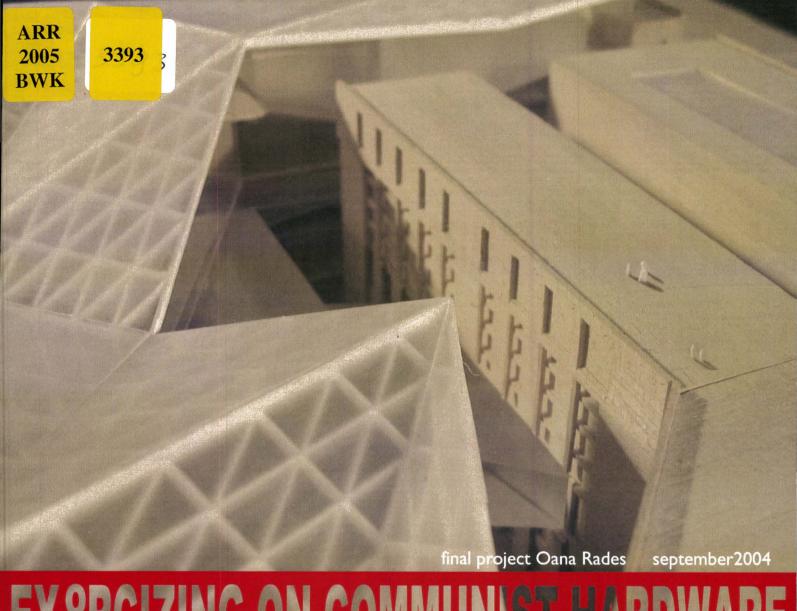


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Exo/ercizing on communist hardware	
Rades, O.R.	
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# EXERCIZING ON COMMUNIST HARDWARE

I would like to thank the following people who helped me with their advises and supported me during the whole process:

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I am grateful to Virgil Polizu (architect active in the collective that designed the building) fot providing me the original drawings of the building.

Oana Rades december 2004

# Introduction

What the hell is architecture if it is collaborating with a dictator like Hitler or Stalin? They both used the style of classicism in order to legitimize their false power. Is architecture a neutral principle or is it a question of hypocrisy? In the case of Mussolini's Casa del Fascio it was the architect Terragni who intertwined the notion of a classical palace and the principles of modernism. He played off against each other those two notions and by doing so architecture got a critical and autonomous meaning in the hard core of ideology. It was the notion of subtle resistance.

In the case of the architecture of Ceauşescu, Oana Rades, being from Bucharest, knew as so many inhabitants that his neo baroque architecture was not only rigid and fake by demolishing and imitating the local baroque tradition but also everyone knew the devil lives in the body of architecture, dressing himself with communist ideology. After he fell down, she asked herself what to do with his dirty heritage. Cleaning it up was no option, so she decided to cut the cancer out of the sick body by exorcizing the devil. Referring to the strategies of both the mannerist Giulio Romano and the déconstructivist Matta Clark, she broke simultaneously the power of the dictatorship and what was unmasked as the dominancy of the functional program. With this attitude in her hand she accepted the concrete and megalomaniac remnants of Casa Radio in order to find a way out. Her struggle generated something ostensible new, what was in fact a critical essence. What was her exercise?

One of the first interventions was the incision through the powering columns to ruin and at the same time to let float the building.

The next architectural intervention implied the capturing of one of the main features of classicism: the monumental axis (and 'champs de marche') not only by a series of programmatic disjunctions but especially by the diagonal incision of the center, transforming itself (and the whole big monster) into a spiraling movement being the connection between nature on the ground and the artificial on the roof.

By interpreting the ground floor, the curtain wall and the roof structure in relation to the local tradition she gave back the building to the people and to their new future as well.

Oana Rades did a wonderful job, by exorcizing the devil out architecture, she found a way out of the fear that surrounded architecture and its people. The way she did it, can be considered as the echo of Edmund Burke's notion of the sublime by generating an architecture of courage in which megalomania was turned into concrete imagination.

Is Oana finally the angel of architecture? Yes she is!

# Exorcizing on communist hardware in... Bucharest

In the former Eastern Block, Bucharest is the capital that suffered the most dramatic urbanistic experiment, in order to reflect an entire new, socialist society. If in the beginnings of the communist years, architecture was used to shape a modern society based on collectivism and other communist ideals, in the end it surpassed any ideological claim and was designed solely to celebrate the myth of Ceauşescu.

During the last decade of his ruling, Ceauşescu had transformed the city into a theater of urbanistic aggression. His interventions in the historical center were done at the price of demolishing a whole neighborhood and evacuating 40.000 people. Ceausescu tried to erase part of the city's built memory, to wipe out its identity, in order to impose his version of identity.

The revolution of 1989 has suddenly rendered his megalomaniac plans obsolete.

Today, several communist structures in the city center which were in scaffolding during the events of '89 are still left unfinished. In this state, they are foreign bodies rejected by the city's metabolism, paralyzing the development of the areas which they occupy. A final project in Bucharest meant for me a project about coming to terms with these unfinished pieces of communist hardware. How can their architecture be updated to the post-revolutionary condition and what are the specific architectural interventions that can accomplish their true assimilation in the city's metabolism?



# Communist hardware

ghetto flats

Bucharest's communist heritage in terms of urban hardware can be roughly divided into two groups. The first consists of a constellation of thousands of large housing blocks in high density configurations, erected to house the rural populations migrating towards Bucharest. These were part of the communist party's ambition (and achievement) to rationalize the housing of the masses in much the same way as other sectors were rationalized according to communistic theories. The vast majority of Bucharest's population (of almost 3 million) is still housed in these structures and they establish the identity of most of the city's residential districts. Their "naked" character, in prefab concrete, can be best described as a (non)-style of stripped modernism, reflecting the quantitative drive behind these structures. Especially the space between the slabs has a very poor urban quality, the necessary green being sometimes completely replaced by asphalt.

The schematic setup recalls Hilbersheimer's alienating Architektur fur die Großstadt. But in practice things have worked out differently. It is fascinating how people took these structures in possession, tamed and adapted them to their life-styles. The poorly equipped public domain around them was no obstacle in the emergence of a vibrant public life that manages to color up even the grey architecture.

While most of them in bad shape and needing renovation, these pieces of communist hardware are fully assimilated by the people and are carrying their signs.



## Communist hardware

Unirii Boulevard and the People's House

The second category of communist heritage consists of public buildings. Among these, the gigantic ensemble of People's House and the Unirii Boulevard form a special case.

They were meant to reshape the capital's face in order to reflect the greatness of Romanian communism and to glorify Ceauşescu's personality. They took shape at the price of a cultural tragedy in the city. The operations came to bulldoze a whole neighborhood in order to draw the axis of a 3,5 km long oversized boulevard and to erase a hill to make place for the second biggest building in the world, the People's House. Bulldozed was also the 18th century Vãcaresti Monastery, just after its seven years restoration had been completed. A few Byzantine churches miraculously escaped demolition and were translated on wheels from their place in order to be hidden behind the new communist structures

The boulevard is aligned with enormous neoclassic buildings such as governmental institutions, party officials apartments, museums, a library, and an opera. It is a foreign body in Bucharest's tissue: it breaks continuity, blocks streets and aggressively dwarfs everything around. Its East-West orientation overrules the diagonal axis on which the Mitropolia church is situated, the four hundred years old symbol of Romanian orthodoxism. At the end of the boulevard, dominating on what is left from the hill, stands the new symbol, the House (ironically enough, "of the People"), as a vulgar display of totalitarian power.



communist blocks hiding byzantine church

This ensemble was to form the decor of Ceauşescu's private utopia. But the "grand projet" did never reach its final state: the revolution of 1989 forced an abrupt hold to its construction.





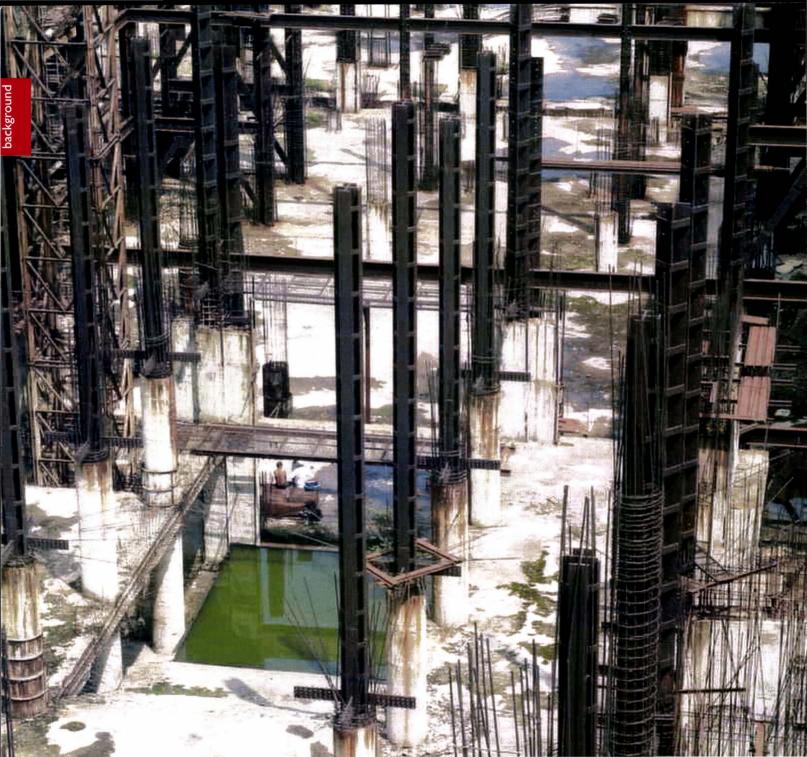
# State of transition

the past 15 years and now

After the shock of the Revolution, Romania is confronted now with a dramatic period of transition. The change from a centralized political and economical model to democracy and market economy is a very slow and difficult one, generating a permanent state of uncertainty. This irreversible process is creating ever-increasing differences. What before used to be the difference between East and West is now between the ones who benefit from the capitalistic turn of events and those who don't manage to keep up. Many people enjoy the freedoms of now, but in the same time miss the certainties and social security of the former communistic regime. Therefore the relation of most with the communist past and its heritage is a complicated and ambiguous one. Sentiments can differ radically, ranging from denial to disgust, from nostalgia to indifference, often found in one and the same person.







# Communist leftovers

The Revolution put a stop to the construction activities going on at that moment all over the city. The Unirii ensemble was the most important operation, but parallel to it there were apartment blocks, agro-food centers (communist variant of supermarket, meant to replace the traditional market), and even an accumulation lake of 6km2 under construction. In the turbulent transition period after the Revolution, most of these structures have remained uncompleted until today, 15 years later. While the conversion into new functions (according to today's reality) of the blocks or the agro-alimentary markets has slowly started, the larger buildings and especially the ideologically imbued ones, remain a problem/challenge.

My project takes the challenge to deal with one of these very large unfinished pieces of communist hardware, Casa Radio.







## Casa Radio

Started in 1986, this building was supposed to be Romania's National Museum of History, with two floors entirely dedicated to the myth of Nicolae Ceausescu himself.

After the revolution, a banner with the inscription "Casa Radio" was hung from the central balcony and the building entered the patrimony of the Public Radio. Two years later, the banner mysteriously disappeared and so did the conversion plans, but the name Casa Radio re-

mained and that is how Bucharestians still refer to this building today.

Even if situated remote from the Unirii Boulevard (at 15 minutes walk, along the Dâmboviţa river), the building was conceived as part of the same scenario: to glorify the leader. Ceauşescu's megalomania dictated here for another colossus: with 180m length and 120m width, almost 10 ha of stacked floor area, voids of 30m height and exhibition spaces big enough to fit a mammoth, Casa Radio is the second biggest building in Romania, after the People's House.







