

La filature.

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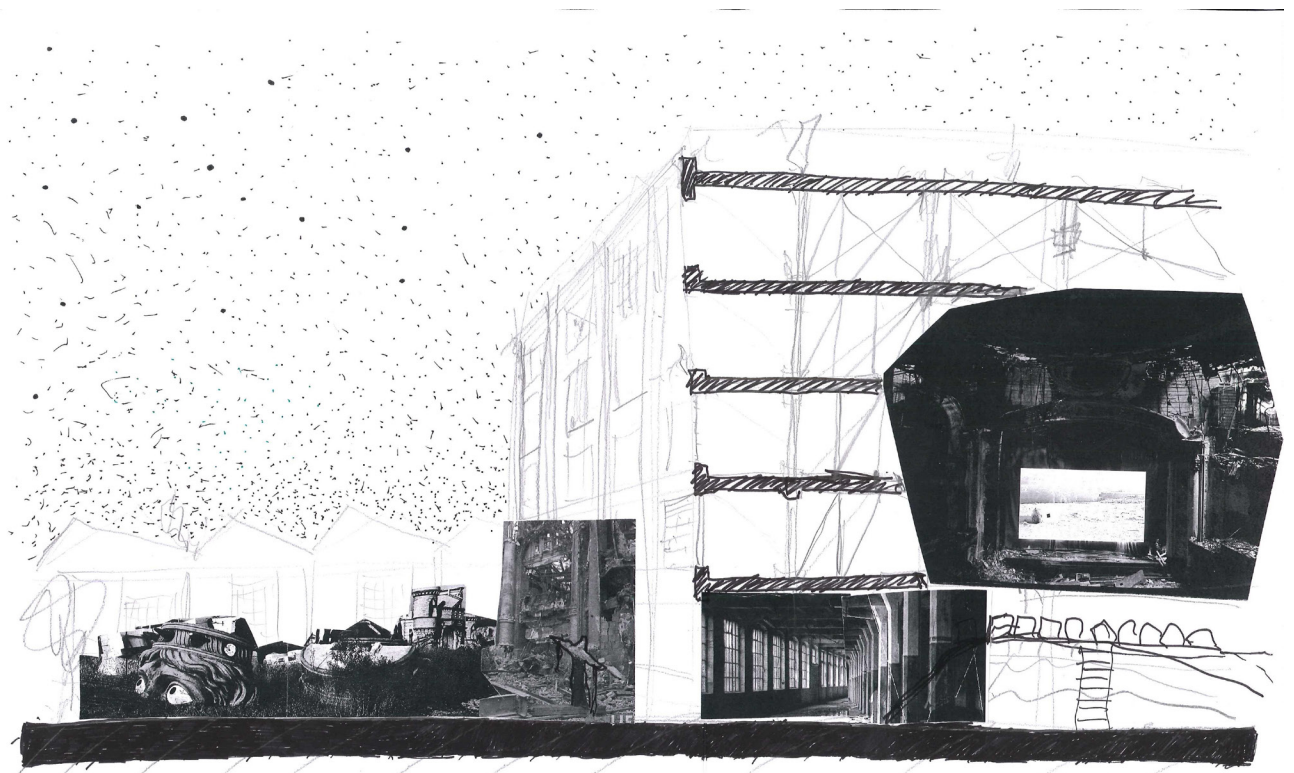
October, 2017

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La filature is a call for the disruption of the post-industrial heritage to break ordinariness of the post-industrial city. Imitating filming technic of montage and cut to introduce a foreign type, Movie Palace, into the obsolete textile factory Desurmont, to open spaces for consumption and production of films. Using the pre-existent beauty of the ruin mixed with the raw appearance of expose materiality that cut produces, as sets, backgrounds for the production of films and as ornaments for the Movie Palace. This project reacts to the commonness of the post-industrial territory by disrupting the orthogonal industrial grid. Setting an example of detournement for the other 97 abandoned sites of the Eurometropolis to follow



Fig 1. Ground floor of the south of Tourcoing. Part of the former industrial ring that surrounded the city. It shows the interior of the abandoned factories, stating the potential to be transform.

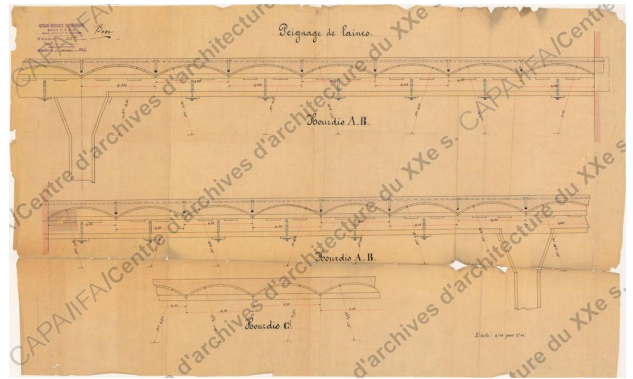


Fig 2. Original drawings of the construction details of the Desurmont Factory in 1912. It show the innovative techniques of using reinforced concrete for industrial buildings. Centre d'archives d'architecture du XXe siecle.

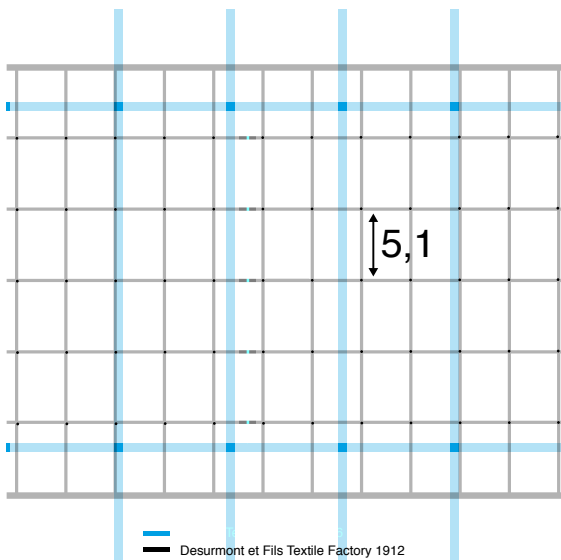


Fig 3. Superposition of structural grid of the Desurmont factory (1912) in Black and the Ipekyol Textile Factory (2006) in blue. The structural evolution of this industrial type is evidence in the drawing.

Decadency, span and the necessity to cut.

This project found in the Euro-metropolis of Lille 97 abandoned industrial complexes. Which constructed an oneiric image of the post-industrial city, for more than 50 years. *Fig 1*. Very present in the local imagination of the metropolis, is impossible to understand the binational territory without the images of vegetation growing in massive brick walls. Even though, this remembrance is in danger, most of the remaining industrial sites are in process of demolition or in way of transformation into speculative housing complexes.

The Desourmont factory is one of those examples, partially under transformation and with a pending tender for the demolition of the 80% of the area. The oneiric image of the ruin is about to disappear.

This found evidences two questions; the first one is the pertinence or not of preserve this obsolete decadent infrastructure, enliven questions about heritage and preservation. And it also evidences the governmental fail to revitalize local economy. Proving the stigmatization of the local economy which is unable to move forward after the decline of the industry. It is incapable of following the global trends despite the continuous help of high level governments.

But as Caitlin DeSilvey suggested in her book *Curated Decay*, this abandoned places has the enormous potential to be transform and evolve by themselves.

Between 1893 and 1929, immerse in the golden age of the north French industry, the society of Jules De Sourmont and his sons built their main site factory of spinning wool in Tourcoing, in the Nord of France. They commission the architect Alexandre Letuppe, which design and construct the whole complex almost as it is presented today.

The use of reinforce concrete to construct big spans between columns (5,1 metres) and liberate the floor plans made possible the introduction and superposition in six levels, big chains of machines to process the wool. *Fig 2*. The mechanization of the textile production made this factory one of the leaders of the sector, reinforcing Tourcoing as the major producer of textiles in France for more than 50 years.

After 103 years of production, in 2003 the Desourmont factory closed due to its low profits, the factory cannot follow the evolution of the industry. It can no longer host in his 5,1 metres span structure the new machines that could had make it competitive. The textile industry evolves at fast paces, new machines, new procedures that required specific dimensions, spaces and ultimately new buildings. The structure that made it so productive and modern, has now force the company to the bankruptcy.

The hundred years old concrete structure can no longer compete with the brand new twenty-four-meter span of the Ipekyol Textile Factory built by Emre Arolat Architects in Turkey, in which its architecture is design to fit the contemporary needs of the textile production. *Fig 3*.

Like Desourmont, the structural grid of the rest of Northern region's textile factories had fallen into the architectural obsolescence because of their own dimensions.

While this process of obsolescence of the industrial infrastructure was going on, the international concurrence, with cheaper and more abundant labour force, added more difficulties to the French and Belgium textile sector. Added to the architectural reason, when new investments to upgrade factories were needed the textile companies just chose for delocalize the production to cheaper

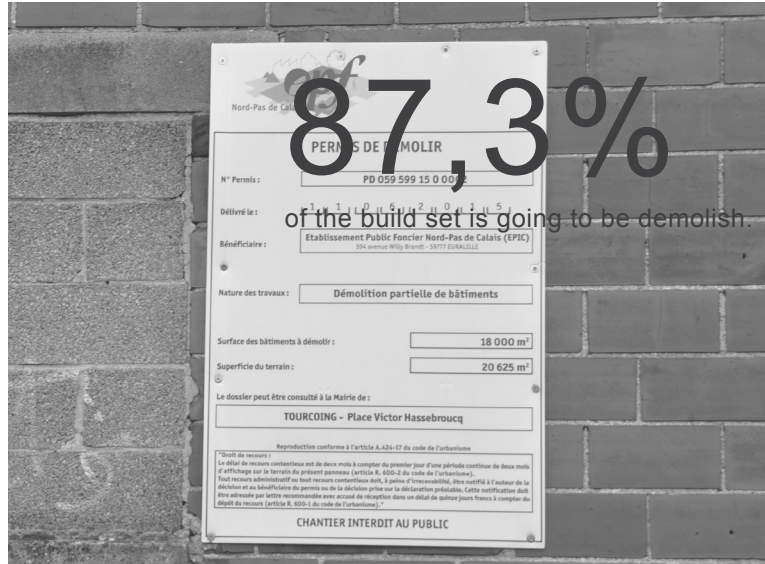


Fig 4. Demolition board in the Desurmont factory. It announce the municipality approval and imminence to demolish the former factory.
 Area of the site: 20.625m²
 Area of demolition: 18.000m²

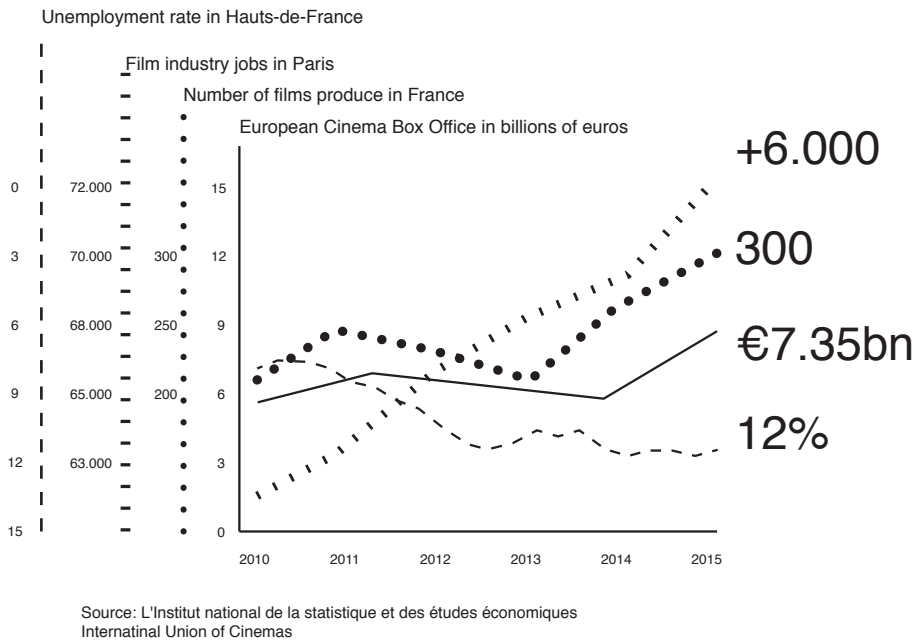


Fig 5. Comparative chart between; the European box office of the film industry, the number of films produce in France every year. The example of Paris film industry creation of employment during a general economic crisis. And the Unemployment rate of the Hauts-de.France region, where the project is located.

countries.

With such concentration of factories, built in the same period with a similar typology, made suddenly and abruptly all to fall into obsolescence. Provoking such big volume of empty abandoned industrial sites and consequently the economic hardship.

After twenty years of abandon and several call for tenders, Desurmont factory is doom to demolition. Public corporations cannot sustain the maintenance. *Fig 4.*

Such long period of abandon has given to this place the freedom to nature to occupy what man didn't want. Transforming it into a *Friche*. *Friche* is a French word historically use in agriculture to designate the parcel that is left wild for a year or two in order to make it rest, and be able to recuperate its fertility. Stating in one word its wildness, its aesthetics, but at the same time its potential to be transform. In the post-industrial city context the term has evolve to designated as well a building that has no active human occupancy, neither culture, and where wild vegetation grow. Its has the connotation of having marginal activities. But always keeping the connotation of a place waiting to be transform.

The cut cinema is a call for the disruption of the industrial heritage in order to break the ordinariness post-industrial city. To propose another alternative life to this building, not the completely demolition, neither its complete transformation into a shiny useless mountain of brick.