Casa Radio

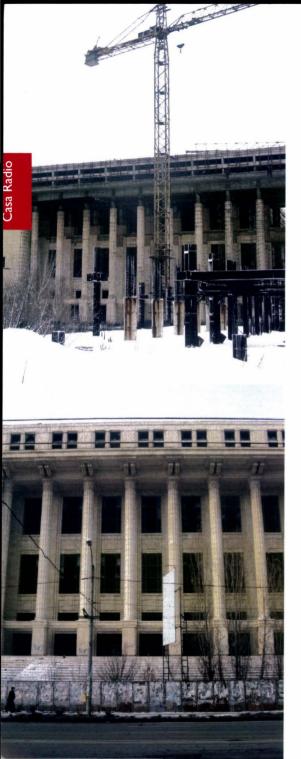
Intercontinental hotel at Bucharest's km 0



Dâmboviţa river

Eroilor metro station

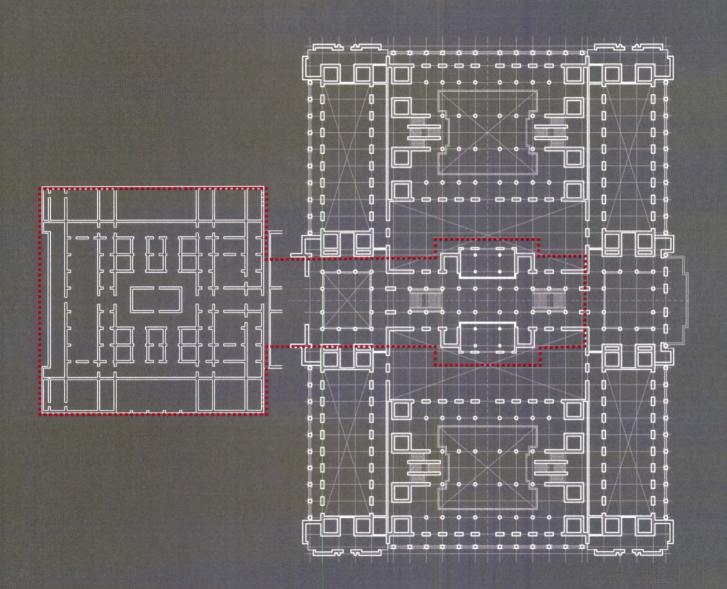
People's House

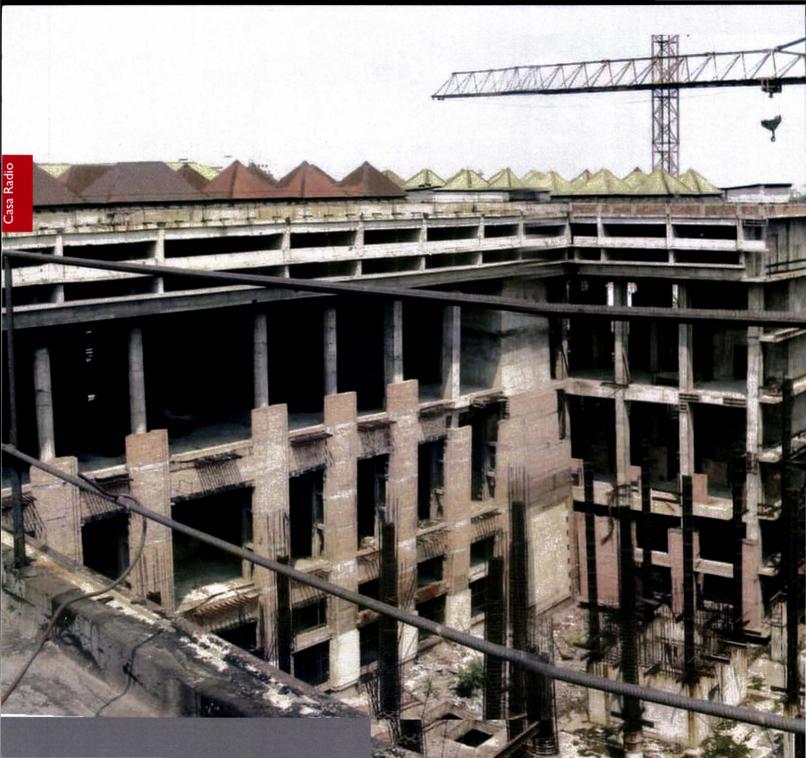


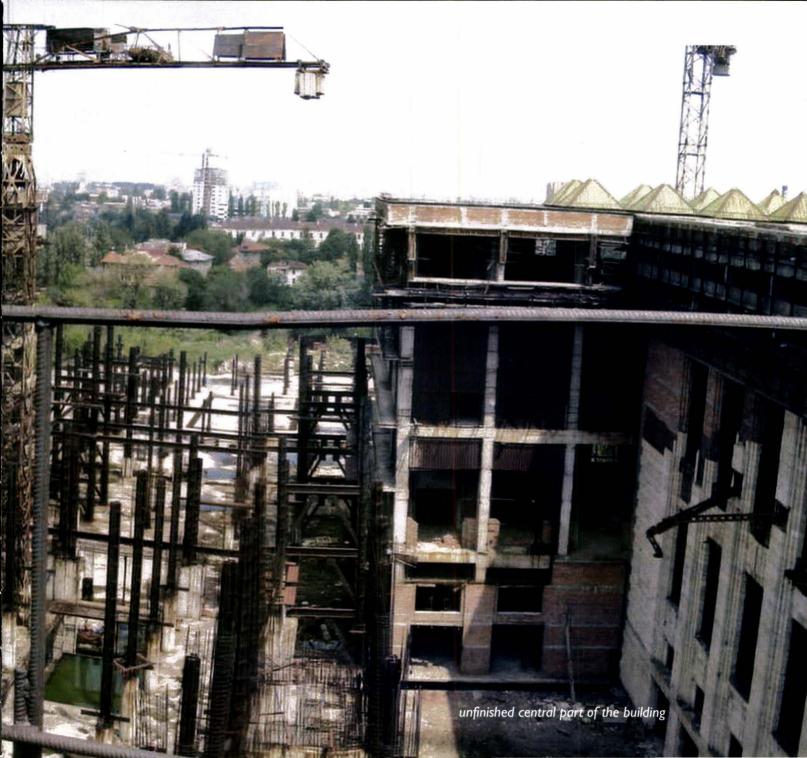
# Contemporary ruin

The building has different stages of completion, which change gradually from the exterior to the interior and from the front to the back. The main exterior volume is almost complete, while the central and the back ones are just beyond the state of foundations. From the façades, the front and side ones are nearly finished and already clad in natural sandstone, while the back façade still reveals the several construction layers.

In this frozen state of development, the unfinished parts reveal the building's true nature. Its primary structure is a steel-concrete skeleton. Because such a modern construction system has relatively reduced dimensions, an impressive quantity of brick infills was used to achieve the desired effect of monumentality and massiveness. Finally, this expanded construction package has been dressed up in a classicist décor of natural stone. Regarded from this perspective, the neo-classicist palace is nothing else but a Venturian decorated shed: a (thick) layer of decoration covering a concrete box.











## Urban décor

The choice of selectively finishing the building (especially at the "surface") corresponds to its second function: the one of urban décor. Besides museum, the building was supposed to serve as the official tribune from which Ceauşescu and the other party officials would follow the parade organized on the national day. Short before the scheduled inauguration date, the building was far from being ready. The decision came then to rapidly clad the façades in natural stone, in order to make it look ready. On the same street, the flats which were in construction, also had to appear finished. Cladding them was no option (they were supposed to be out of prefab concrete panels), so the architects decided to simulate them in cardboard. In this way, façadeism during the communist regime was also literal.

For once, the building got to fulfill its urban décor function. On the 23rd of August 1989, only a few months away from his execution, Ceauşescu was standing on the central balcony, waving at the jubilating masses marching past.



# The question of style

Beyond a brief classification of the building as **neo-classical**, it is interesting to trace the underlying motivations which dictated this style.

Thinking in the line of art tradition in the communist systems, the building (together with Ceausescu's whole ensemble in the city center) can be seen as a late manifestation of socialist realism. Typical to socialist realism's modus operandi is the appropriation of a monumental style from the past, whose message and efficiency of communication have already been tested out in history, and for which the need for innovation and invention of formal vocabularies is redundant. This explains the apparent difference in the official taste in what concerned the architecture of the grand ensemble in the city center and that of the housing neighborhoods at the periphery, erected in the same time in Bucharest. The "style" for the mass housing projects was not a ideological choice, but the fastest answer to an economical necessity. Modernism, or at least a stripped and impoverished variant of it, was the only way to solve this necessity. But modernism was dismissed as an option for the city center, where its abstract and elitarian aesthetics couldn't "communicate" according to people's taste and understanding. There another language was needed, one that operated with historical and thus familiar symbols, that could guaranty the effectiveness in communication of state propaganda. For buildings like Casa Radio (as well as People's House, etc) classicism and the paradigm of the palace became the instruments to communicate the power's message. The classic palace, once symbol of the enemy class (bourgeoisie and aristocracy), was adopted as a symbol of "victory of socialism", which was to be celebrated with the entire people. The same modern concrete skeletons like in the ghetto flats have been dressed up in stucco ornaments and garnished with classical colonnades to represent "palaces for the people". But what was appropriated in the name of the people, was (ab)used as instrument of personal glorification by Ceauşescu. Classical architecture's expression of order and hierarchy was distorted to reflect the new hierarchy in society and the control exercised upon it. By perverting the icons of classicism and emptying them of meaning, Ceauşescu turned buildings like Casa Radio into inaccessible "palaces of the power".

Judging in the time frame when the building was realized, the mid 80ies, it could be argued that the building is the product of a **post modern** approach. The oversized cornice which houses a whole floor, the unusual proportion of the columns and other details are typical to the ironic way in which (historicist) postmodernism makes use of classical language. But this subtle notes of critique understood in the best case maybe in highly academical circles can in no way demolish the perverted values of classicism which the building celebrates.

The neo-classic Adriatica palace by arhitect Petre Antonescu has served as inspiration for the buildings on the Unirea Boulevard







# ..."Store as big as a city"

in Bucharest, the largest mall in the Balkans

After the institution of the Public Radio wasn't able to raise the necessary funds to complete it, the building was literally abandoned. In the uncertain post-revolutionary climate, the gargantuan scale and monumentality of the building have condemn it to the status of obsolete. The ideological message expressed in its monumentality and neo-classic language made it a difficult subject for conversion. And its size alone, 10 ha of stacked floors, made it a risky and unattractive investment for real estate developers in the unstable market. In the next decade, systematic plundering followed - windows, bricks, pipes, cladding, stucco - everything what could have been stolen was stolen. For years, it was a shelter for tens of homeless. The story of the building even entered the urban folklore, according to which it may never be finished because it is "surrounded by negative magnetic fields which are present at all the places where demolitions from Ceauşescu's order took place".

Finally, in 2003 the government promulgated a law which stipulates that all unfinished pieces of communist hardware must be found a new destination in order to be completed. As such large projects cannot be financed by the state budget, the solution of the private-public partnership was found (through which the private partner gets the right to use the construction on a period of 50 years). The auction for Casa Radio was won by a Turkish / English group of investors. Their plan is to transform Casa Radio into "Dâmboviţa Center", a multi-use facility with housing, offices, five star hotel, conference center, etc and most important: the largest shopping mall of Eastern Europe.

# Revista Presei

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# Magazin cât un oras

În Bucuresti, cel mai mare supermarket din Balcani

Statul român concesioneaza unui grup turco-britanic, pe 49 de ani, Casa Radio din Bucuresti, constructie gigantica ridicata în anii □80 si abandonata dupa 1989.

Investitia se va cifra la 150 de milioane de dolari. Complexul comercial va fi dat în folosinta în 2004, putând gazdui peste 10.000 de clienti simultan.



În Bucuresti se va construi un gigant comercial. A doua cladire ca dimensiuni din România, dupa Palatul Parlamentului, si-a gasit în sfârsit utilitatea. Ea va gazdui un urias centru comercial

Cladirea neterminata a Casei Radio va fi transformata în cel mai mare complex comercial din Balcani □ Dâmbovita Center, de catre grupul turco-britanic Cenk Mimel- ORB. Suprafata construita va fi de 160.500 m2. Aici vor lucra cel putin 3.500 de oameni. Lucrarile vor fi începute în martie 2003 si vor fi finalizate în 2006. Complexul va cuprinde:

# ☐ hotel cu 305 camere,

- □ un supermarket de 129.500 m2, cu 6 cinematografe, 8 piste de □ bowling si 160 de magazine,
- ☐ birouri clasa A, în suprafata de 16.000 m2
- □ spital privat ultramodern cu 200 de paturi.
- □ centru sportiv.
- □ centru cultural.
- ☐ parcare pe 4 niveluri pentru 1.500 de automobile
- ☐ zona de apartamente rezidentiale, în suprafata
- 45.054 m2 (Cristian Ionita)

De 13 ani, casa pentru boschetari

De la opulenta la mizerie si invers

Grandoarea si megalomania fara limita a lui Ceausescu a atins paroxismul la jumatatea anilor □80. Ideea construirii unei cladiri gigantice, care sa adaposteasca un urias muzeu al Partidului Comunist, i-a rasarit dictatorului în minte în anul 1978, imediat dupa întoarcerea dintr-o vizita oficiala în lugoslavia. El vazuse aici celebrul mausoleu al lui Tito. Inspirat de monumentala cladire în care se odihnea dictatorul iugoslav, Ceausescu si-a dorit ceva asemanator. Ideea era ca în viitorul muzeu al PCR sa fie adunate exponate în care istoria partidului unic sa se împleteasca. cât mai









impressions of the future Dâmbovita Center

# Statement

In today's reality, the building certainly cannot communicate the fulfillment of the great socialist ideal as it was envisioned to do, nor can it any longer merely be a symbol for the failure and collapse of that same ideal as it was in the past fifteen years.

Total demolition is no option since it would imply the denial of a painful history. Total restoration, as still being carried out at People's House, is in my view also inappropriate, since it would ignore Romania's recent post-communist history and prospect.

My project takes the program of the new developer for converting Casa Radio as a point of departure, but without doing it too literally. I have taken freedoms in altering this realistic, market-conform program, in order to make a statement. The main concern of the project is not to turn the building into a well-oiled shopping paradise with adjacent program, but to reconcile, by means of architectural design, this communist leftover with the post-revolutionary social condi-

tion. There is a double agenda operating here. On the one hand dealing with the legacy of the communist past by converting the building's architectural message of "palace of the power". On the other hand coping with today's realities of the market economy by rethinking the concept of the mall beyond a "palace of consumption". They are in fact both reactions against totalitarian ways of appropriating the city and its hardware.

Transforming the building's iconographic character of "palace of the power" means coming to terms with its classical vocabulary in such a way that new messages are being communicated. Many references have been used from Matta Clark's cuttings to Christo's packages, but the overall paradigm is formed by Giulio Romano's Pallazo del Té and his fight with classicist dogma. Romano succeeded to destabilize the classicistic certainties in his Mantuan palazzo, making room for notions such as multiplicity, ambiguity, irony, the unexpected and the sensational. In much the same way but with the means and technical possibilities of nowadays, the architectural interventions

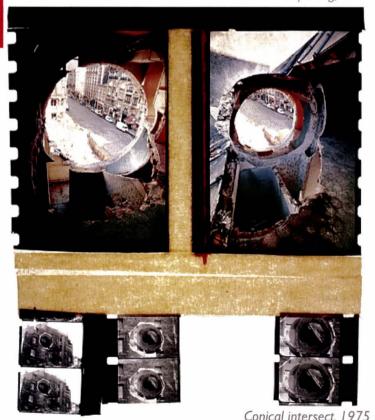
on Casa Radio introduce a multiplicity of historical perspectives, so that the "new" building can embody both a recent history, communist and post-communist, and a future full of promises and uncertainties. The building has been cut, wrapped, restored and left ruinous, without jeopardizing its integrity as a whole. This strategy of multiplicity seeks to mirror the ambiguous way in which people relate to the communist past, with emotions ranging from denial to disgust, from nostalgia to indifference, often felt by one and the same individual.

The bottom line for choosing to incorporate a shopping mall is that only a highly commercial program can transform Casa Radio into a viable urban facility that can take account for the enormous investments needed. The mall, which is still perceived as a novelty in Romania, is an undisputable crowd puller. It can therefore be a catalyser for what the building really aims to be: a territory of new communal experiences in the contemporary socio-economic condition. But to make sure that these experiences are accessible to more than a selective economical group and that they

are not limited to consuming only, the building has to literally open up. It does so by breaking the hermetic world of the mall and connecting it to the public domain and to other "worlds". The shopping mall facilities are blended with the other functions after a model of programmatic alchemy. This model is supported by the new spatial organization which facilitates the stacking of different functions in the building's mass and enables their connection to one spatial continuum which runs through the entire building in its system of interconnected voids. This spatial continuum, conceived as an urban interior. stages the public life of the building. In this continuum mall routing, market landscape, housing galleries, hotel amenities and roofscape are brought visually and physically in touch with each other. Here the commodified and idealized world of the mall coexists with manifestations of the vernacular, the ordinary, the everyday, the decadent and the unconditioned. By bringing all these worlds and their specific users to a modus vivendi, the building stands for a more complete urban experience in which social interaction is stimulated.



Splitting, 1974



# The cuttings of Gordon Matta-Clark

Gordon Matta-Clark, artist trained as an architect, was active in the minimalist art scene in the seventies in New York. His most famous works are about cuttings executed on abandoned buildings in marginal areas of the city. These neglected structures are reclaimed by his actions and given a new identity. The process of destruction - the cutting of walls, floors, foundations even- has the role to break physical enclosures and reveal unexpected perspectives and aspects of stratification in the old structures. But almost every time the intervention is also about a political statement against various social conditions.

"Splitting" is in this sense one of the most illustrative examples. The sawing in two of a suburban house, chosen for its archetypal value to represent the stable middle-class American home, is an attempt to "liberate" the form of the house which had come to symbolize containment and suburban alienation.

Matta-Clark's architectural gestures provide valuable inspiration for physical interventions at Casa Radio, which by operating on the archetype of the palace abusively appropriated by the totalitarian power, can return it "exorcized" to the people.

# Giulio Romano's Pallazo del Té

Giulio Romano was a 16th century painter and architect. His works, unlike the ones of his master Rafael which are obviously high Renaissance, are hard to label. Art and architecture historians have called his work anti-classic, post-classic or manneristic. What unites all interpretations is the fact that they take Romano's reaction against the classical architecture of his time as a key aspect of his work.

One of Romano's most emblematic works in this respect is Pallazo del Té in Mantua

Romano's break with Renaissance classicism is expressed by almost any aspect of Pallazo del Té. While Renaissance architecture is characterized by a sequencing of the gradual spatial changes, Pallazo del Té is composed by unusual and unexpected juxtapositions of a large variety of spaces. A similar approach is also to be found in the treatment of the façades. The fact that all façades are different and the presence of falling trygliphs and the broken pediments are well known examples. But Romano doesn't break with classic syntax only by the "incorrect" application of the Doric order and the









(1525-1534). In this palace classic certainties are undermined in a variety of ways. The underlying body of rules and dogmas of classicism have been distorted and disturbed by a highly personal and expressive architecture. Instead of harmony, balance and uniformity, Romano introduces here an architecture of differences, confrontations and contradictions. As Romano's contemporary, Sebastiano Serlio has pointed out it is exactly the mingling of 'nature' and 'artifice' which creates this tensions. Nature stands for the raw materiality and a potentially destructive force, artifice stands for the refined transformation of material after an idea.

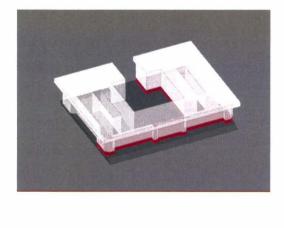
classic rules of combination and composition. Also in the materiality of the façades where smoothly polished shafts of the Doric order, 'artifice', stand next to aggressively rustificated stones, 'nature', Romano seeks for tension and contradiction.

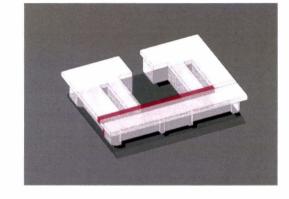
Palazo del Té, as a building in which classicism has been destabilized and has transformed into a new architecture, forms the paradigm for the conversion of Casa Radio. This new architecture de-codifies the fundamental principles on which classical architecture is based in order to make room for notions such as multiplicity, variety, the unexpected and the contradictory.









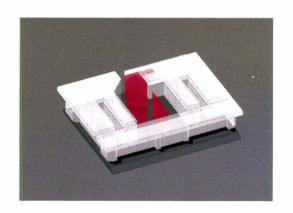


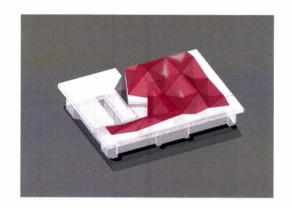
horizontal cut



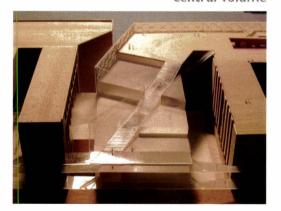
vertical cut







central volume

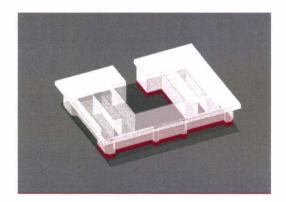


wrappings





approaching the building from the metro station



### Horizontal cut

The **horizontal cut** dramatically splits the building open, just above the socle, in order to make the new *public* character of the building literally visible. The cut "lifts" up the building, making place on the socle for a large food market, the corner-stone of Romanian public space. In this way, the building becomes a continuation of the public domain, sheltering a permanent stage of urban vitality.

At night time, the horizontal cut makes the stone colossus seem to *float* on a beam of artificial light. The certainty of classical buildings being firmly grounded to the earth is radically broken.

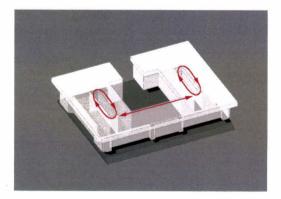


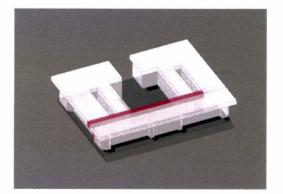
the market is accessed via the monumental stairs, the shopping mall through a carve out in the stairs

### Vertical cut

To make possible the functioning of a shopping mall in the existing structure, my first concern was to define a new infrastructure, a **continuous routing** along which the shopping act can take place. The most natural way to imagine this routing was to introduce a loop in each of the two existing atriums of the building and (in order to make the routing continuous) to make a connection between them.

The **vertical cut** is a 7m wide incision over the almost full length of the building, which primarily enables the connection between the two atriums. Besides horizontal circulation, it concentrates the largest number of escalators, becoming the main vertical logistical backbone of the building.



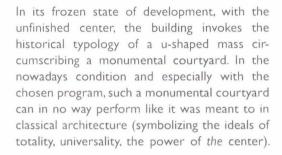




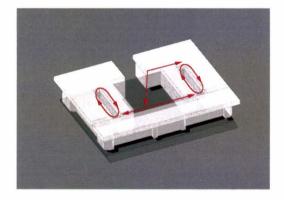
meandering shopping galleries in vertical cut allow surprising visual connections

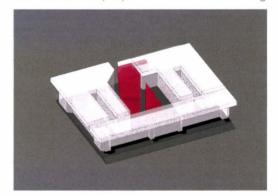
#### Central volume

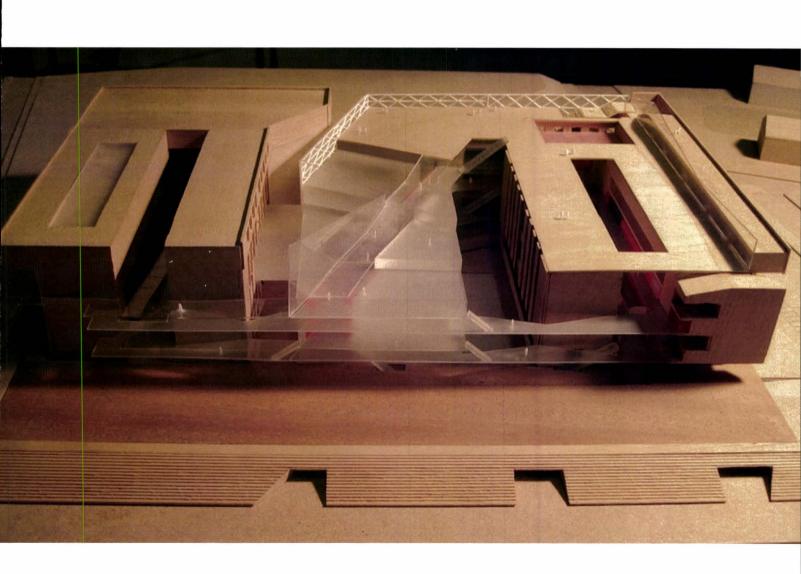
The parcours of the two connected loops is completed with a **diagonal**, generating a spiraling movement through the building from the socle level up to the roof. The diagonal is in fact a deviation of the monumental symmetry axis of the building and acts as a destabilizing agent of the classical space.



With the insertion of the new **central volume** in this courtyard, the building transforms into one large mass punctured by (what have become) four non-hierarchical courtyards, supporting the idea of a non-hierarchic programmatic amalgam. In the same time, by following the diagonal, the central volume opens up the block configuration and marks the (car) entrance in the building.





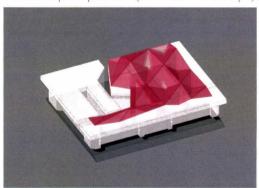




back façade with People's House in the background

### Glazed roof

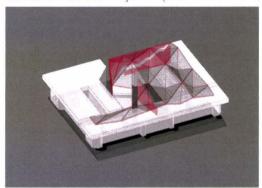
Mirroring the large open space created by the horizontal cut, the old roof makes place for an open plateau (the new roofscape).



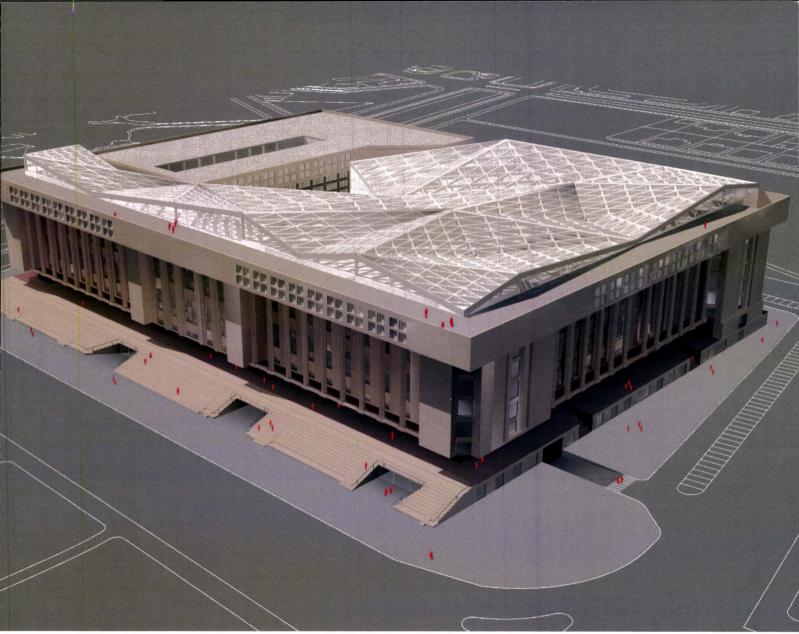
A **glazed roof** covers and unifies this space, confronting the visitor in a single glimpse with the vastness of the building. Hovering above like a hard edge cloud, the roof creates a radically new tectonic experience on top of the building.