The fear of lost plagued the contemporary approach towards intervention in heritage, what Caitlin DeSilvey¹ propose is to free our understanding of this fear in order to

move forward. Cutting the existing building seems necessary to fit a new productive space, to reveal a new understanding of the existing spaces is needed to attract, to provoke the desire disruption of the Euro-metropolis.

The project use the beauty of the Friche as a transformative tool. The wild vegetation, the graffiti, the holes in the roofs, the cracks in the brick walls, the broken windows, the emptiness of the space, the state of ruin as a reflection of the post-industrial context of the french region. As attraction for the film industry. Both for consumption, as a movie palace that use the aesthetics of the Friche as ornaments. And as production space, film studio, which use the building as a background, as inspiration for contemporary new films.

Why cinema?

With a revenue of 7.35 billion euros in 2015, an increase of 16% in a year, despite the believe that online streaming is killing the business. The European cinema industry is growing. With France and Belgium leading the production and consumption. The film industry generated 6.000 jobs in Paris in five years. Where in Tourcoing a combination of consumption and production spaces of movies, in a creative pole, could generate a new economy for the region. *Fig 5.*

Tourcoing was at the beginning of twentieth century the heart of textile production in France, hence the consistent legacy of ruined factories. In particular, the disaffected factory Desurmont is located in the heart of Tourcoing and therefore of the Eurometropolis. The site is accessible by tramway from Euralille, and reachable by a population of 1.059.310 within 20min. Making it the closest point to every city of the metropolis. Benefited from the low value of properties, and the mentioned reasons before, Tourcoing is the

¹ DeSilvey, Caitlin. Curated Decay : Heritage Beyond Saving. Minneapolis: University of Minnesota Press, 2017

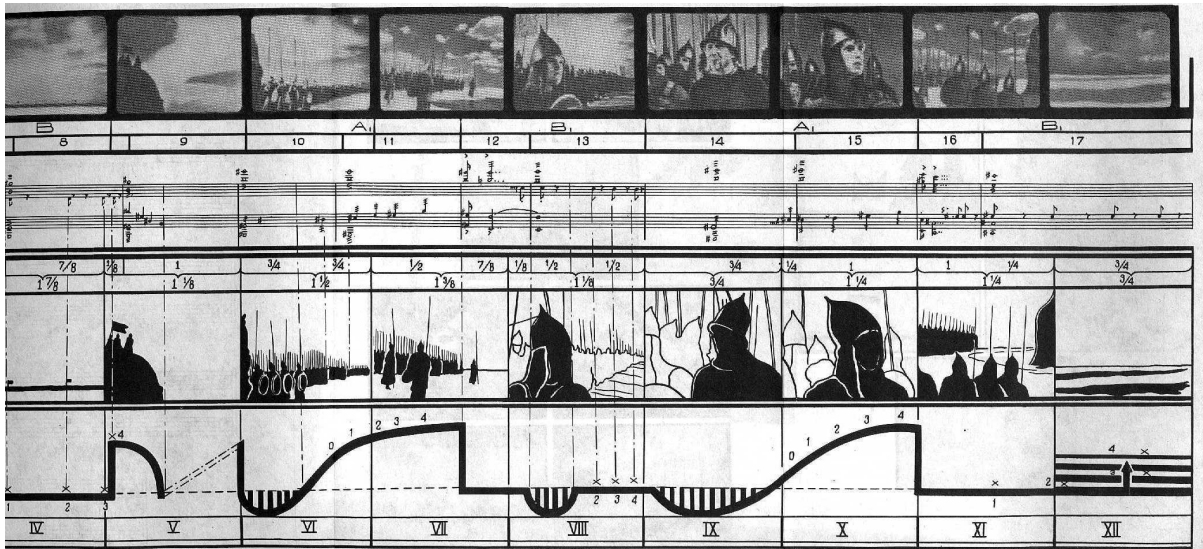


Fig 6. Sergei Eisenstein, sequences diagrams for Alexander Nevsky. In this diagram Sergei coordinate the montage of voices, music, film, and composition alongside with the movement of the camera, to edit the film as a whole.

<http://socks-studio.com/2011/04/21/sergei-eisenstein-sequences-diagrams-for-alexander-nevsky-and-battleship-potemkin/>

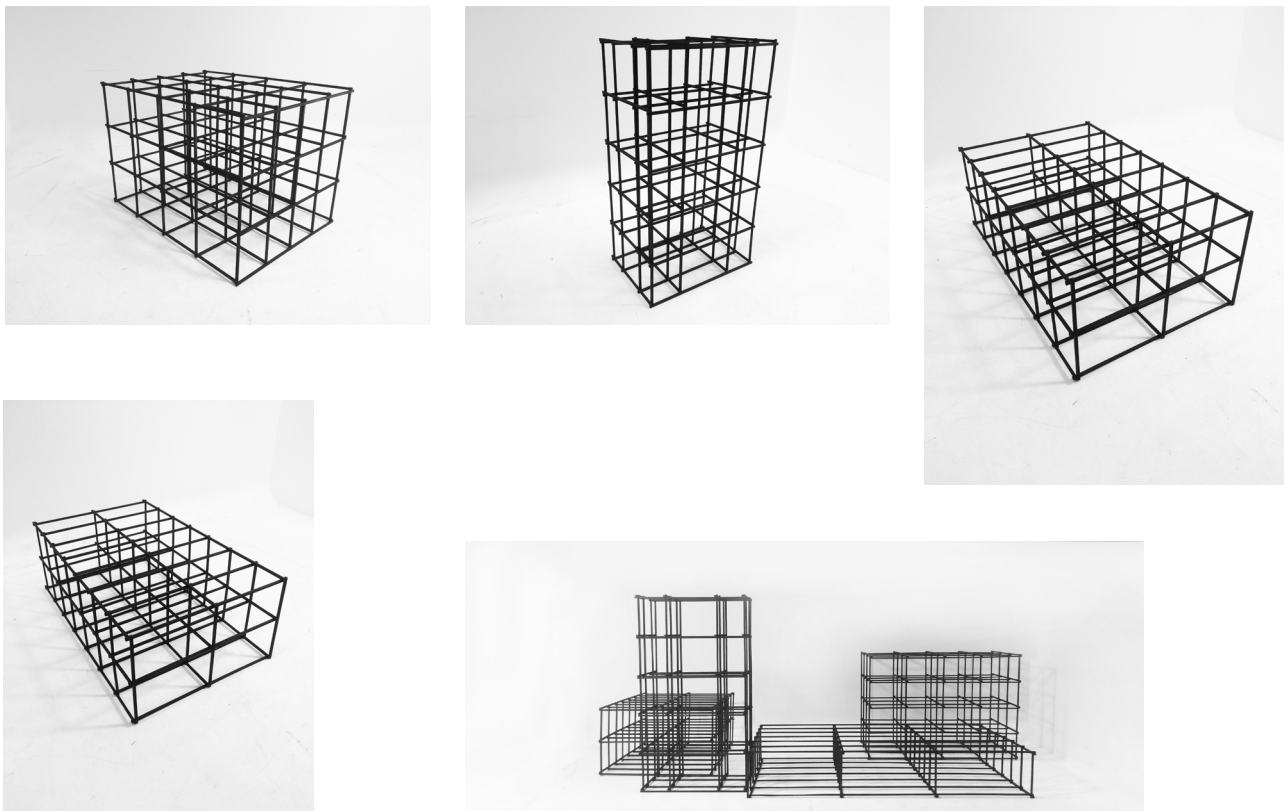


Fig 7. Study structural models of the existing building. An abstract analysis of the structure to determine the possibilities of the cut.

ideal location for a cinema complex, in which production and consumption are mixed inside a Friche.

Sergei Eisenstein argued that montage is the essence of the cinema, is “the nerve of cinema”², and montage theory, in its rudimentary form, asserts that a series of connected images allows for complex ideas to be extracted from a sequence and, when strung together, constitute the entirety of a film’s ideological and intellectual power. In other words, the editing of shots rather than the content of the shot alone constitutes the force of a film. *Fig 6.*

This project propose the use of this technique applied to the architecture. Instead of editing the film afterwards, the building is edited. Openings in the walls, cuts in the floor are made to let the camera pass and shoot continuous scenes from space to space, from inside to outside to inside again. Using the totality of the building as stage. The project propose a more flexible understanding of the heritage as a productive space, in which the creative filmmakers are free to use the space and the building as they want.

Cutting elements and rearranging the spaces of the existing building give a new understanding of architecture. It allow with this method to reproduce the sequence of spaces of the Movie palace type, entry, ticket box, hall, and auditorium *Fig 7.* inside the existing building, leaving intact the aesthetics of the Friche but at the same time opening a new understanding of the space for the new program to fit.

While the cuts in the studios are made to connect the stages one to the other, and to open new perspectives for the camera’s lenses. The cut of the cinema becomes the

performer. It reacts to the commonness of the post-industrial territory by disrupting the orthogonal industrial grid. It set an example of detournement for the other sites to follow. Twisting the site, the found, but as well the movie palace type. Learning which are the useful aspects of this particular type to be transfer in the project.

The movie palace in different styles, Chinese theatres, Egyptian ones or modern, used intense ornamentations, like intense blue ceilings, neon lights and intricate carpet patterns. Instead cut cinema will use cracks, chipped walls, broken windows and wild vegetation. The ruins as ornaments for the new movie palace. Ruins to blur the boundaries between real and unreal. Ruins to begin the cinematic experience.

While big chains of entertainment like Pathé or AMC are becoming simple black containers of technology. Cutting a movie palace inside a Friche, because of the potential of the film industry to generate economy, because of the independence of the type from the exterior skin. And because of the greedy desire for exotic decoration of the Movie Palace, because of the power of the cinema as projector of experience across generations and cultural backgrounds. Using architectural means to expand the experience of the film.

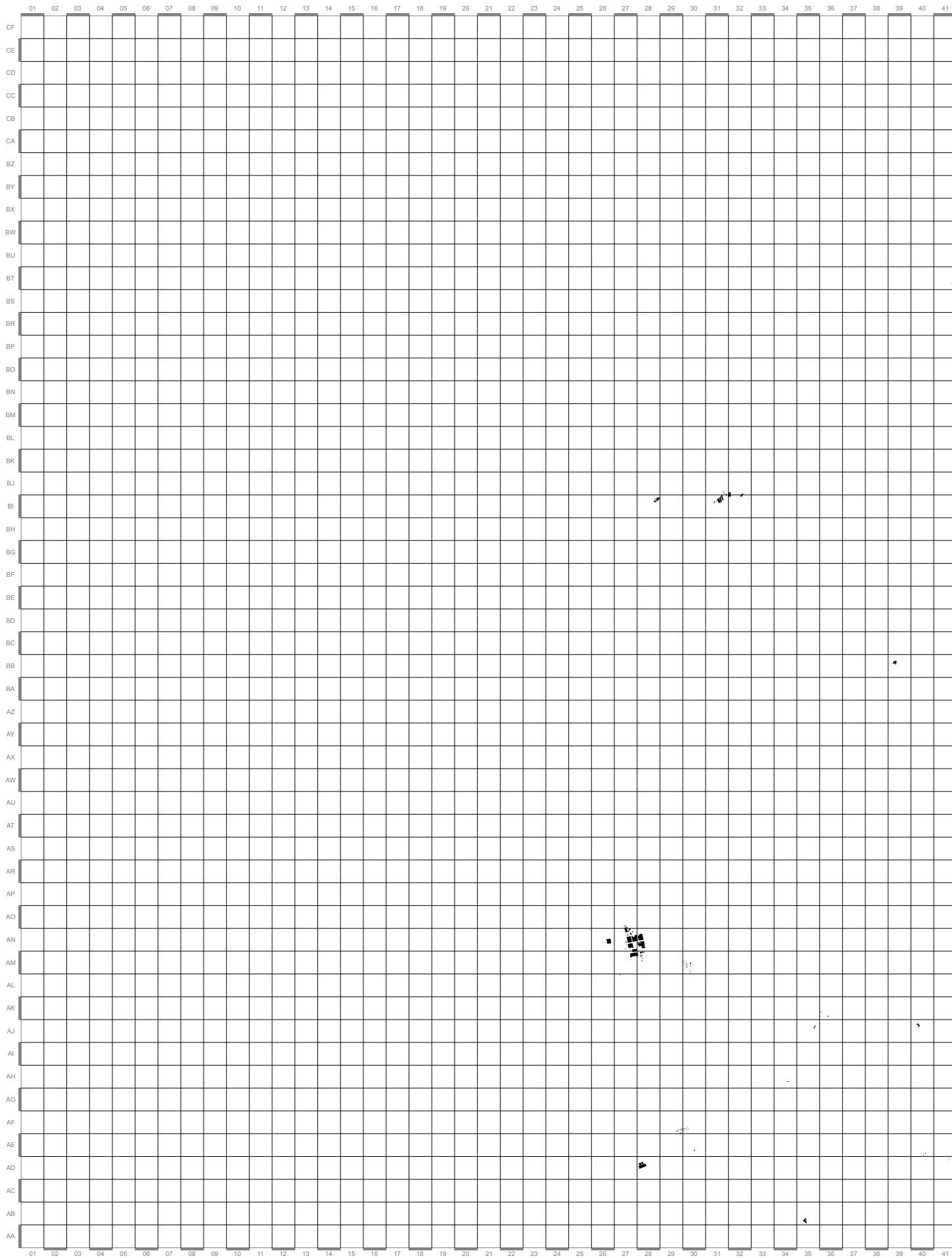
By cutting a new sequence of spaces inside the Friche is possible to regenerate the space of cinema, one can create a new reality inside without disturbing the wildness of the place. Preserving the continuous decay of the ruin while promoting a new economy. Hard concrete cut-outs, expose materiality and mountains of debris are the interior ruthless image of the cut cinema