### Glazed back façade

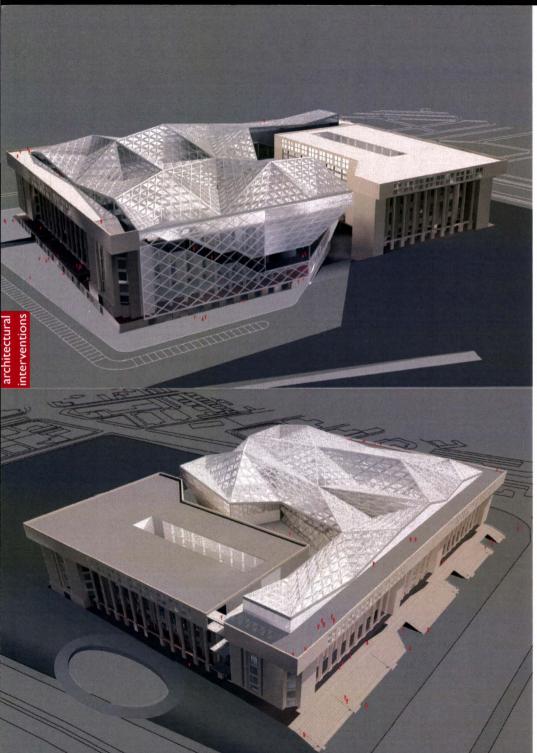
The glazed roof folds down in the back to pack the central volume and half of the unfinished/ruinous façade. (The other half,



belonging to the hotel, is refurbished to its original state.) By preserving a fragment of the façade in its actual state (unfinished/ruinous), the story of the unusual fate of this building is kept alive in the new design.

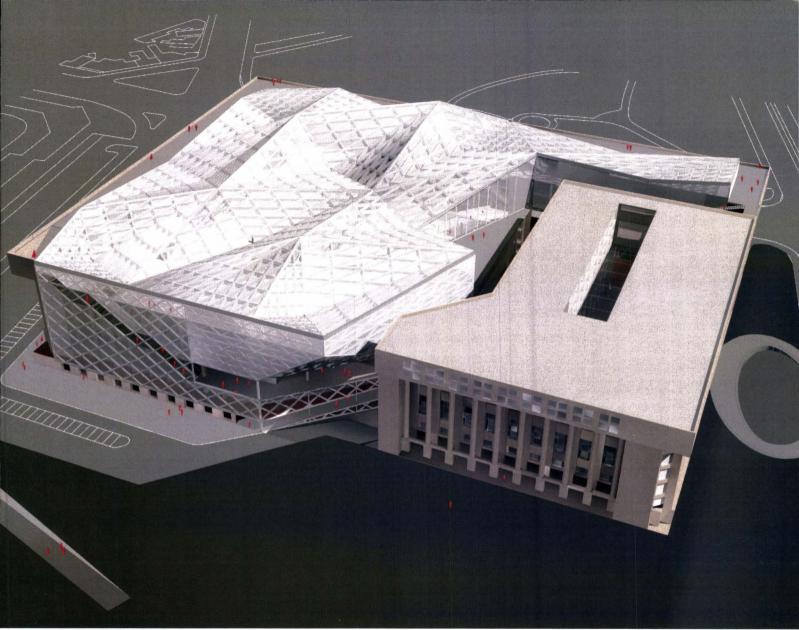


bird's eye view East



bird's eye view North

bird's eye view South



bird's eye view West



front façade sliced by horizontal cut



side façade partly sliced by horizontal cut



hotel façade renovated

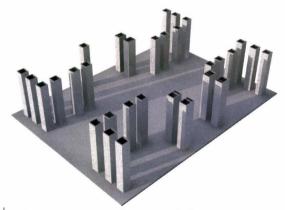


back façade partly left ruinous and packed, partly restored to the original design

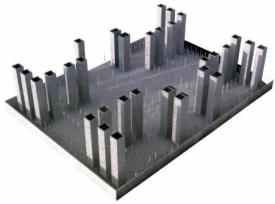
### Construction scheme

The architectural interventions largely depend on constructive logic. The structure of Casa Radio becomes a hybrid one in which existing contruction merges with new constructive elements.

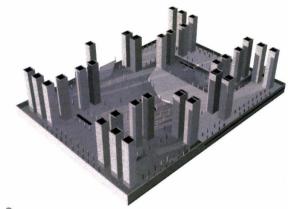
A tectonic sequence is presented:



I primary structure of existing shafts, consolidated in order to support the extra loads\*



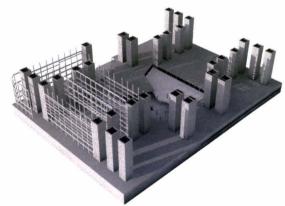
2 existing grid of columns in the basement



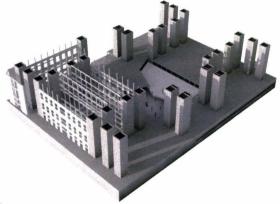
3 existing floor at -1.60m and introduction of new floor at 0.00m



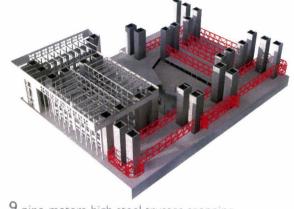
4 existing floor at +3.95m is perforated



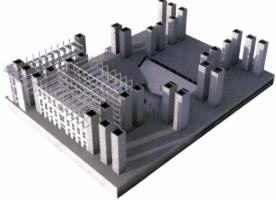
5 existing building's reinforced concrete skeleton, which is left unaltered at the hotel side, ...

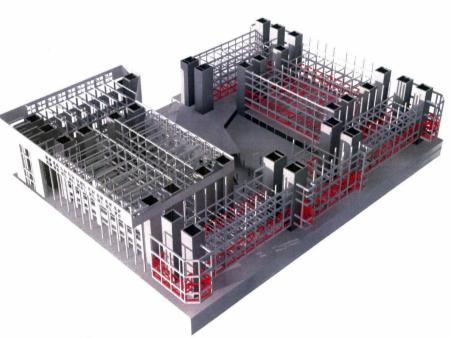


6 ...forms the load bearing façade

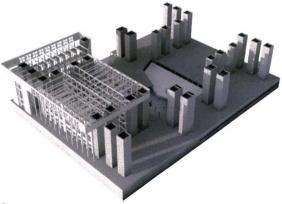


9 nine-meters-high steel trusses spanning between the shafts...

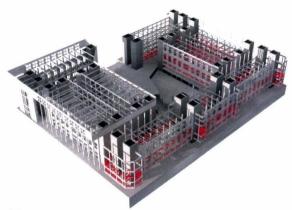




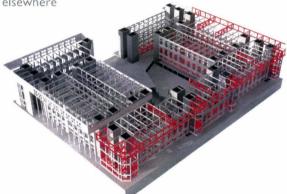
10 ...to support the sliced load bearing façades



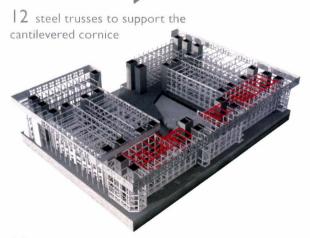
8 cantilevered cornice



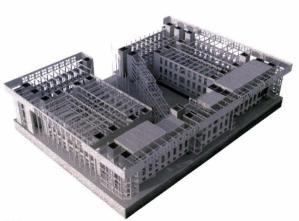
I steel trusses are behind the construction line on the façades' sides and in the construction line elsewhere



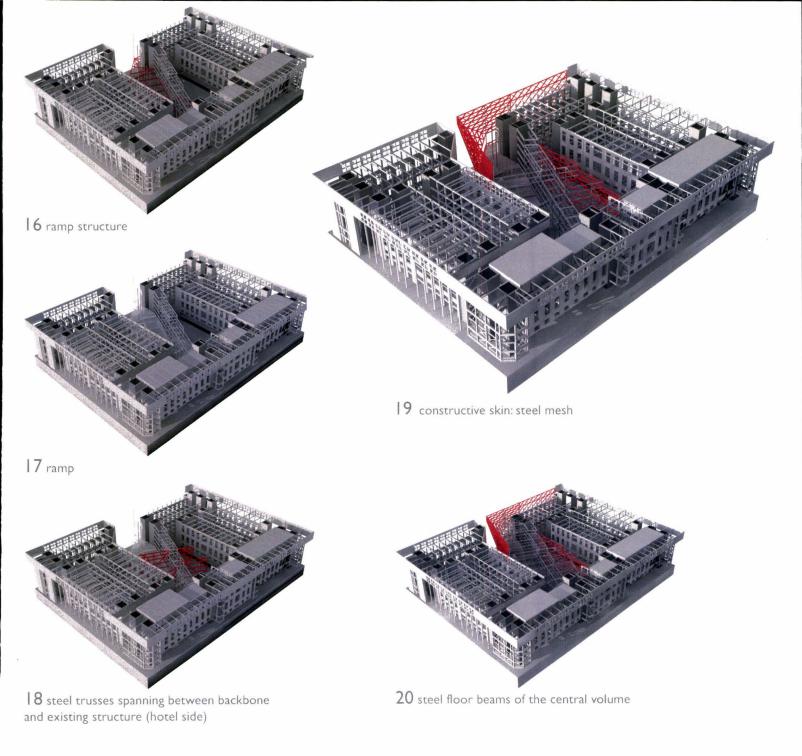


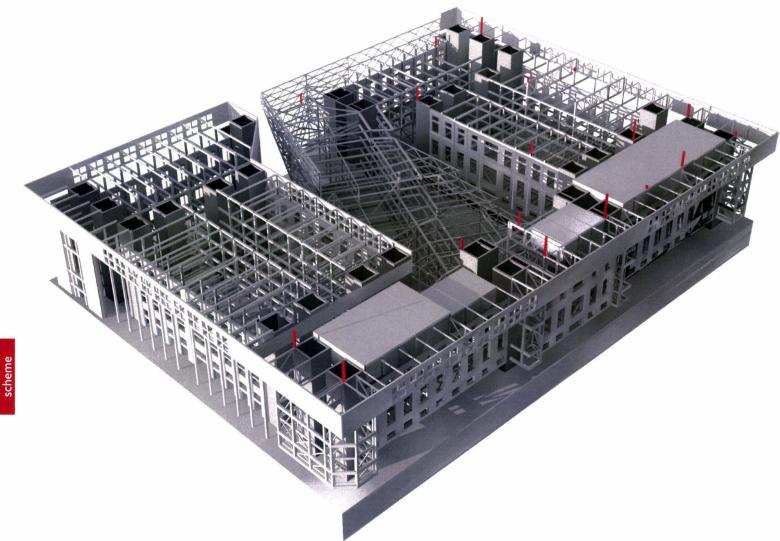


13 cinemas integrated within existing construction scheme



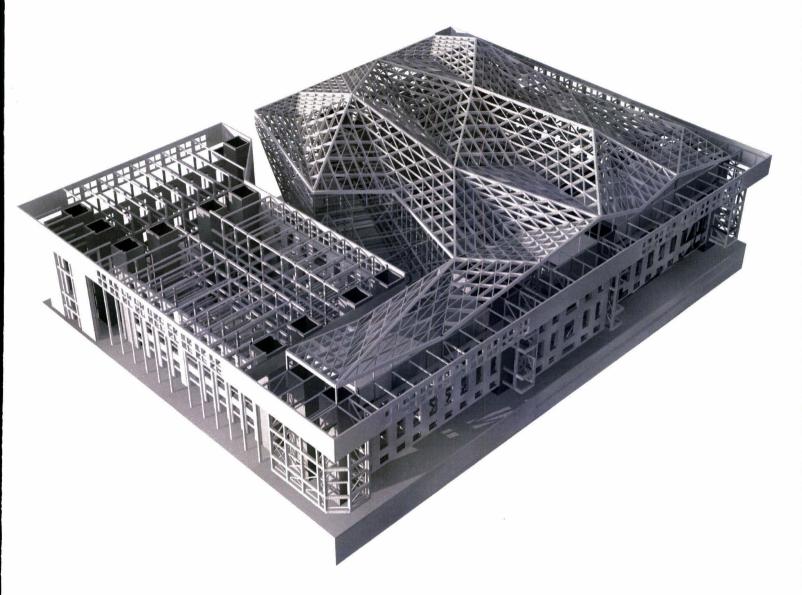
15 additional columns to support central volume





21 roof columns resting on (consolidated) existing building's columns

\*the architectural and structural interventions depart from the premises of the structural overcapacity of the building. However, through the horizontal cut and the introduction of the steel girders spanning between the primary shafts, extra consolidation is necessary for the shafts and their foundations.

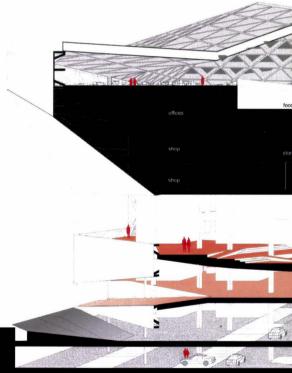


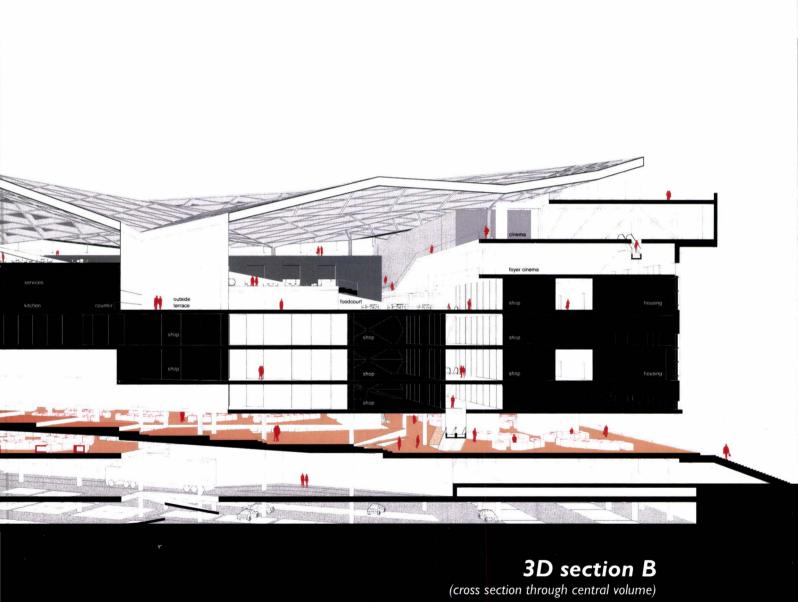
22 tectonic roof

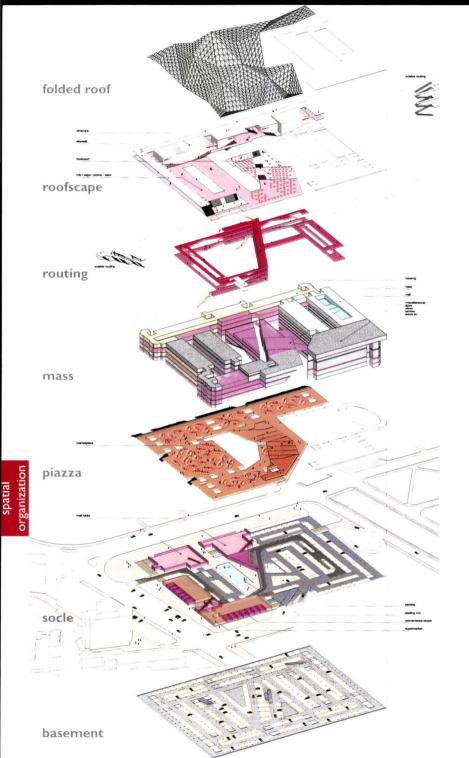
\*\*in the construction scheme, for an easier reading, the floors of the existing building (old and new) are represented by floor beams. In reality, their constructive principle differs from this representation:

- -the existing floors consist of a 700mm package of two thin layers of in situ poured concrete with a grid of concrete ribbons inbetween
- -the new floors are so-called bubble-deck floors: a 500mm sandwich of concrete, metal cable grills and a mass of hollow plastic bubbles









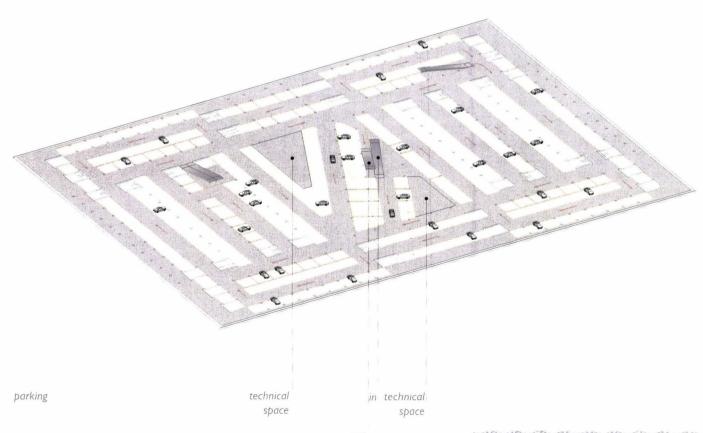
### Spatial organization

The building mass is sandwiched between two programmatic landscapes, the piazza and the roofscape. The mass contains the bulk of the program in cellular spaces (housing units, hotel rooms, shops), while the programmatic landscapes accommodate activities in a field condition.

The **shopping mall routing** weaves itself in the voids punctured through the building mass and connects at various points to an **outside routing**.

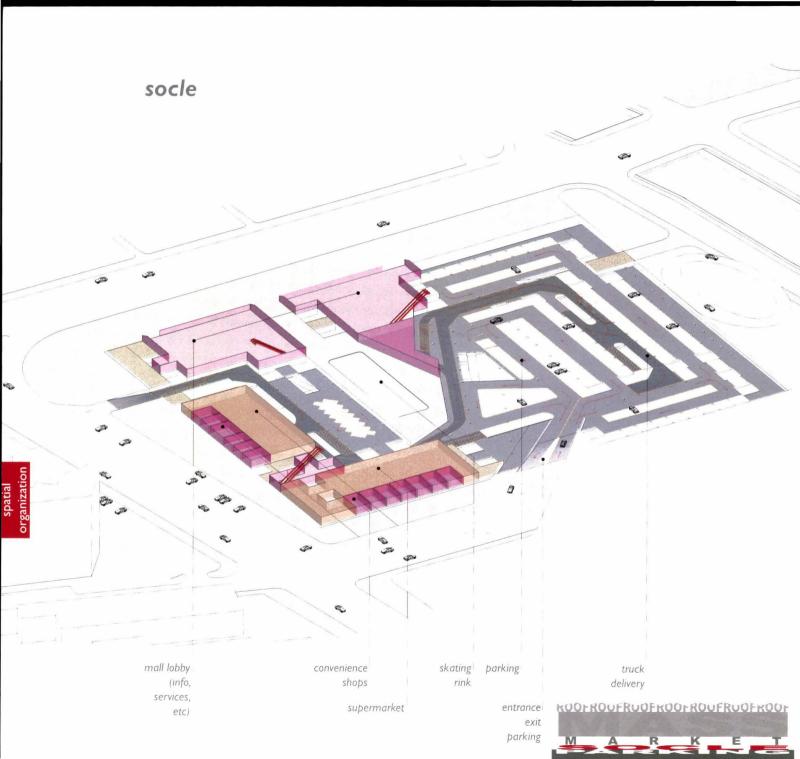
At the street level, the **socle** provides the access for all programs above and for the parking in the **basement**.

## basement

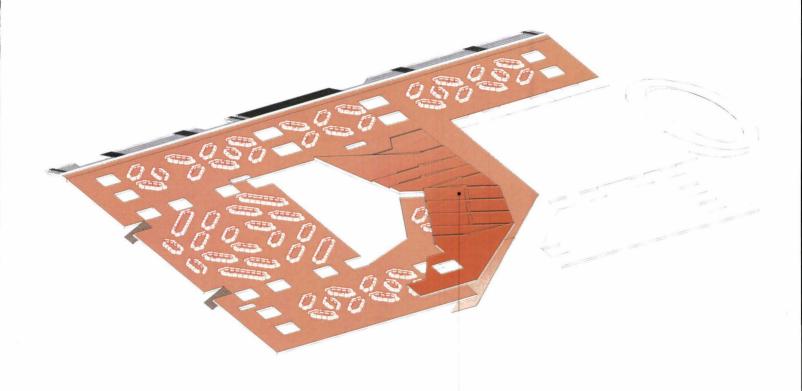


out

M A R K E T



# piazza

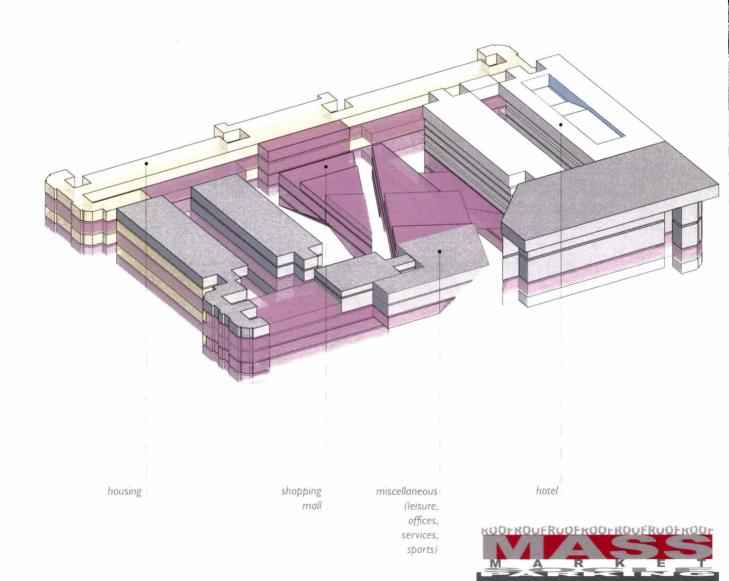


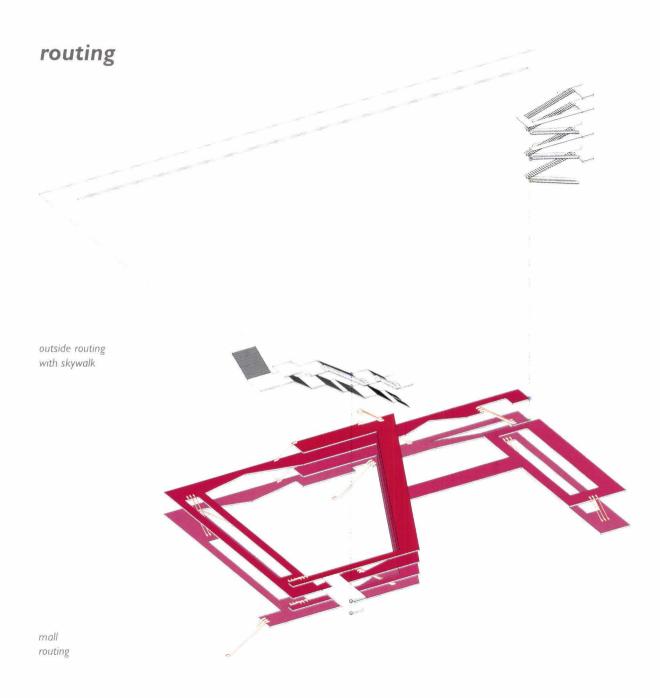
marketplace

ramp (access to mall and outside routing)