² Sergei Eisenstein. A Dialectic Approach to Film Form. Essay from “Film Form”, 1949; New York

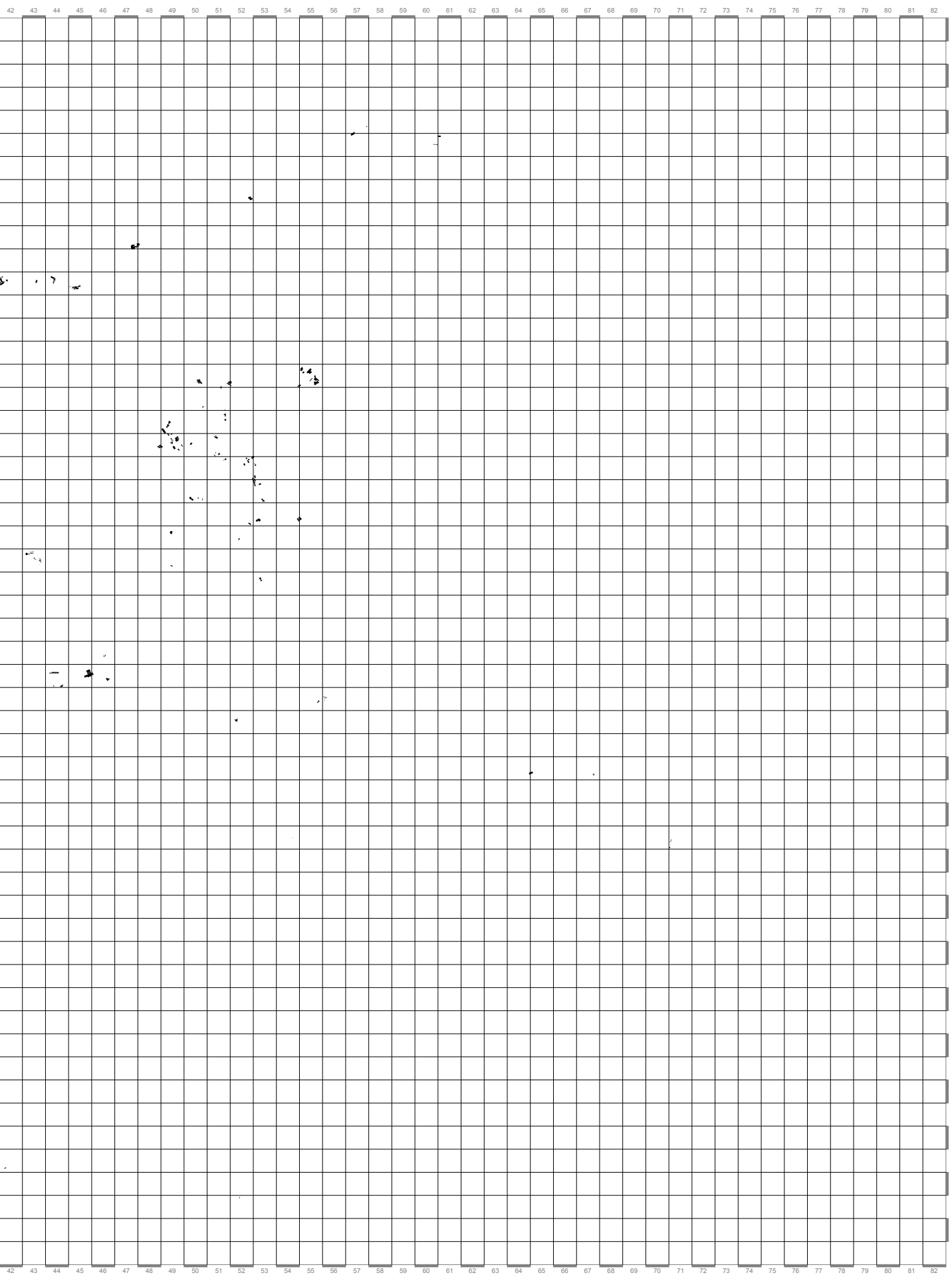
As Found

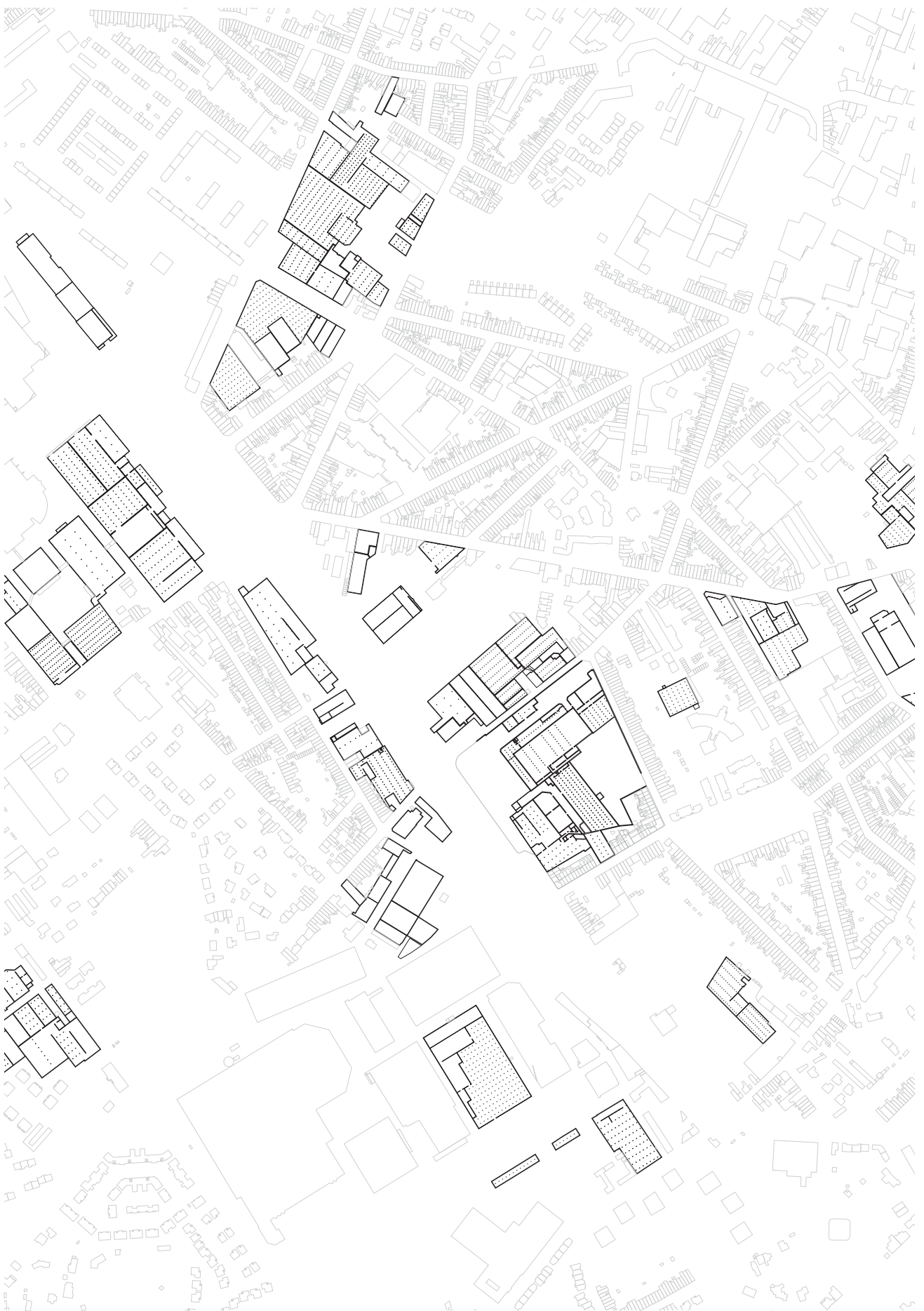


Ruins of the former textile factory
Desurmont et Fils
by author. 2017. Tourcoing, France



Territorial map of the decadency of the industry in the Eurometropolis.
 97 abandoned industrial complex.





Ground floor of the south of Tourcoing. Part of the former industrial ring that surrounded the city. It shows the interior of the abandoned factories, stating the potential to be transform.

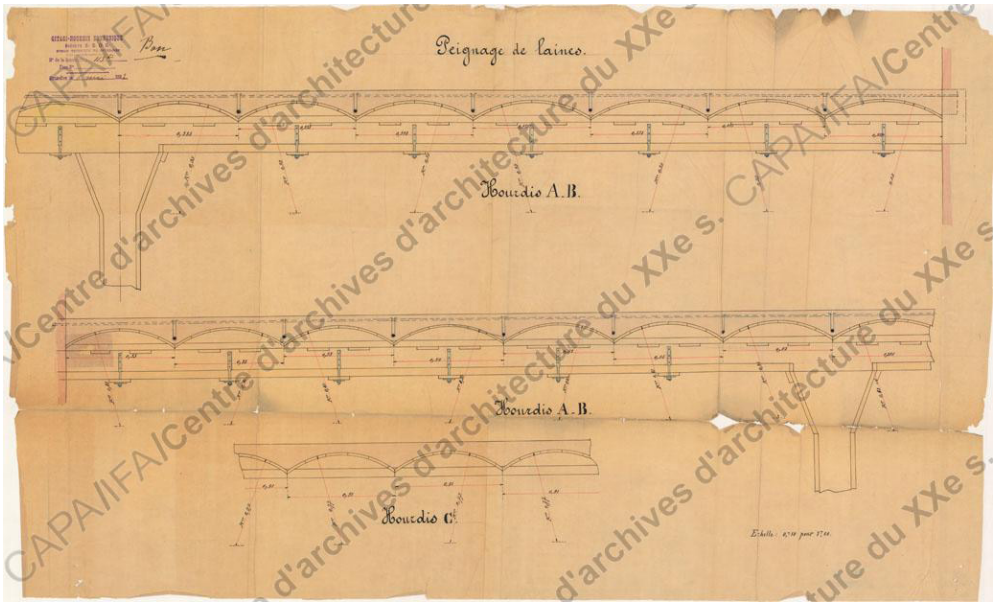
Industrial decadency

This project found in the Euro-metropolis of Lille 97 abandoned industrial complexes. Which constructed an oneiric image of the post-industrial city, for more than 50 years. Very present in the local imagination of the metropolis, is impossible to understand the binational territory without the images of vegetation growing in massive brick walls. Even though, this remembrance is in danger, most of the remaining industrial Friches are in process of demolition or in way to transformation into speculative housing complexes.

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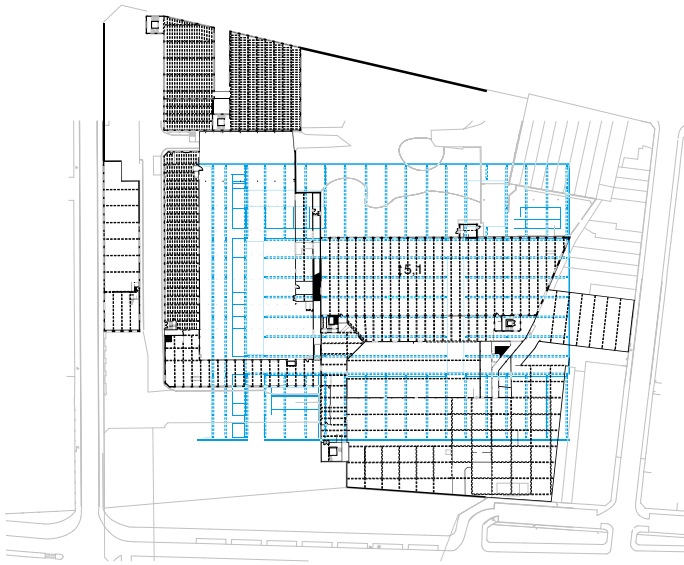
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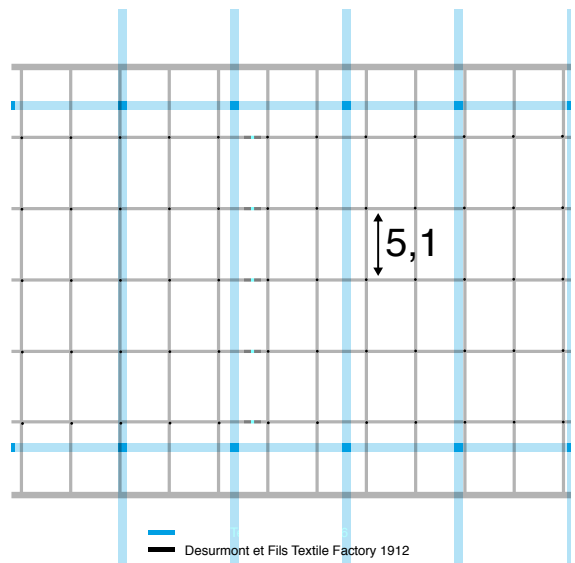


SOURCE: Centre d'archives d'architecture du XXe siècle.

Original drawings of the construction details of the Desurmont Factory in 1912. It shows the innovative techniques of using reinforced concrete for industrial buildings.



Superposition of the ground floor of the Desurmont factory (1912) in Black and the Ipekyol Textile Factory (2006) in blue.



Superposition of structural grid of the Desurmont factory (1912) in Black and the Ipekyol Textile Factory (2006) in blue. The structural evolution of this industrial type is evidence in the drawing.

Span obsolescence

Between 1893 and 1929, immerse in the golden age of the north French industry, the society of Jules De Sourmont and his sons built their main site factory of spinning wool in Tourcoing, in the Nord of France. They commission the architect Alexandre Letuppe, which design and construct the whole complex almost as it is presented today.

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While this process of obsolescence of the industrial infrastructure was going on, the international concurrence, with cheaper and more abundant labour force, added more difficulties to the French and Belgium textile sector. Added to the architectural reason, when new investments to upgrade factories were needed the textile companies just chose for delocalize the production to cheaper countries.

With such concentration of factories, built in the same period with a similar typology, made suddenly and abruptly all to fall into obsolescence. Provoking such big volume of empty abandoned industrial sites and consequently the economic hardship.



Gloria Swanson in the ruins of the Roxy Theatre.
Eliot Elisofon. New York City, October 14, 1960. © Time, Inc.



Film sets are chaotic spaces. The Czech–French photographer capture as well as the French film director, Godard, the ruined ambience of the Italian Cinecittà. Relating the space of production of movies with their vision of the world.

Cinecittà film studios. Josef Koudelka, Italy. Rome. 2002.

Ruin Aesthetics

“When the Roxy theater in New York, an \$11 million cathedral of motion pictures, opened 33 years ago, Gloria Swanson, glittery queen of movie stars, was foremost among 6,000 guests. She was also the star of the movie shown that night. *The Love of Sunya*. Earlier she had carved her name on a beam high in the dome. The famous theater, its day done, is now being torn down, and the last month Miss Swanson came for a last look at the ruins. A wry and witty woman, she remarked, “Wherever I go I hear people saying ‘Is it?’ or ‘Isn’t it?’ and once I heard a man say, ‘It is. It is the original.’” When, gowned in a Jean Louis sheath, a feathery boa and \$170,000 in jewels, she swept up to the Roxy in her Rolls-Royce, crowds gathered and she could hear again, ‘Is it, or isn’t it?’ Perhaps she also heard the man who said loudly, “It is, and looking better than ever.”

Life magazine November the 7th 1960
pag 46.

The nostalgic show of Gloria Swanson in 1960 posing for the Life photographer Eliot Elisofon, in the middle of the demolition of the Roxy Theatre one of the most famous movie palace of New York for 33 years, show us the beauty of the decadency. Comparing the alluring beauty of the old movie star dress in her best robe, with the ruins of the cinema. A visual provocation to the perversity of the demolition of the loved monument.

Josef Koudelka photographs in the Rome’s Cinecitta, show us the beauty of the current state of the abandoned chaos of old film sets. Their beauty because of what they are, not because of what they have been. The right composition and the wildness of the place is the only ingredients for this pictures to have its strong visual potential.

As this two examples the Cut cinema claim the beauty of the Friche as a tool to design. The former factory is not beautiful

because of its past. It is beautiful because of its current conditions. Therefore those conditions must be preserve.



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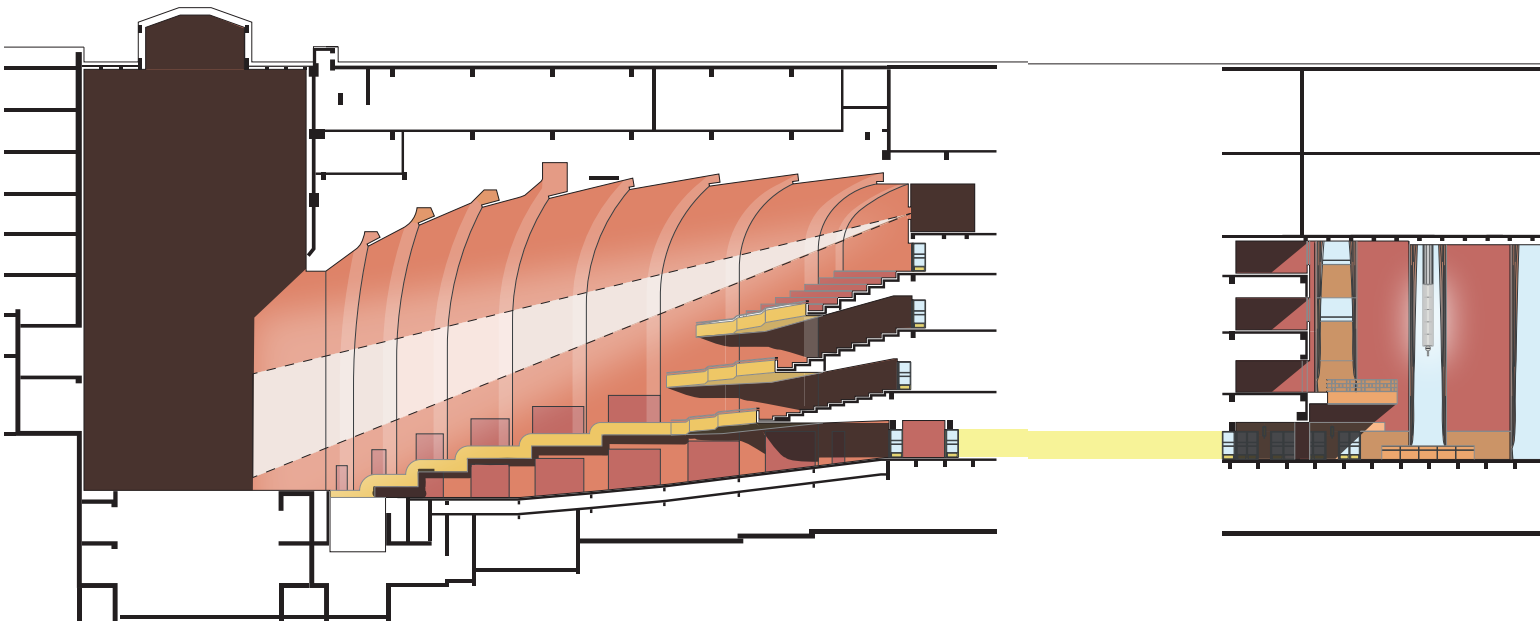
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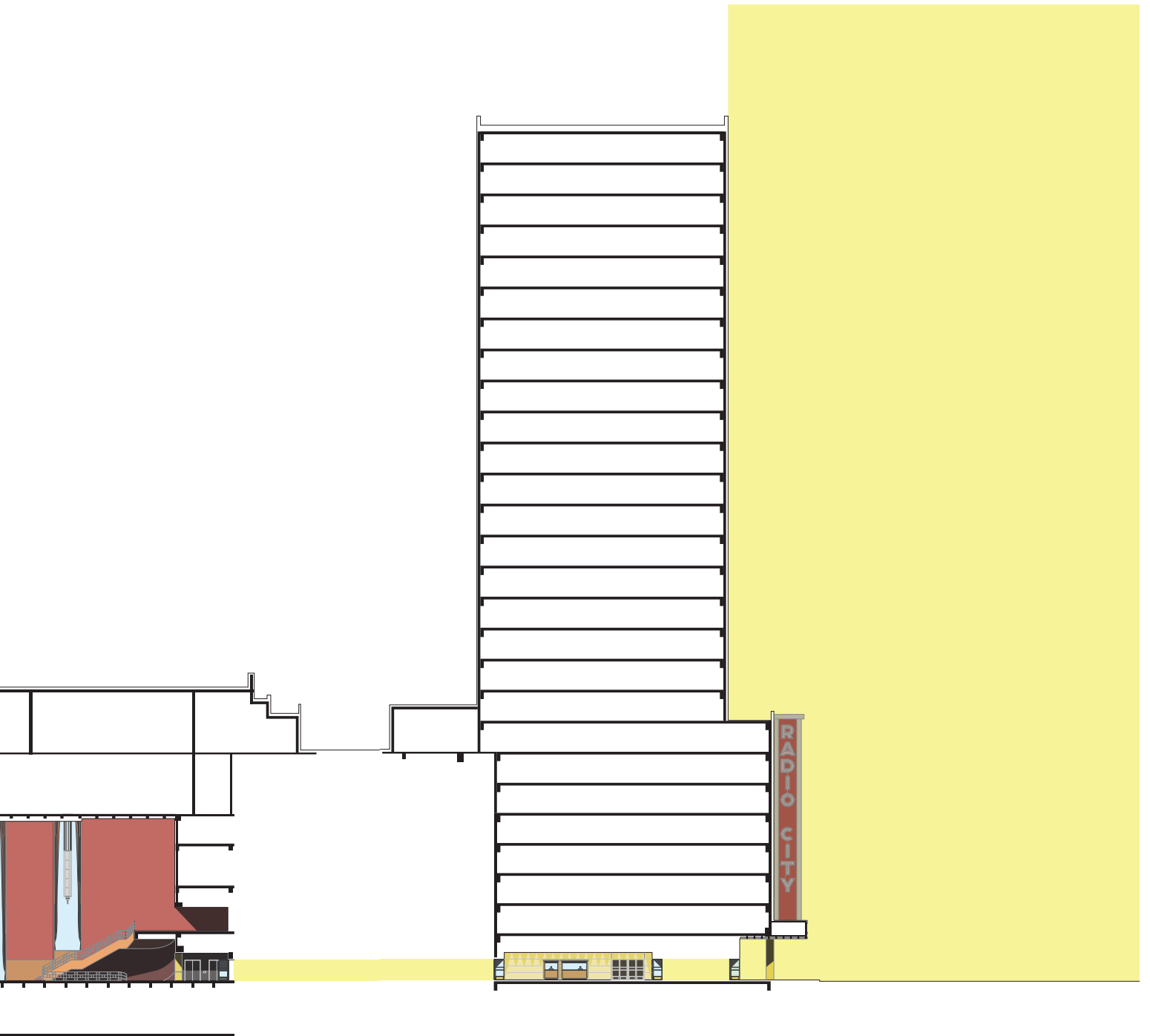


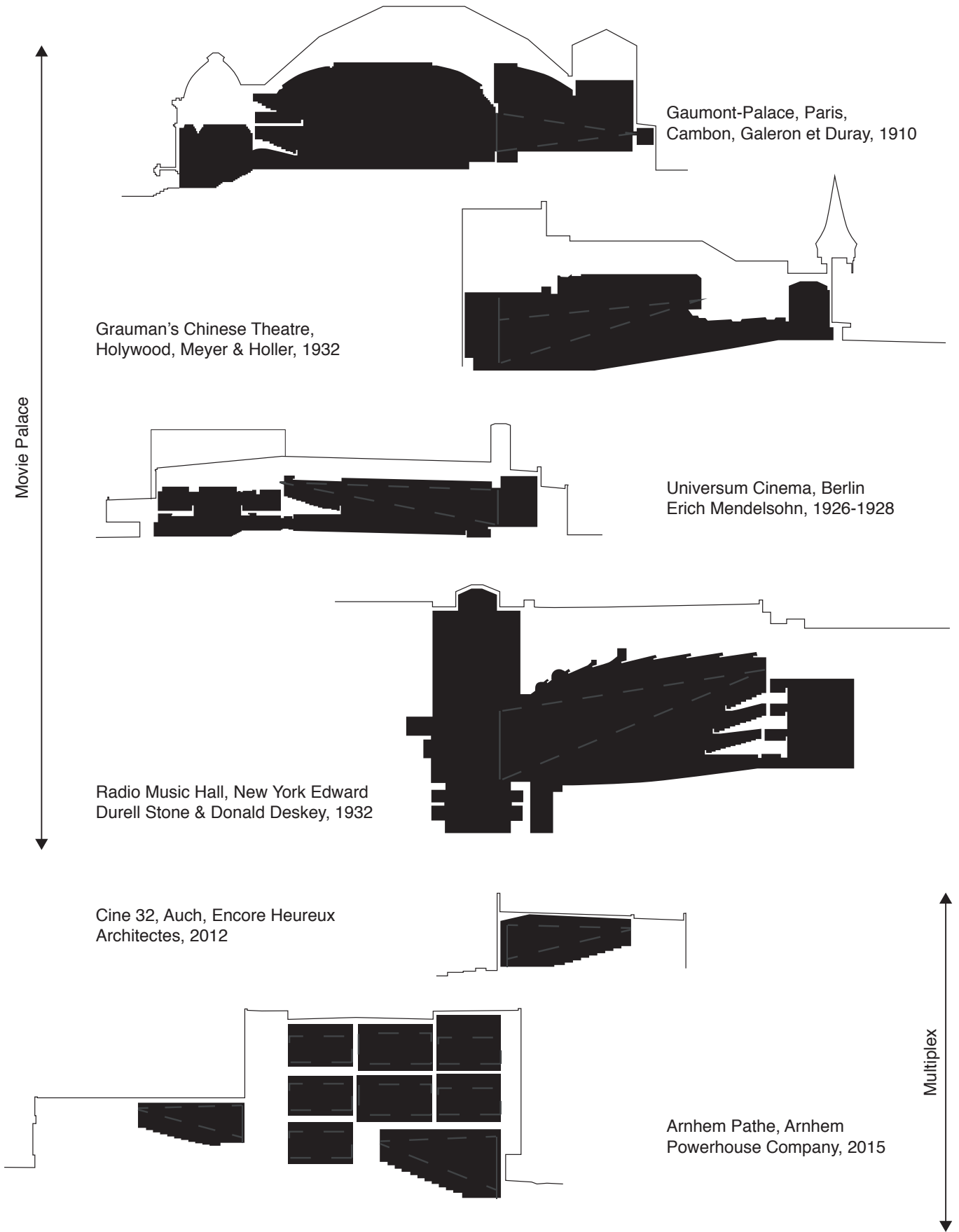
Theaters Series
Sugimoto, Hiroshi. 2016. Hiroshi Sugimoto. Vol. , Theaters /. Paris: Éditions Xavier Barral.