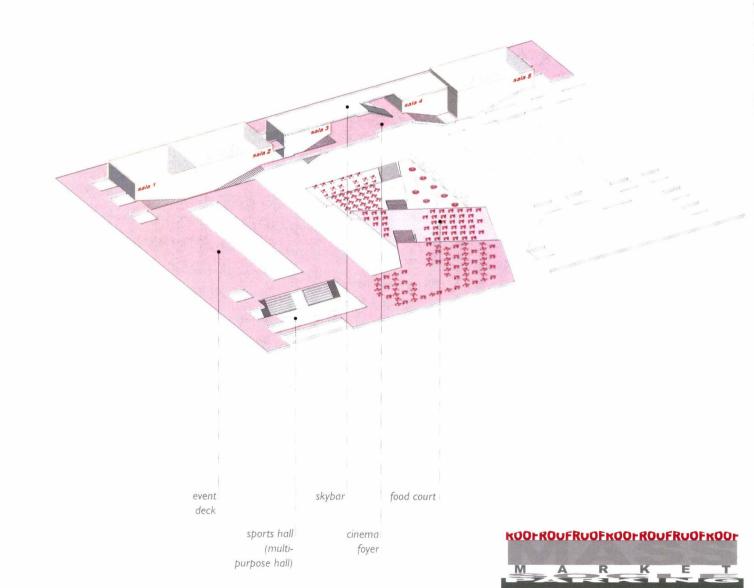
M A R K E T

## mass

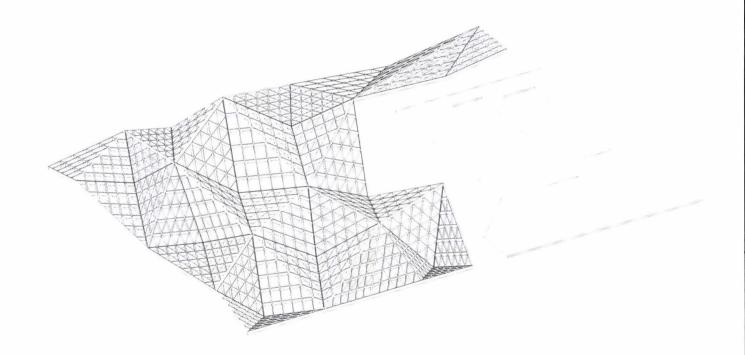




## roofscape



# folded roof

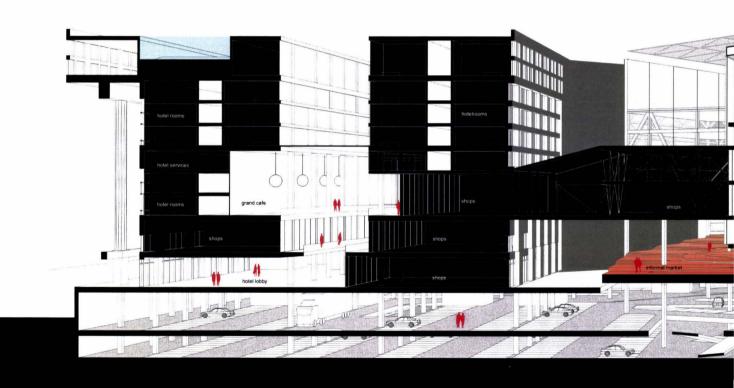


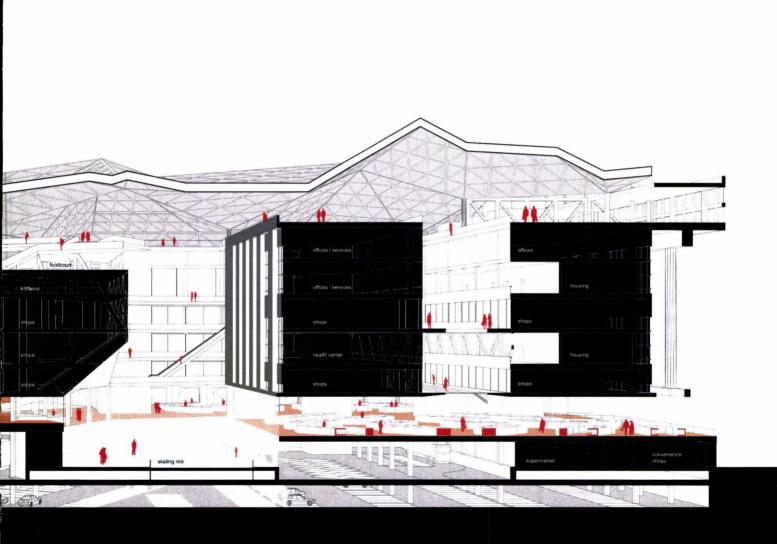


### "Nolli" sections

In his famous map of Rome, Nolli represented the city by making a distinction between its private and public spaces. The notion of public space didn't refer only to streets and squares, but (according to the way space was used) also included interiors of buildings (churches, administrative and governmental buildings). Like this, Nolli defined a spatial continuum through the city, which was public in the way that was free for access to all citizens.

By drawing the sections in a Nolli manner, the building is illustrated as an urban composition of private realms (shops, housing units, hotel rooms, offices stacked in the building's mass) which are connected and animated by a public spatial continuum (with programmatic land-scapes, routings, galleries running through the building's voids).



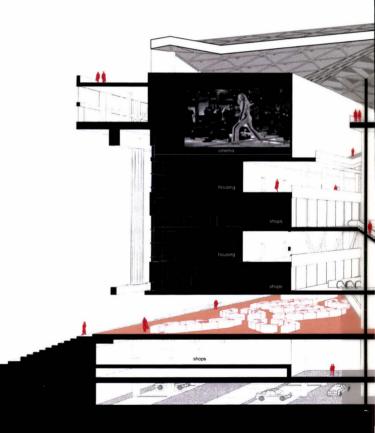


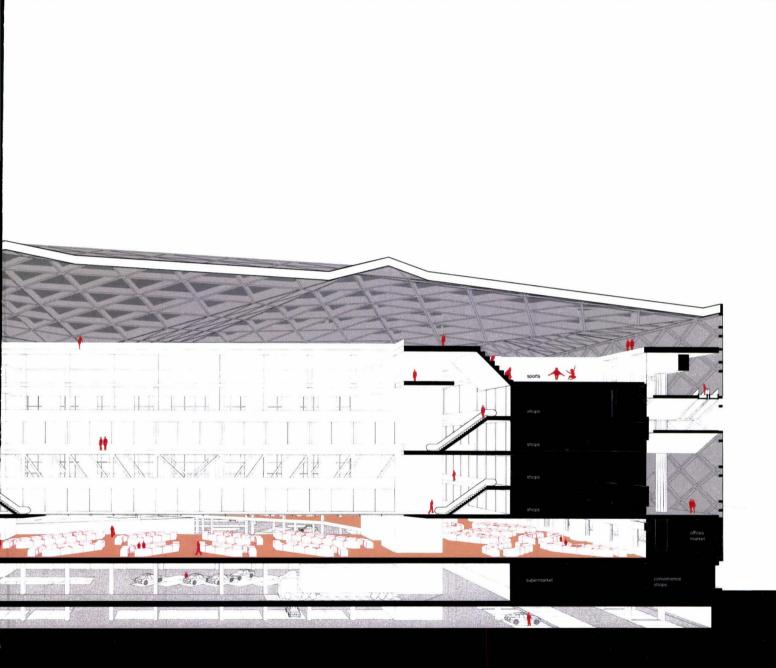
**3D section A** (typical longitudinal section)

## rogram

### Distribution of the program in the building mass

Initially, the building had 9m high floors, suitable for its museum function. To facilitate the new program, the number of floors has been doubled (where was before a 9m high space are now two spaces of 4,25m height). In this new configuration, the program is stacked in such a way that the functions which need view and natural light are positioned at the levels with the original windows. The other levels mainly accommodate the shopping mall.





# 3D section D (cross section through atrium)



the Villacros passage



"Hanul cu tei" - 18th century inn

#### Retail typologies in Bucharest

The conversion of communist hardware into shopping mall is not new in Bucharest in the last decade. The Unirea shopping center and the Bucharest Mall are the most eloquent examples. In both cases, shopping is accommodated in an isolated, interiorized environment, that turns its back towards the urban reality outside. This can be literally seen in the way their facades, as interfaces with the city, become redundant: blinded with urban-scale advertisements or replaced with a sugar candy décor in postmodern manner.

Historical retail typologies like the passage or the commercial inn provide a more inspiring model of integrating the realm of shopping within the public domain of the city. The larger gamma of shops which they accommodate and the mix with other programs (ateliers, housing) enhances their urban character. Even if they are confined spaces, they are at the same time extensions of the public domain, linked to the surrounding pedestrian network.

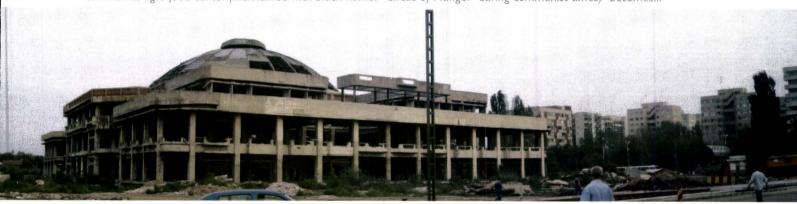


Former Unirea socialist commerce department store becomes...



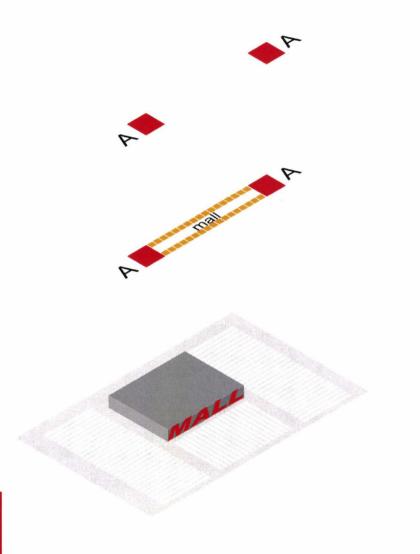
...Unirea shopping center

communist agro-food center (nicknamed with black humor "Circus of Hunger" during communist times) becomes...



...Bucharest Mall





### analysis The suburban shopping mall

(50ies to 80ies)
responding to the "need"-culture,
purpose shopping (service economy)

- I. layout= functional diagram
- -anchors at either end
- -small shops in between them

- -best represented in plan: horizontality - streamlining the traffic of people
- 2. enclosed in an oversized, windowless box
- 3. floating in a sea of asphalt used for parking
- 4. interior coherent, unitary aesthetics

### analysis The new generation shopping mall

(starting with the 80ies) responding to the "want"-culture, leisure shopping (experience economy)

#### I. layout= **staged routing** (armature)

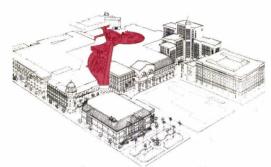
-dramatized (sometimes picturesque) routing along which the whole shopping act is staged -routing is an attraction in itself, it is not merely a corridor, but creates a sense of place -routing is sometimes integrated in an existing urban parcours (from here the desire to give it a picturesque, organic character)

-best represented in section: vertical spine, atrium - maximizing the staying

2. often "packed" in other programs, façade on human scale

### 3. stacked parking

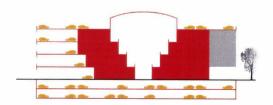
4. interior - aesthetics of multiplicity, it mimes an organically grown townscape



staged routing (armature) at Horton Plaza, (San Diego, California) by Jon Jerde



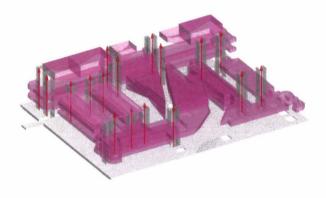
existing street network continuated in the layout of Namba Center (Osaka, Japan) by Jon Jerde

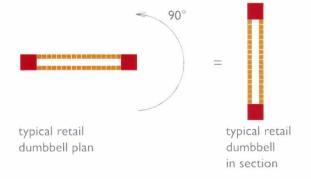


#### The shopping mall

Judged strictly by the organization around atriums and vertical cut and its staged routing, the mall at Casa Radio belongs to the new generation of malls. But the fundamental difference with a mall in the traditional sense of the word is the mixed section, the vertical alternation of shops with other programs (market, housing, hotel, offices), reminding of the urban character of the passage. The aesthetics of multiplicity which is often mimed in the "traditional" malls is here the natural product of condensing multiple "worlds" in the building's urban interiors. The mall visitor strolling through the polished environment of global brands is permanently confronted with these worlds. He can access them via an alternative routing connected to the mall routing at various points.

The stacking of program imposes a vertical organization of the mall. To stimulate the vertical movement, the main attractions (cinemas, food court and events deck) are situated on a programmatic landscape at the highest level.







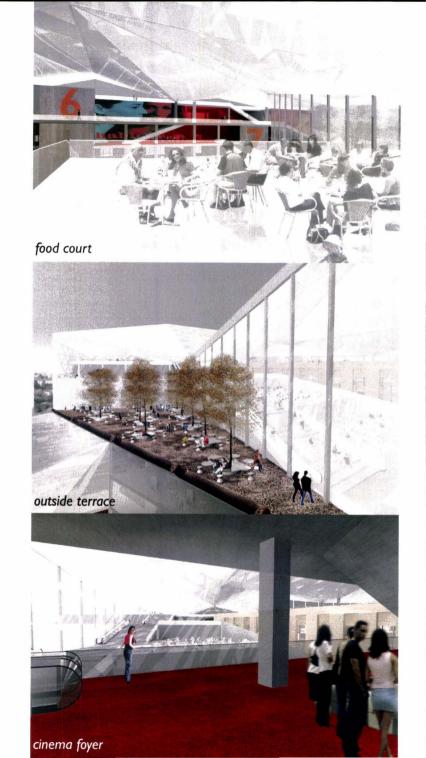
vertical mall: attraction points on the lowest and highest levels trigger the vertical movement

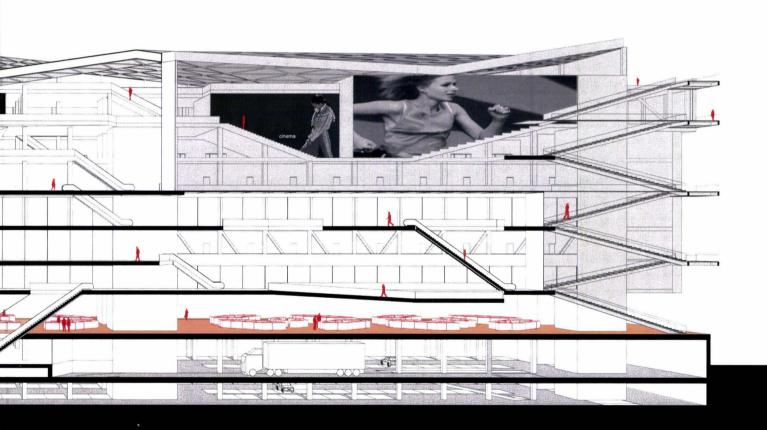
The **food court** is organized in cascading terraces, linking seamlessly the shopping levels to the roofscape. This terraced layout provides a dramatic setup for watching and being watched. The terraces can be themed to offer diverse culinary experiences. The outside terrace, conceived as a park equipped with picnic tables, encourages the consumption of food which is not necessarily purchased in the mall (here one can for instance eat a melon bought at the market, etc). This terrace is also permanently accessible from the street.