The space of cinema in the movie palace is formed by a concatenation of glamorous spaces. Those spaces had particular shapes. But they respond to the internal logic of the cinema, creating a confrontation between the constructed mass of the building and the interior.

Radio Music Hall, New York Edward Durell Stone & Donald Deskey 1932





Type comparison between the movie palace and the multiplex. The spatial richness of the origins of the cinema type has been lost in the evolution of the cinema space.

Movie Palace vs Multiplex

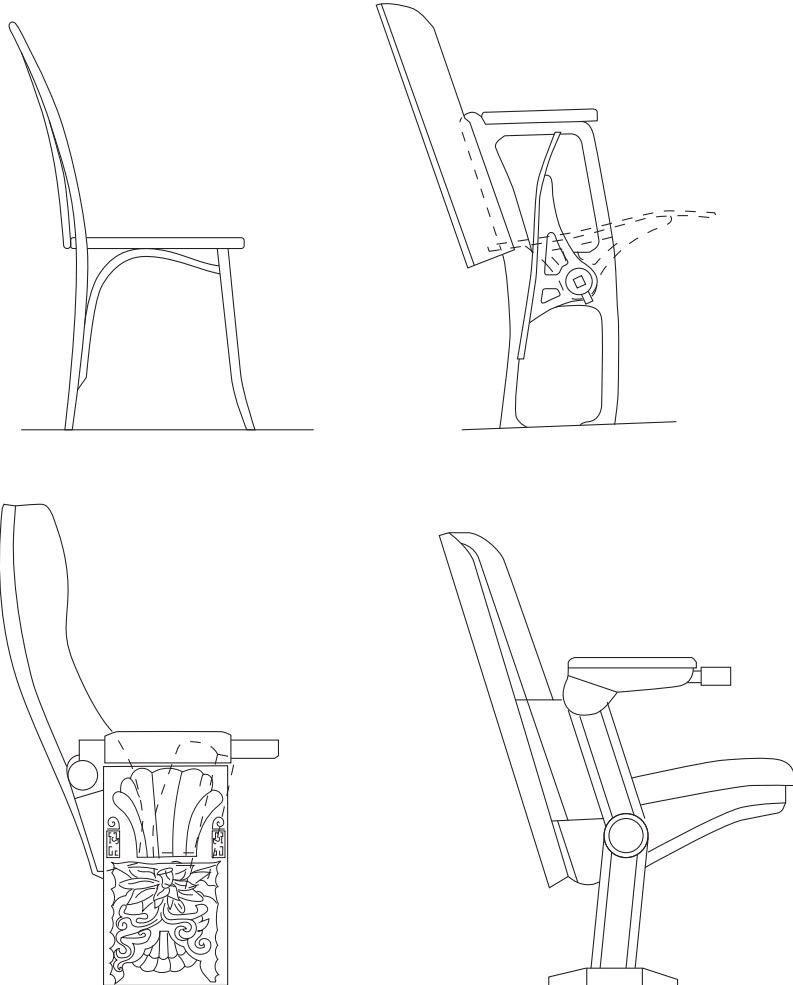
Movies were one of the first form of a global culture. As so the cinema was the building type that hosted the social activity, its internationally known and constructed in all the countries of the world.

Movie palaces are traditionally compose of the following sequence of spaces; the exterior space cover with a bright marquise which both announce the films and attract the attention of the people using big signs or highly decorated elements, like Chinese pagodas or Egyptian elements, to as well indicate the entrance to the building. The tickets box, where the tickets for the seance are sell, is the gate to the inside world of the building, in some cases this element is positioned outside the entry door in other cinemas is a desk inside the entry hall, as strategy to seduce the costumer with the interior architecture. Following the snack bar, the traditional American pop corn and Coca Cola are supply in this space, even though it may change according to cultures. And finally the auditorium, the destination. This space is not too big, neither to small, is proportioned to make the guest comfortable, the light is soft and busy noise of the street is inappreciable.

The most essential element of the cinema is the screen and the projector, this two are the core of the type. Around the type historically has been adapting itself to the social changes, the technology and the films. As so the birth of the type is consider by Ross Melnick and Andreas Fuchs in their book "Cinema Treasures: A New Look at Classic Movie Theaters", the Nickelodeon. The formalisation into space of one of the shows of the Vaudeville theatres. There for one nickel the immigrant American worker had a cheap access to entertainment and culture without the barriers of the language. From that, the evolution of the films, which really started to be films instead of motion picture, and the desire of the high class to enjoy the spectacle as well, provoke the need for a

more classy and notorious spaces for this avid bourgeois. The Movie Palace with all his different styles resolve this need. This evolution through technology and social changes can be trace in the history of the type, but this text doesn't intent to lecture about the topic but to illustrate with an example how this mechanism has transform the type.

"It is disappointingly ironic that, as cinema becomes more technically accomplished, the experience of going to see cinema gets ever more banal." Says Fabien Riggall, founder of Future Cinema, a London-based events company specialising in the creation of immersive and social cinema experiences. While big chains of entertainment like Pathé or AMC rely in the constant search of new technologies that increase the artificial sense of the experience to maintain the economy of the type. Neglecting the architectural experience, those macro complexes are becoming simple containers of technology. Other ways of consume films are appearing in the cities, temporary film festivals, pop up cinemas, rooftops cinemas, etc, nostalgic spaces to provide with the sensory experience that is characteristic of the type. Using for that innovative design and complementary activities they are bringing back the social experience of the movie palace. But cinema is not only for summer and the experience of going to the movies is not temporary. Therefore, serious spaces for cinemas are necessary. For this reason, I proposed as a project to rescue the movie palace type, as a more complex space for a richer experience of the film.



“

Going to the cinema results in a immobilization of the body. Not much gets in the way of one's perception. All can do is look and listen. One forgets where one is sitting. The luminous screen spreads a murky light throughout the darkness

”

“Underground Cinema” Robert Smithson, 1971. Smithson, Robert, and Jack Flam. 1996. Robert Smithson : The Collected Writings. The documents of twentieth century art; The documents of twentieth century art. Berkeley etc.: University of California Press.

Spectator evolution

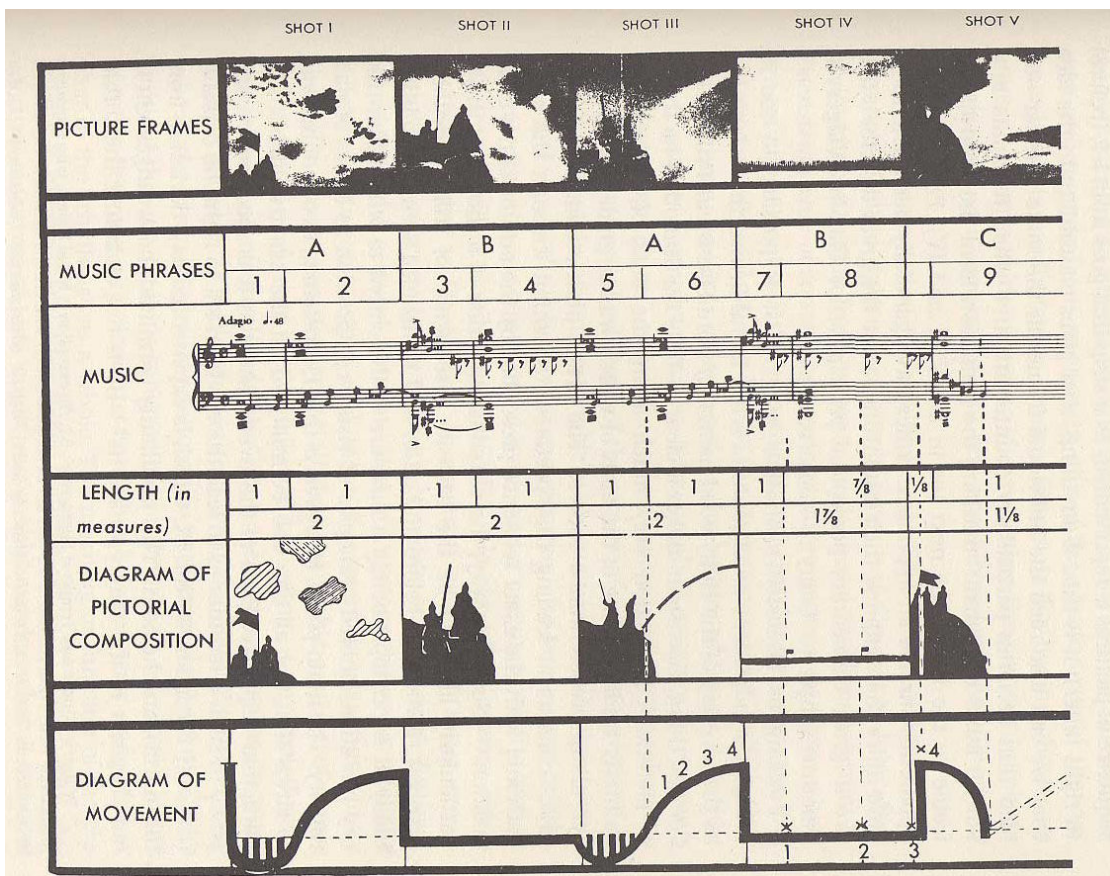
Cinema has been one of the most popular way of transmission of culture in the last century. As such it always has addressed the populous, the generic mass of consumer. Always called generally spectator.

The anonymous figure of the spectator, is not specific, but still classified by ages in order to control the type of movies that the figure should watch or not. The type of the cinema has always adapt itself to the needs of the spectator, from the cheap Nickelodeons for workers, to the family suburban drive-in. His instrument the seat, as Smithson said, "going to the cinema results in a immobilization of the body", is the object that fusions with the body in order to make you comfortable and even forget your own existence, in order to be completely absorb by the image. This object can be as well trace along the evolution of the typology, from the first chairs in a front-store, the glamorous seats of the Movie Palace to the heavy and soft seats of the multiplex. We can find many patents for small transformations of this object to the point to transform itself to be part of the motion in the 4dx experiences. In the last decade alongside with other effects that extends the feelings of a film, the seat can now move, project sound and smells and change temperature. This level of technicality allow to maximize the perceptions with more senses than sight and hearing.

The parcoure the cinema is the concatenation of spaces that allow the spectator to enter in the emotional state to enjoy a movie. From the street, where the signs attract you with their bright signs and the posters of exciting movies, the entry which already has a softer lighting to induce the calm and the tranquillity of the space, in the twenties highly decorate with divers styles to already make you think of farthest and exotic destinations, the sound and the smell of the popcorns that are already part of our childhood memory, to the auditorium almost dark where the sounds are trap into the ornamentations

and carpets. In this space the spectator sits and watch a 90min movie without moving, in completely disconnection of the immediate outdoor reality. The sequence of spaces and the architecture helps to set in motion the magic of the spectacle setting the ambiance and the mood for the spectator to, again, surrender his perceptions.

With the growth of online streaming services of movies and series, the television and the smartphones, the relevance of this sequence is in question by the spectator. Why go outside if I can watch the same film at home cheaper or for free? In the movie palace, high class society went to watch movies more than just watch the film, it was a social activity where to enjoy technology and international culture. As before the architecture have the role to provide the space for such interaction. What a cinema can provide is the atmosphere, the ambience that is difficult to reproduce elsewhere, the uniqueness of the space. But how to design for unique architectural experiences? Should we go back to the magnificence and highly detailed movie palaces?



Sergei Eisenstein, sequences diagrams for Alexander Nevsky.
 In this diagram Sergei coordinate the montage of voices, music, film, and composition alongside with the movement of the camera, to edit the film as a whole.

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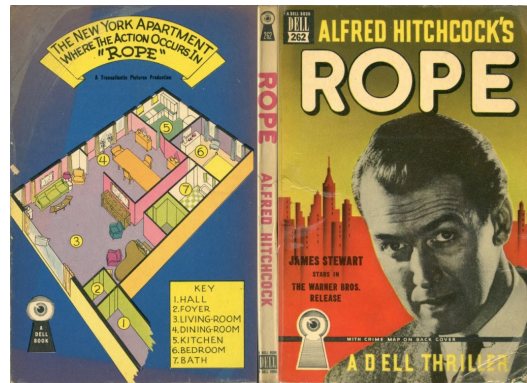
Movie production and shooting techniques

Sergei Eisenstein argued that montage is the essence of the cinema, is “the nerve of cinema”¹, and montage theory, in its rudimentary form, asserts that a series of connected images allows for complex ideas to be extracted from a sequence and, when strung together, constitute the entirety of a film’s ideological and intellectual power. In other words, the editing of shots rather than the content of the shot alone constitutes the force of a film.

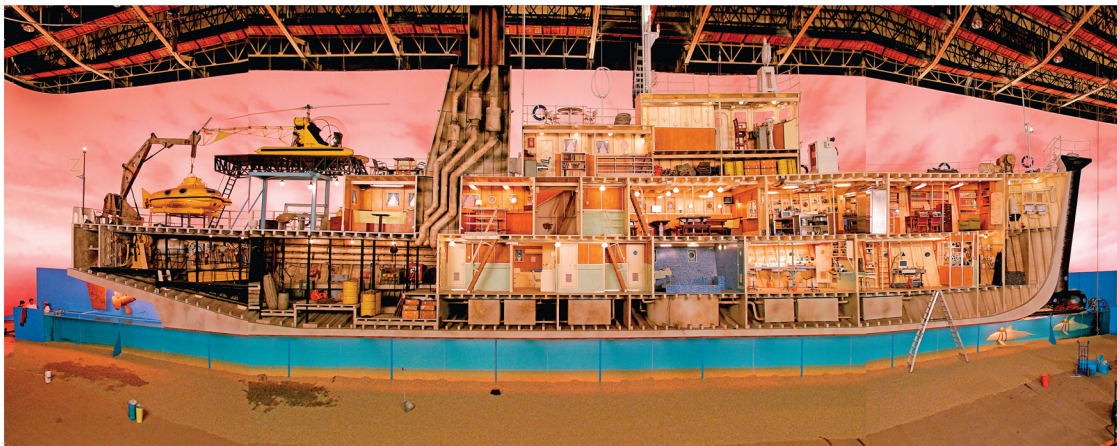
¹ Sergei Eisenstein. A Dialectic Approach to Film Form. Essay from “Film Form”; 1949; New York



Touch of Evil. Orson Welles. 1958



Rope. Alfred Hitchcock. 1948



The Life Aquatic with Steve Zissou. Wes Anderson. 2004



The Shining. Stanley Kubrick. 1980

In films shots, or the actual recoding of the camera, have in average 2,5 seconds, which combined and edited form the story of the movie. In some cases, experimental filmmakers use longer shots to make longer scenes, that allow for more complex relations of the actors with the space and the narrative, working with pace, speed, movement of the camera and the play of the actors. This technique is more difficult because it requires more preparation, bigger spaces, rehearsal, etc.

Directors like Orson Welles, in the entry scene of *Touch of evil*, he used the long shot technique, in which the camera travels up and down, from wide takes to close up interrupted and fluid, as one tool more to expand the narrative of the film.

Alfred Hitchcock tried in 1948, for his film *Rope*, to shot the entire film in one take. Impossible at the time because the camera could only take 10 min of film.

Or Wes Andersons, who is famous for his sets. He made construct a set of the boat Belofonte for the film *The Life Aquatic*, to shot in one take the activity of the boat in a continuous movement of the camera across the section and describe spatially the movie.

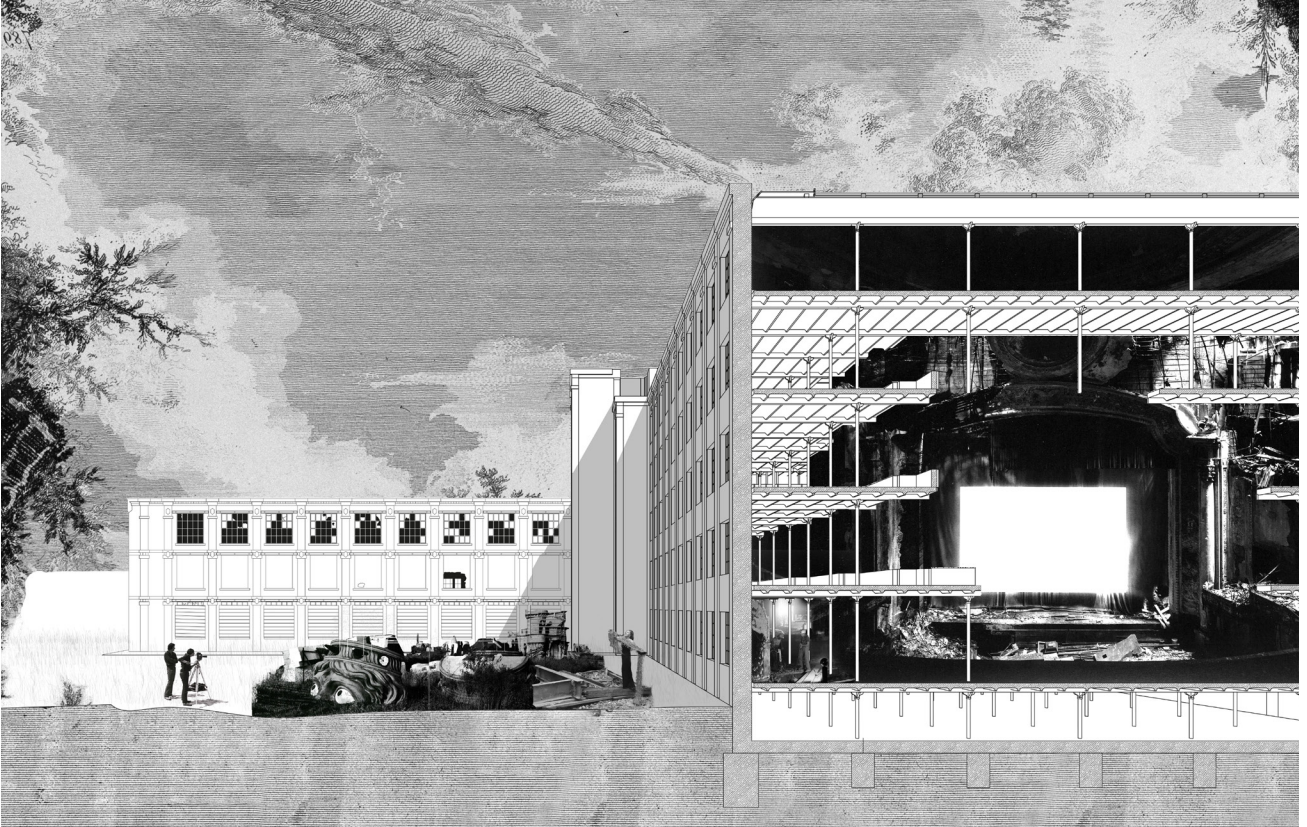
And finally Stanley Kubrick, used the long shot technique to create suspense in the film *The Shining*. In the corridor scene, where the camera follows for a few minutes a kid cycling a tricycle, the director shows us from the child perspective the space of the hotel, traveling from one room to another.

But then could the architecture help to develop this techniques? Instead of editing the film, cut the shots to construct the story. Could the architecture be cut to let the camera pass?

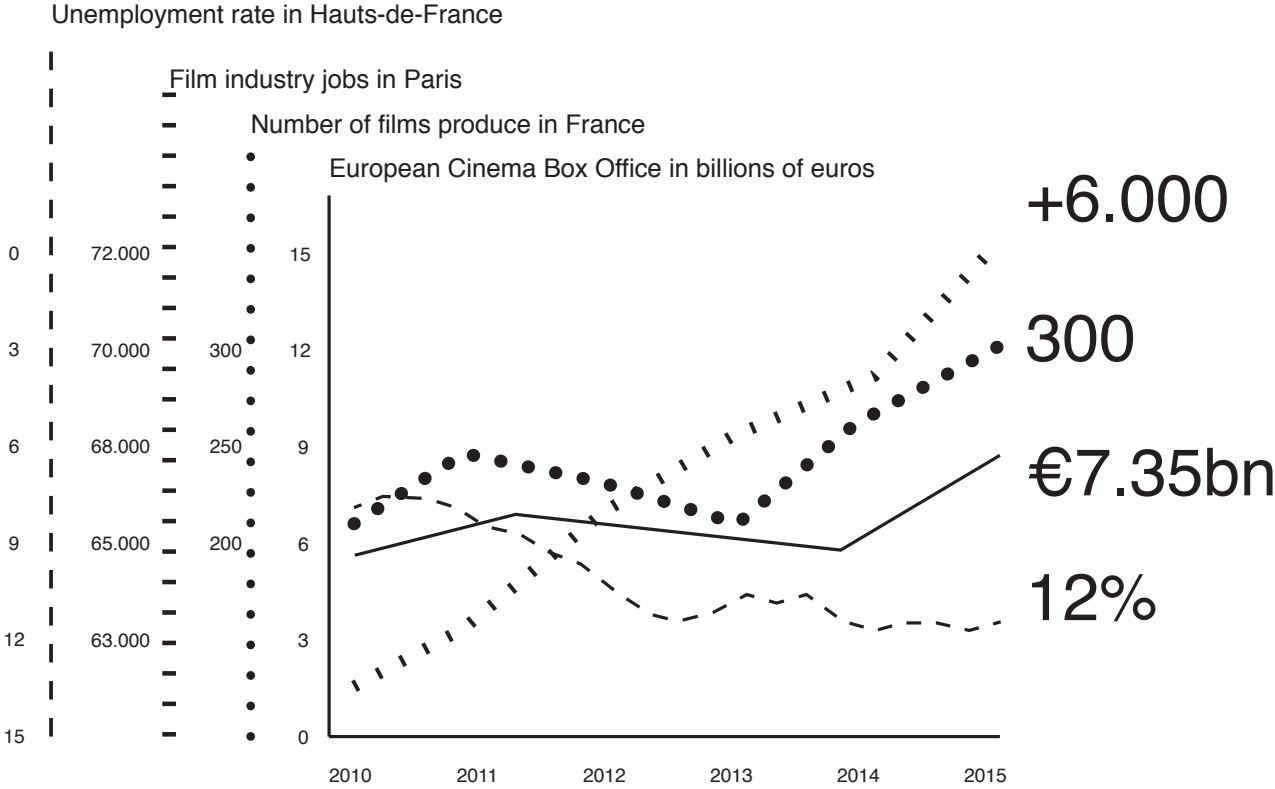
This project proposes to edit the architecture instead of the films. Opening

holes, cutting floor slabs and demolishing roofs, to allow the maximal expression of the cinematic art. It proposes a more flexible understanding of the studio space, where the building can be use fragmented or as a whole.

Project



Cinema vs Unemployment

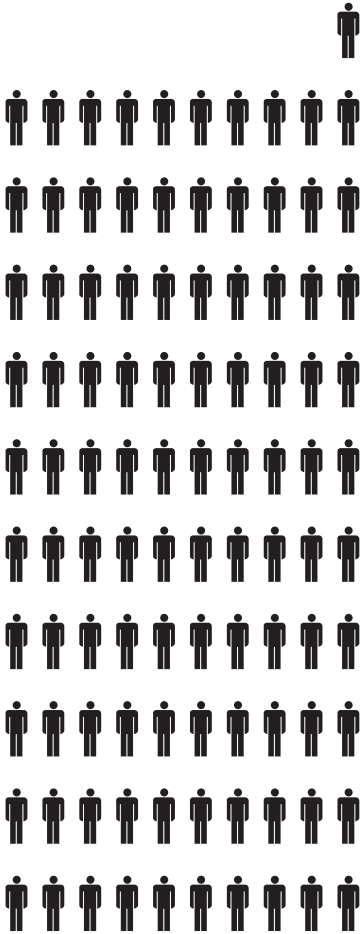


Source: L'Institut national de la statistique et des études économiques
 Internatinal Union of Cinemas

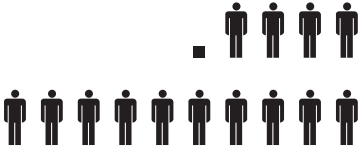
With a revenue of 7.35 billion euros in 2015, an increase of 16% in a year, despite the believe that online streaming is killing the business. The European cinema industry is growing. With France and Belgium leading the production and consumption. The film industry generated 6.000 jobs in Paris in five years. Where in Tourcoing a combination of consumption and production spaces of movies, in a creative pole, could generate a new economy for the region

Visualize evidence

Inhabitants per cinema



Cinema



Bioscoop

 x 1.000 inhabitants

Despite the believe that online streaming is killing the cinemas, the annual report of the International Union of Cinemas demonstrates that European cinema business is solid and growing. “In most countries, cinemas represent a growing share of film industry revenues as returns in home entertainment continue to decrease. This is because cinemas are first of all cultural and creative meeting places that enable audiences to share an unparalleled experience that cannot be compared to watching”.