At the food court the visitor has the choice between two distinct alternatives: being in the "cash space" of the mall or the "free space" of the park (as opposed to the difference without distinction between McDonalds and Burger King).

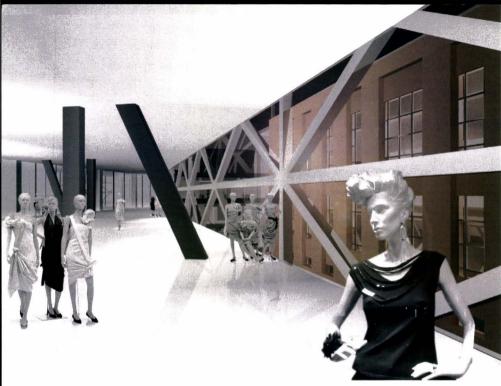
The **event deck** accommodates periodically various manifestations: product promotions, exhibitions, fairs, informative seminars, etc. It makes use of the facilities in its immediate proximity: food court, cinema (as auditorium), sports hall (as multipurpose hall), becoming an integrated attraction in the continuous routing of the mall. (It can also be accessed independently from the socle). Through this platform, the mall has the opportunity to tune itself to the city dynamics.

Finally, the **cinemas** are aligned with the vertical cut. Their foyer slopes adjacently, offering a panoramic view over the whole length of the building.

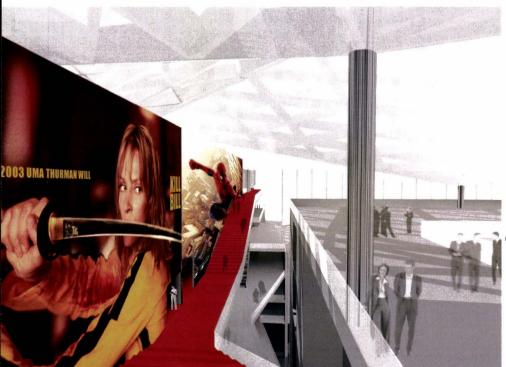




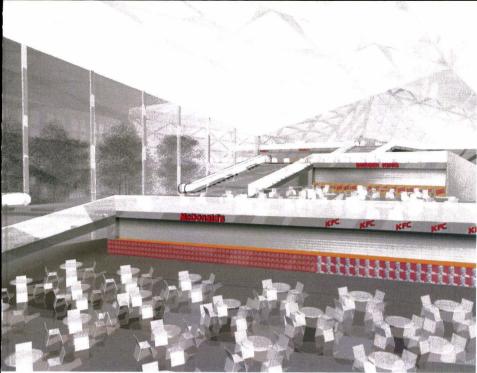
# 3D section C (section through vertical cut)



"capitalist fashion" against "communist background" in the new central volume



cinema foyer sloping through vertical cut

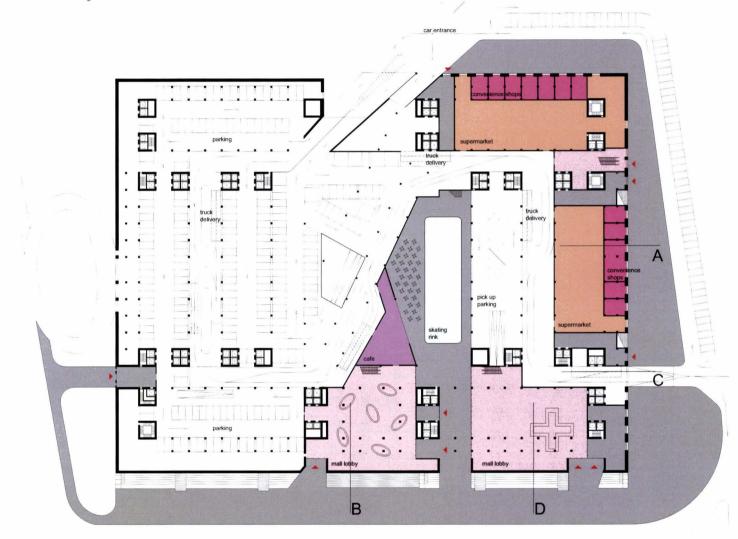


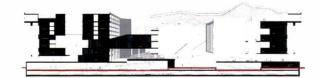
food court with cascading terraces



outside terrace of the food court, where the "cash space" of the mall blends with the "free space" of the park

plan level +0.00m

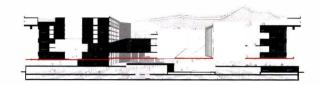




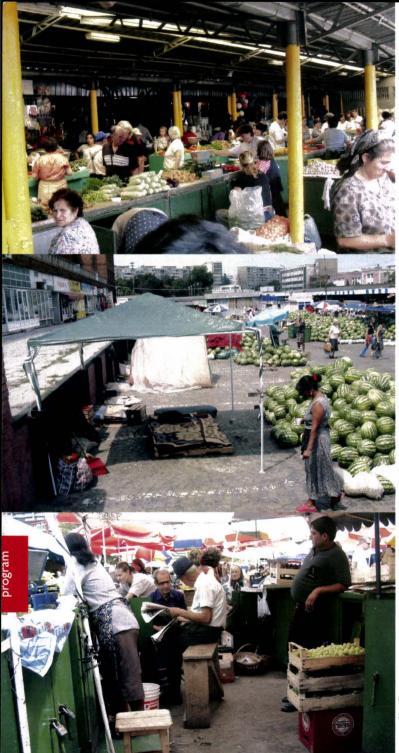


### plan level +9.55m









#### The marketplace

The market in Romania is a permanent "institution" on fixed location in every neighborhood. Farmers come every day from the surrounding villages to sell here their fresh products. The sensuality and messiness of food products, which sometimes overflow the market beyond its limits, give the place its typical vitality and stimulate real-life sensations: smelling and tasting are the usual ritual before buying.

The market's informal character encourages people to be more loose. In this sense, it is one of the last enclaves of authentic public space in the city, where people's behavior is not conditioned (here free speech is allowed, drunkenness is tolerated within certain limits, etc).

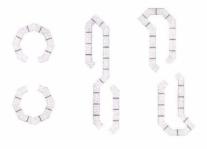
Therefore placing the market on the socle was emblematic for the building's new public character. As a place for chance encounters and social interaction between people from various economic groups, the market extends the public domain into the building. Where it comes in contact with the other programs, it contaminates them with a higher sense of reality.

more than a place to exchange goods, the market is a place to socialize and even a temporary home

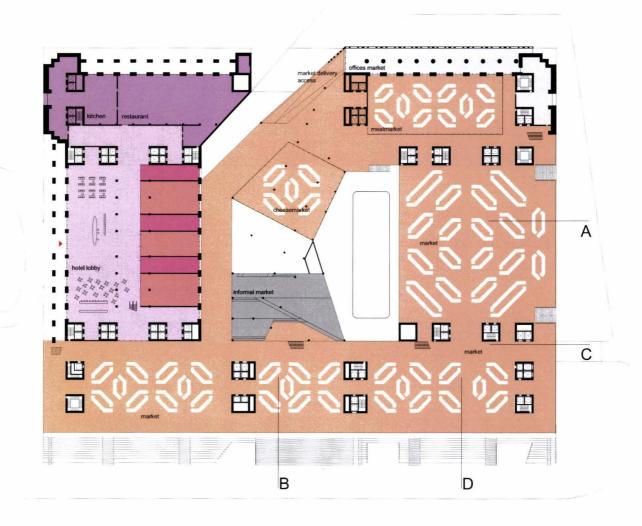
#### The market stalls

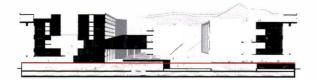
The market is equipped with stalls of prefab concrete covered with mosaic tiles (for easy maintenance). Two different modules, a regular and a corner one, make various configurations possible. By moving them with forklifts in the desired configuration, the market can be easily adapted to the seasonal product variations.





### plan level +3.95m









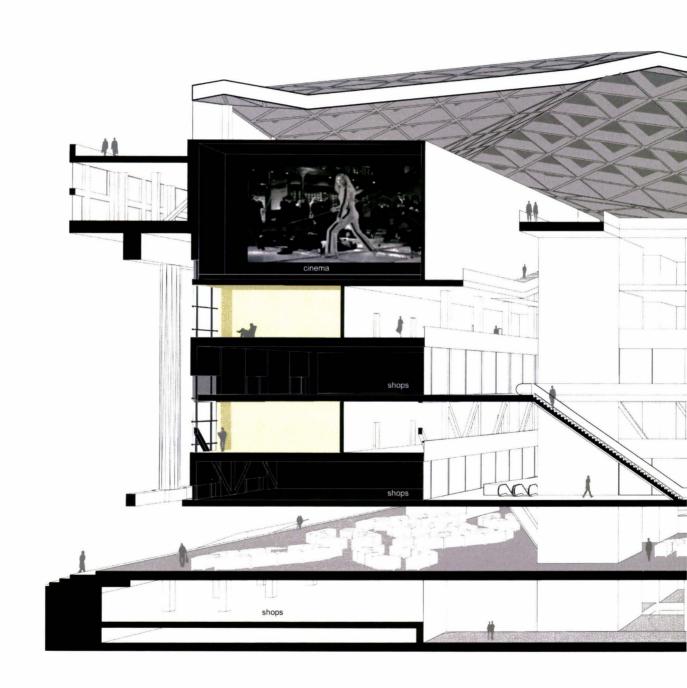




superimposed: shopping atrium and market place, the wished-for world of calculated sensations



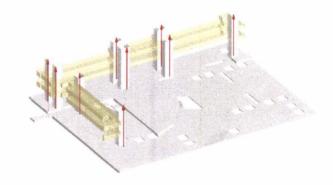
and the ordinary world of authentic sensations

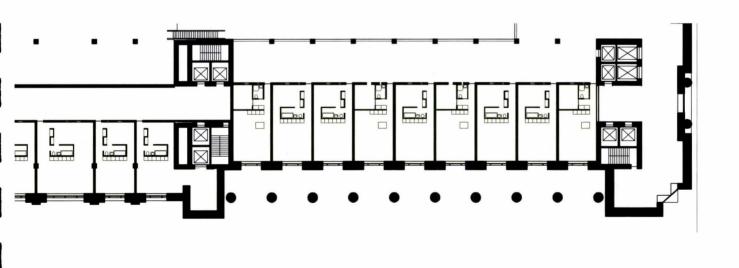


### Housing units

The housing units are aligned with the front and side facades, claiming the largest portion of windows to capture view and natural light. Seen from the outside, these windows reveal people's signs of inhabitation, giving a note of domesticity to the monumental facades.

The units are accessed via galleries which look into the atrium and the vertical cut. The generous space of the galleries taken in possession by the inhabitants will bring the sense of the everyday in the building's urban interiors.









the countless halls at the People's House give insight of what Casa Radio's interiors might have looked like, if times didn't change.

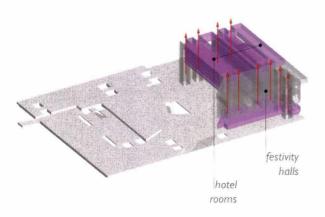


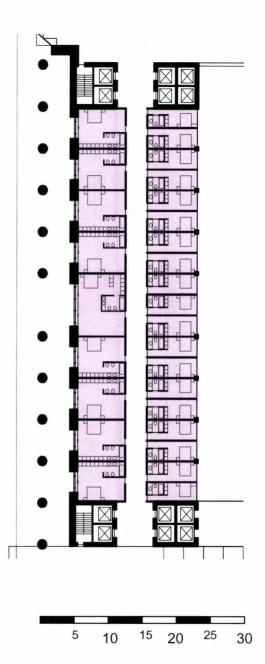
### Five star hotel styled after communist dictator luxury

The Western wing of the building (at the river side) is not affected by the horizontal cut. Here the neo-classical facade is refurbished to become the prestigious front of a five star hotel. The interiors are styled in the spirit of the original design, indulging the visitors into the sumptuous environments of a communist dictator.

The hotel facilities blend with the shopping mall, so that hotel guests can start shopping already from the lobby and mall visitors can enjoy the ambiance of the hotel's grand café.