The post industrial image



SOURCE: Photograph taken by the author

Area of the site: 20.625m²
 Area of demolition: 18.000m²

87,3%

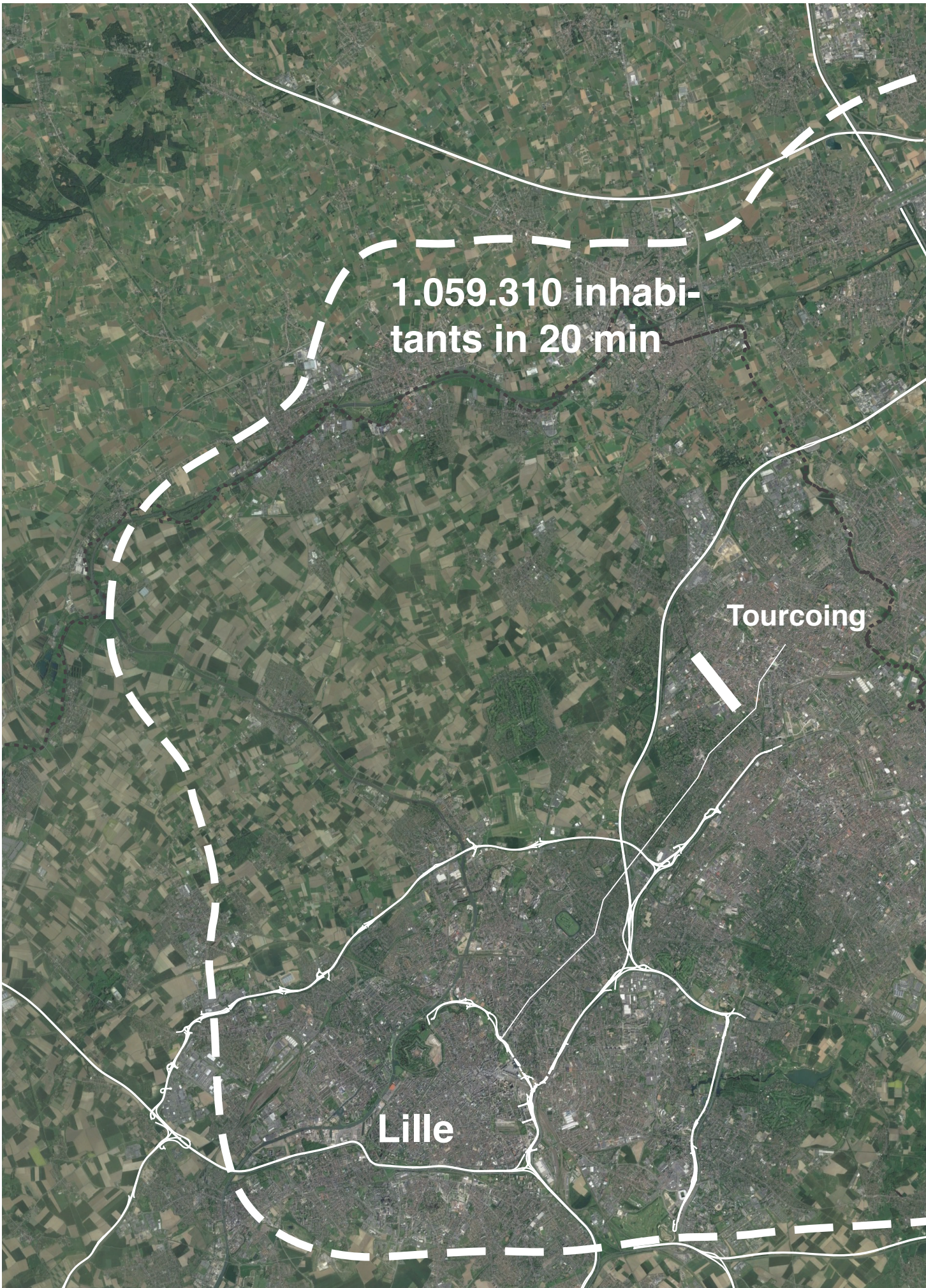
of the build set is going to be demolish.

The Desurmont factory is in process of demolition as well as many other industrial Friche of the region. Evidencing the danger of extinction of this building, it also evidence the endanger of disappearance of the post industrial image of the city in ruins

Site Information



Urbex : Desurmont Floor
exkub. 2008-2017. [http://exkub.
deviantart.com/art/Urbex-Desurmont-
Floor-96002364](http://exkub.deviantart.com/art/Urbex-Desurmont-Floor-96002364)



1.059.310 inhabitants in 20 min

Tourcoing

Lille

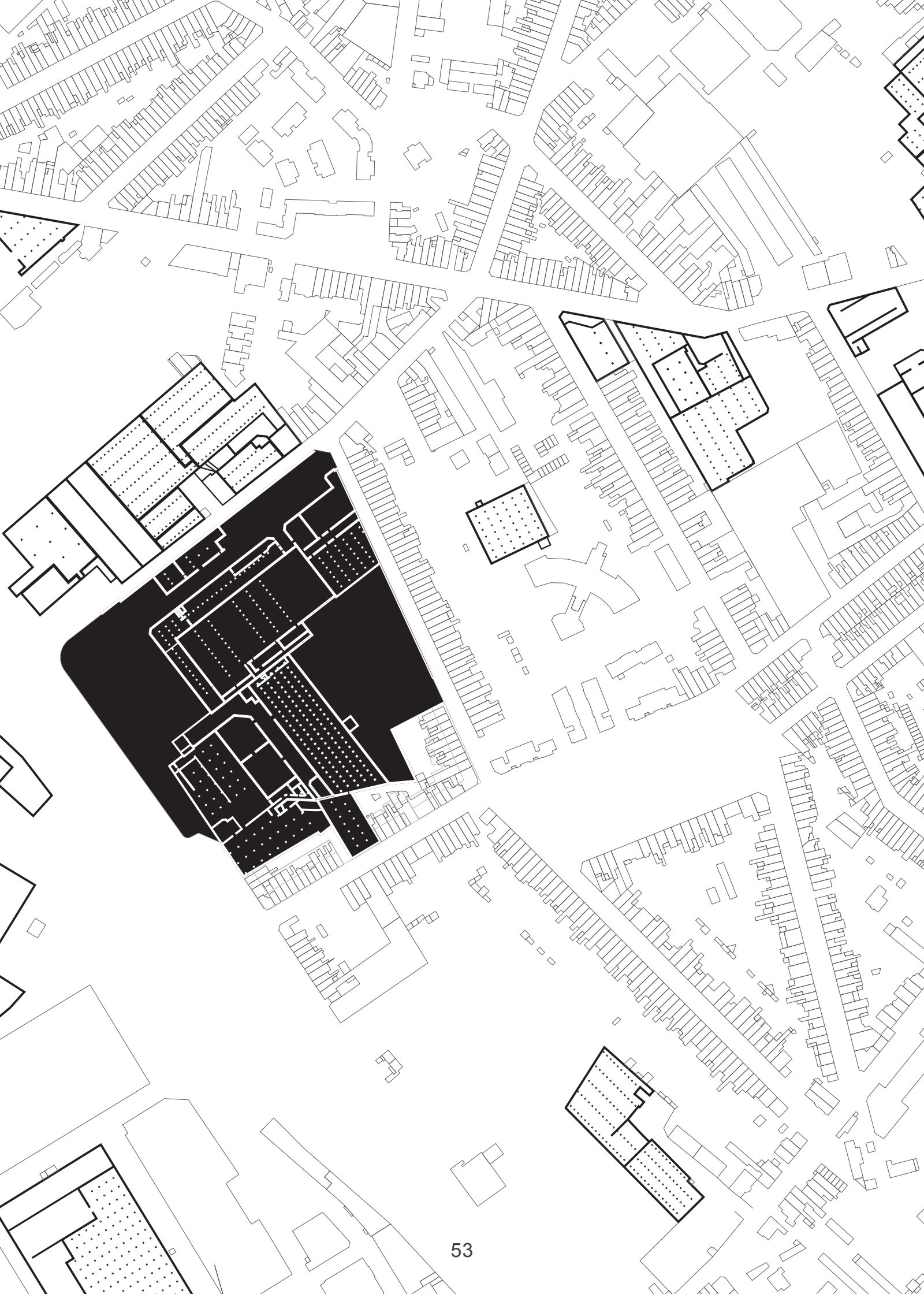
Kortrijk

Why in Tourcoing?

Tourcoing was at the beginning of twentieth century the heart of textile production in France, hence the consistent legacy of ruined factories. In particular, the disaffected factory Desurmont is located in the heart of Tourcoing and therefore of the Eurometropolis. The site is accessible by tramway from Euralille, and reachable by a population of 1.059.310 within 20min. Making it the closest point to every city of the metropolis. Benefited from the low value of properties, and the mentioned reasons in the architectural agenda, Tourcoing is the ideal location for a cinema complex, in which production and consumption are mixed inside an abandoned building.

Tournai











SOURCE: Photograph taken by the author

The Desurmont Friche is composed of a conglomerate of different volumes, where each of them represents a potential different space in the project.



SOURCE: Photograph taken by the author

The aesthetics of the Desurmont Friche, matched the conceptual intentionality of the research, wild vegetation, broken windows and cracks, representing an alternative reality from the everyday life.

Site information

Desourmont factory.

Following the artist Robert Smithson's provocation to build an underground cinema in a mine or a cave, I propose to build a cinema in an abandoned building—or friche, a building that has no active human occupation and where wild vegetation grows. While the term friche is more used for long-term abandoned buildings, it also has the connotation of allowing for marginal activities. The main requirement of the site is to be constituted by a big volume, extremely necessary for hosting the new activity inside, and be able to perform the carving of the negative volume of the space. The site is located inside the center city not because of the relevance of the urban space but because it aims to be a counter reaction to the multiplex cinemas of the suburbs. The aesthetic of the original building is not important but the abandoned aesthetic is, wild vegetation, broken windows and cracks will be the beginning of the cinematic experience.

The Eurometropole of Lille is crowded of this abandoned industrial buildings. Its textile industrial past constructed an oneiric image of the postindustrial city, more than 50 years later. Present in the local imagination of the metropolis, is impossible to understand the binational territory without the images of vegetation growing in massive brick walls. Even though it seem that this image is profoundly rooted in the popular imagination, this dream is in danger, most of the remaining industrial Friche are in process of demolition or in the way to transformation into speculative housing complexes. The Desourmont factory is one of those examples, partially under transformation already and with a pending tender for the demolition of the 80% of the area. The oneiric image of the ruin is going to disappear.

The empty factory Friche Desourmont is accessible by tramway from Lille, and reachable by a population of 1.059.310 within 20 min. locally well connected and well positioned inside the city, it has an excellent location in terms of consumer market exploitation. Benefited from the low value of properties, the political benefits of introducing a new industry in a depress area. As well as benefiting from the continuous decay of the building, Tourcoing is the ideal location for a cinema complex, in which the production of films use the ruins as backgrounds and the consumption happens in a movie palace cut inside the Friche.

Master Plan

With a plot area of 17.218 m² the project doesn't intent to occupy the entire place with a complicated program. Instead it proposes a generous use of the space.

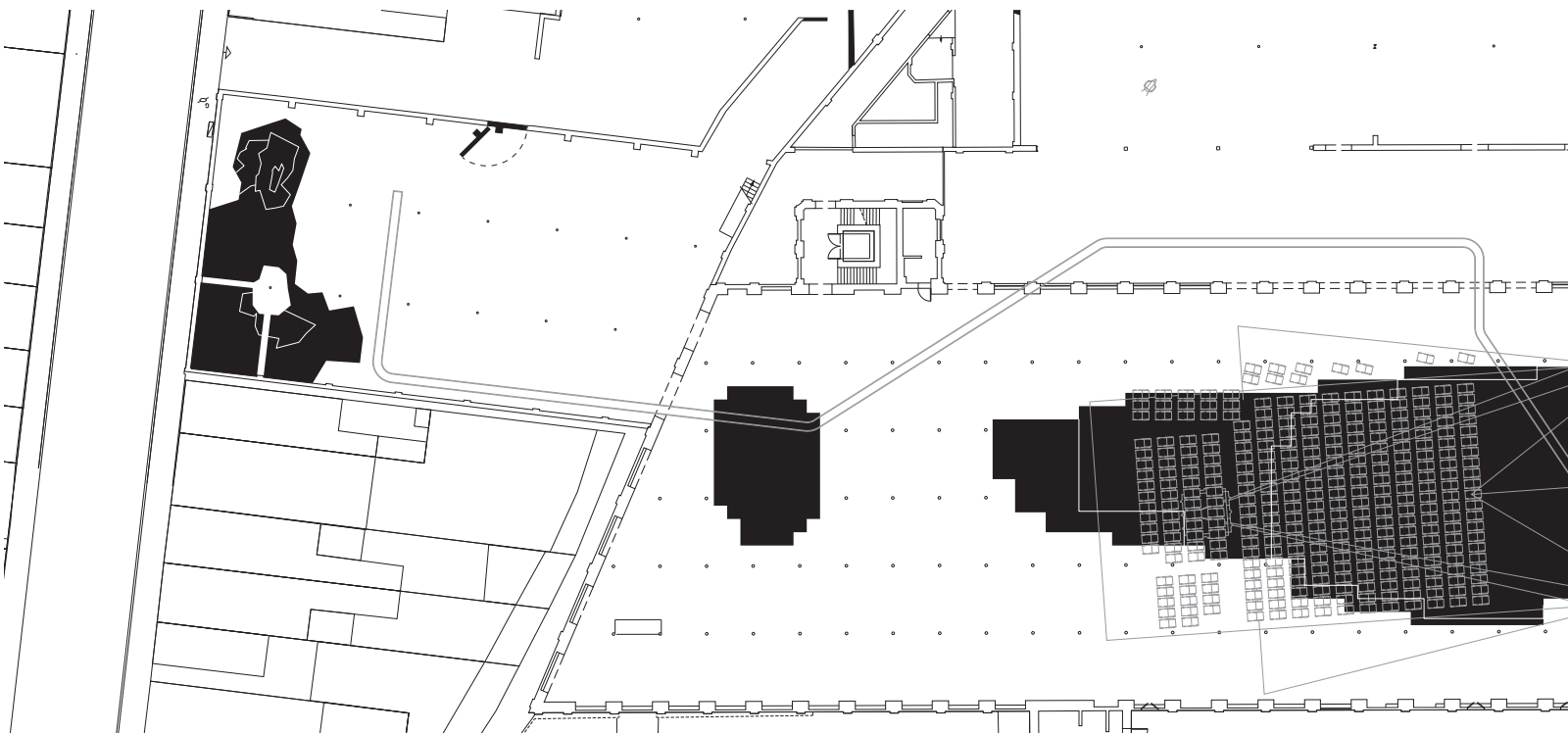
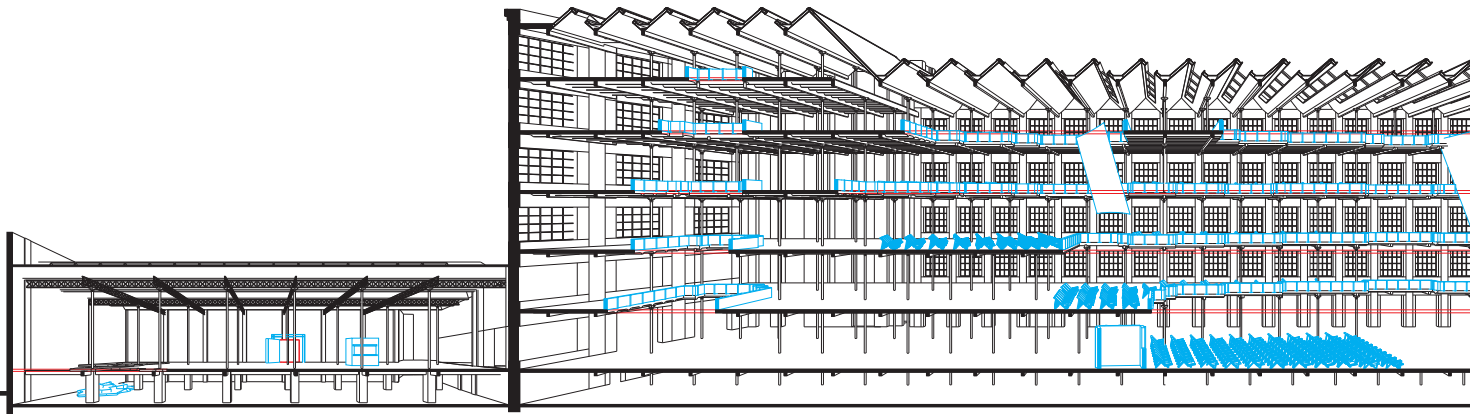
The project is divide in two main programs, the movie palace and the film studio. The cinema occupy two of the buildings, one for the entrance, building B, and another for the hall and the auditorium itself, in the building A, the main volume of the complex.