In the part perpendicular on the atrium, also the original spatial organization is preserved. The 9m high exhibition halls, finished with the intended grandeur, are now opened to the large public. They can be rented for receptions, banquets and wedding parties.

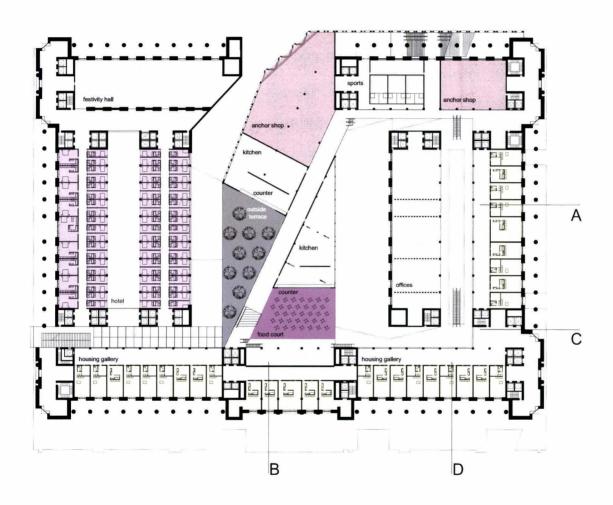


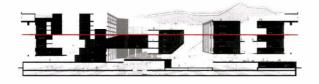




hotel and shopping mall blended: the hotel guest encounters the first shops at his arrival in the lobby, on the ground floor, the mall visitor is led in his stroll to the hotel's grand café

### plan level +22.20m



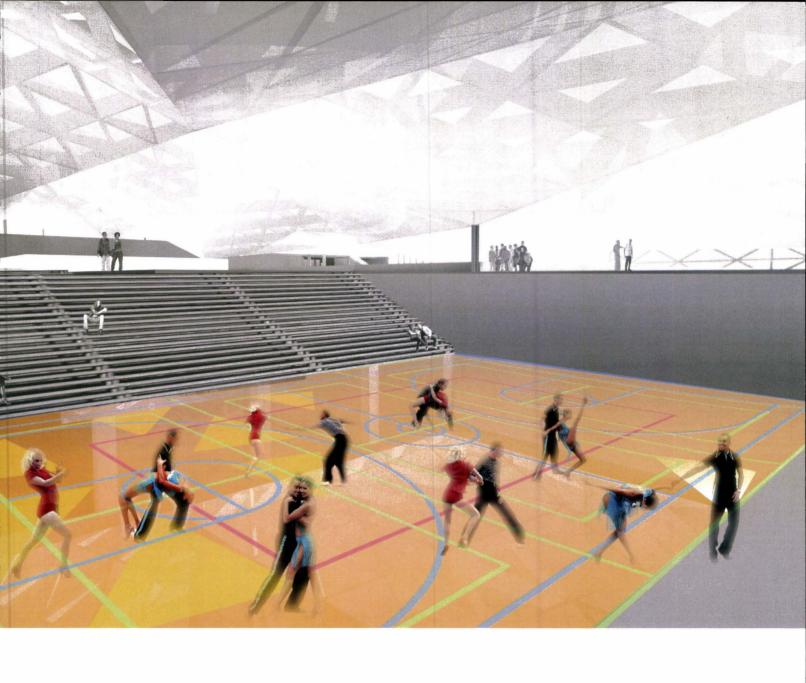




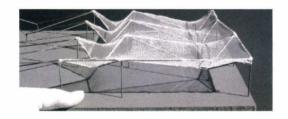
#### Roof

In order to create the maximum tectonic contrast with the building, the roof was thought as a lightweight construction, touching the building as delicately as possible (with the smallest amount of columns). The geometry of the construction should match both the existing grid of columns and the diagonal deviation. The cladding should let enough light through, but in the same time provide good thermic isolation. Construction and cladding are to be experienced as a homogeneous whole, creating a unified space underneath.





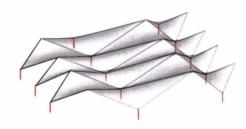






### First concept: lightweight doubly-curved surfaces

The basic element of this concept is a cable grid spanned between four edge beams in order to form a saddle shaped surface, on which a textile membrane is stretched. By varying the size of the elements and coupling them together, a stable roof is obtained with a geometry which matches the building's column grid. Even if this solution is one of the most lightweight structures possibly imaginable, its geometry is difficult to be adapted at the edges (where instead of saddle shaped surfaces, the elements have a flat triangular surface), requiring additional stiffening elements. Apart from that, the insulation capacities of the textile membrane are insufficient in the continental-excessive climate of Bucharest.



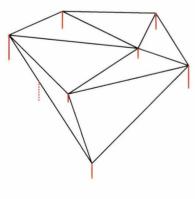


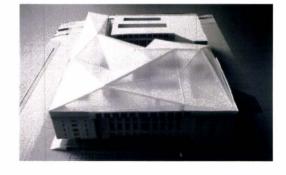
### Second concept: triangulated roof

The primary construction of this concept consists of girders which define a triangular pattern and columns supporting the triangles at every junction (corresponding with the existing grid of columns). A secondary structure fills the triangles and supports the glazed cladding. In order to give the roof the expression of a uniform wrapping (and not of a collection of traditional pitched roofs), its scale must match the scale of the building. The size of the triangles must therefore be increased until the point that the girders become very high (and heavy) or additional columns have to be introduced to support them. A final roof concept was developed from here...









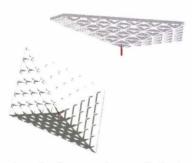
primary
construction column
additional column
girders

construction

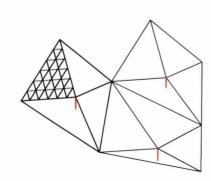
infill



pyramid with stiff triangular faces



triangular faces made out of a lattice of welded beams



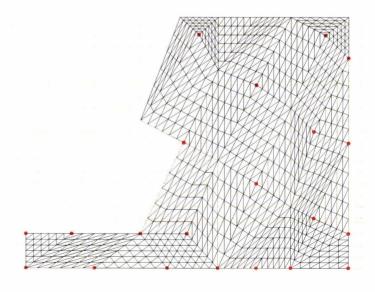
construction



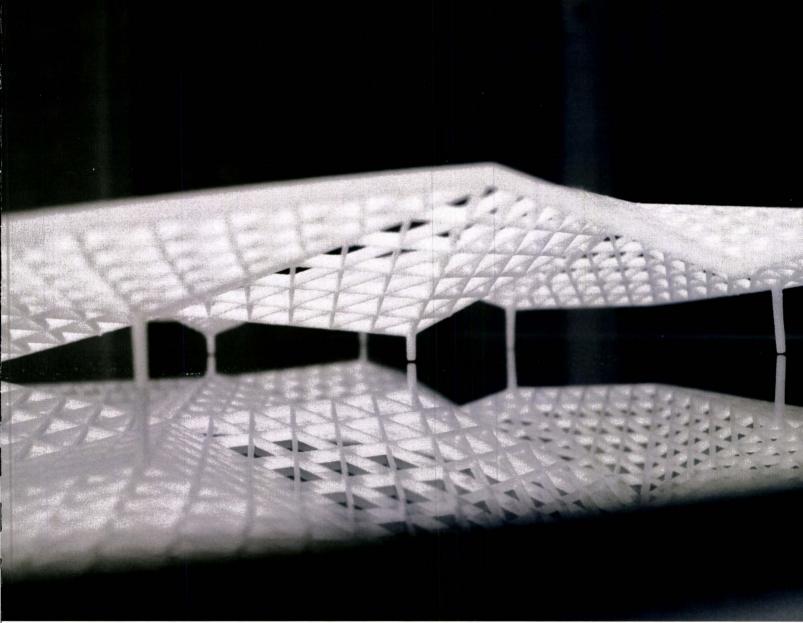


### Final concept: folded triangulated roof

The basic element of the final concept is a non-deformable pyramid with its top downwards, where it rests on a column (corresponding with the existing grid). Each pyramid consists of four stiff triangles. The triangles are made of a lattice of welded castellated l-beams (with the height of lm). By coupling the non-deformable pyramids together, a stable roof is obtained, with a reduced number of columns to support the same number of triangles (compared to the previous concept). The only extra columns are needed at the edges where some pyramids are incomplete.



roof geometry superimposed on building's grid



physical model of the roof structure realized with the method of selective laser sintering (sls) at TNO, Eindhoven

multilayered polycarbonate plates available in different transparencies



castellated beams of 1m height clad on both sides with polycarbonate plates

#### Cladding

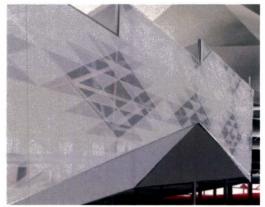
The lattices of castellated beams are clad on both sides with triangular polycarbonate plates. This double roof cladding provides a good thermic isolation through the stationary layer of air inbetween the plates. By making certain elements of the cladding openable, various methods for controlled ventilation can be applied, to regulate the climate underneath even in extreme season conditions.

Due to its vast surface, the roof cladding doesn't need to be entirely translucent to guarantee enough light in the space underneath. It is even desirable to protect certain spots (sitting areas, etc) from direct sunlight. This can be achieved by varying the transparency of the plates from transparent to translucent to opaque. The proposed cladding pattern uses a geometrical motif inspired from the traditional Romanian rugs. With this allusion to the vernacular, the roof adds a layer of specificity to the globalized environment of the shopping mall.

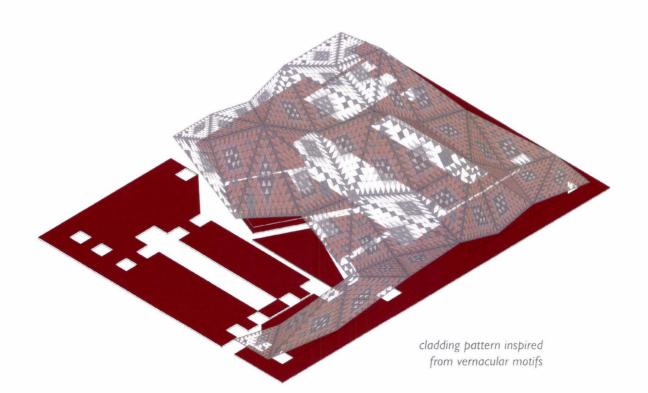


traditional Romanian rug





the facade of the new central volume is also clad in polycarbonate, in a similar pattern with the roof





#### **Outside** routing

An outside routing running through, along and on top of the building interconnects several programs, being more than a circulation space alone. Because of it's royal dimensions, its contact with the city and the beautiful views it provides, this routing becomes a place in itself. A place in which people can escape the pressures of the interiorized worlds within the building.

The routing starts in front of the building with the monumental stairs which open the way into the horizontal cut. In the market place it reaches its moment of maximum expansion. From the market, it ascends in the form of a programmatic ramp towards the loggia in the back facade and from there it makes its way upwards to the roof with a stair in between the old and new facade. At the loggia and in the inbetween space are points of connection with the routing of the shopping mall and with other programs (sports, etc). Once it reaches the top level, the outside routing transforms into a promenade, running at the perimeters of the roof: skywalk.

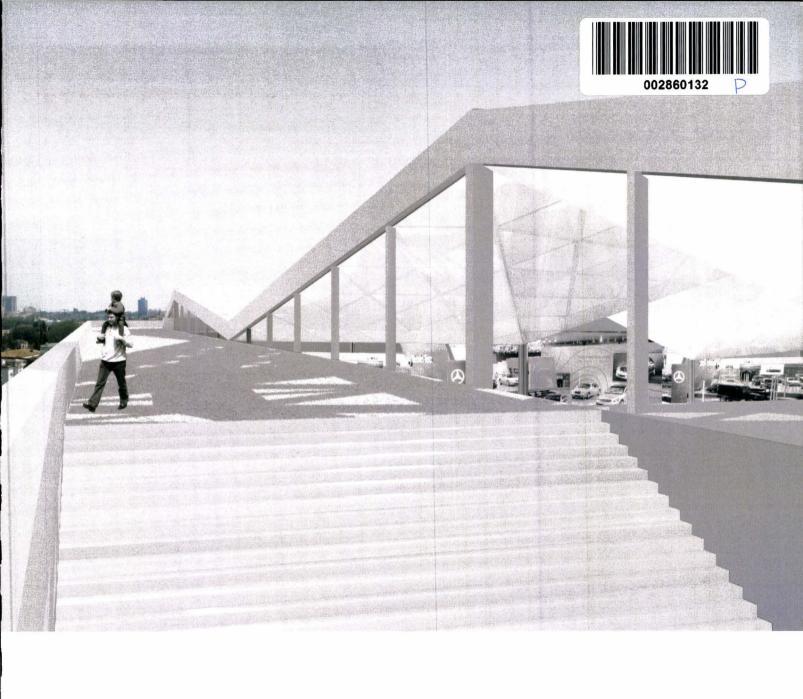








the outside routing reaching the building's top transforms in a skywalk here the visitor is delivered to the final confrontation: the one with the city as a whole, experienced in a generous panoramic view



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# EXERCIZING ON COMMUNIST HARDWARE