The rest is use in loose way, it can perform as an unique stage, where the camera can move from one space to another, up and down, to film long shots. Or it can work as several studios independently, where each building can offer different qualities of space.

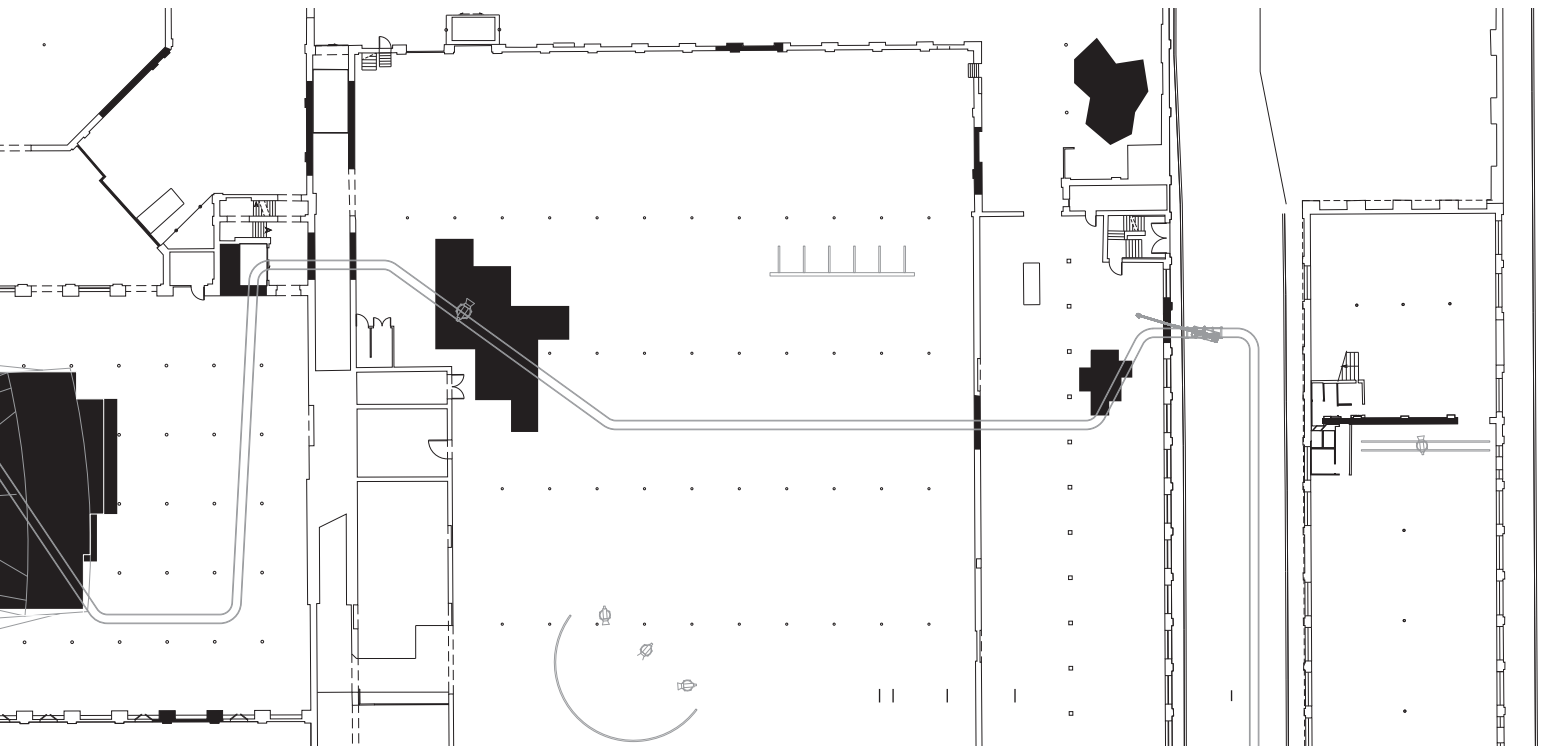
Therefore, the master plan only design the cuts, only planing the demolition of the necessary elements to fit the new programs. Then multiples scenarios occurs always depending on the necessities of the filmmakers. Additionally, certain programmatic elements needs to be fixed as basic amenities, likes cloakrooms, offices, kitchen and canteen. As well as workshops of wood, metal and technical film related materials



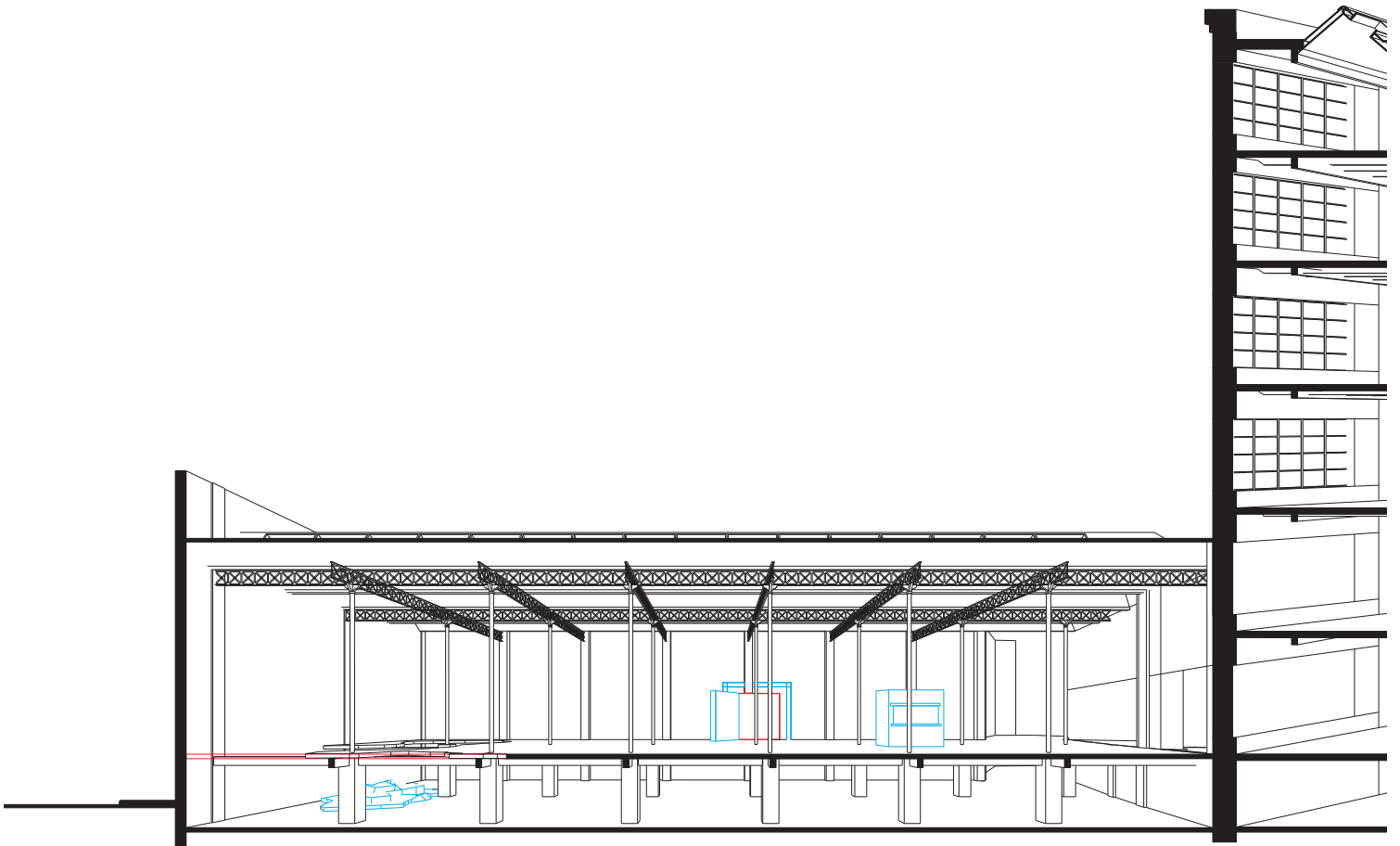


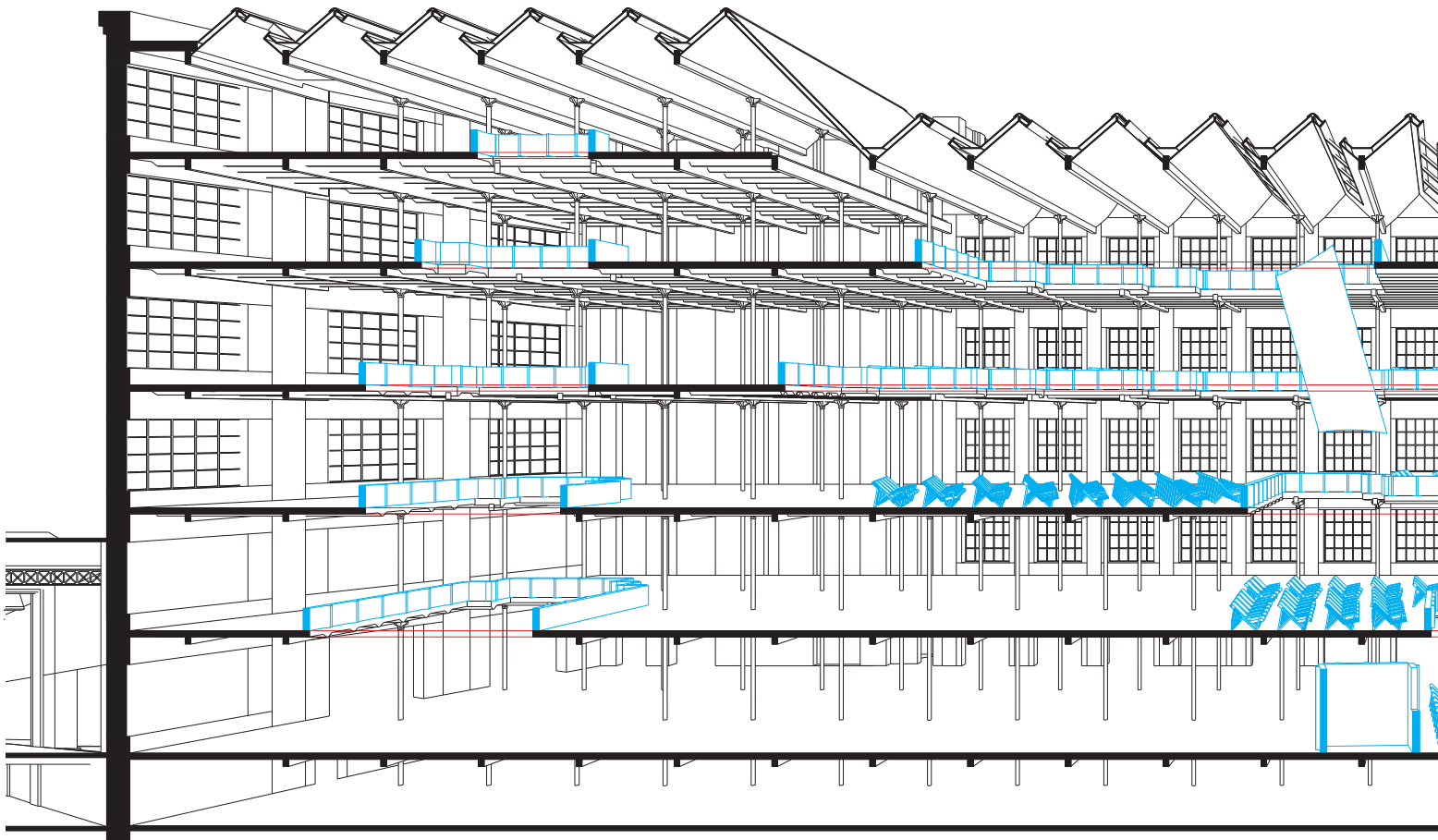


Section

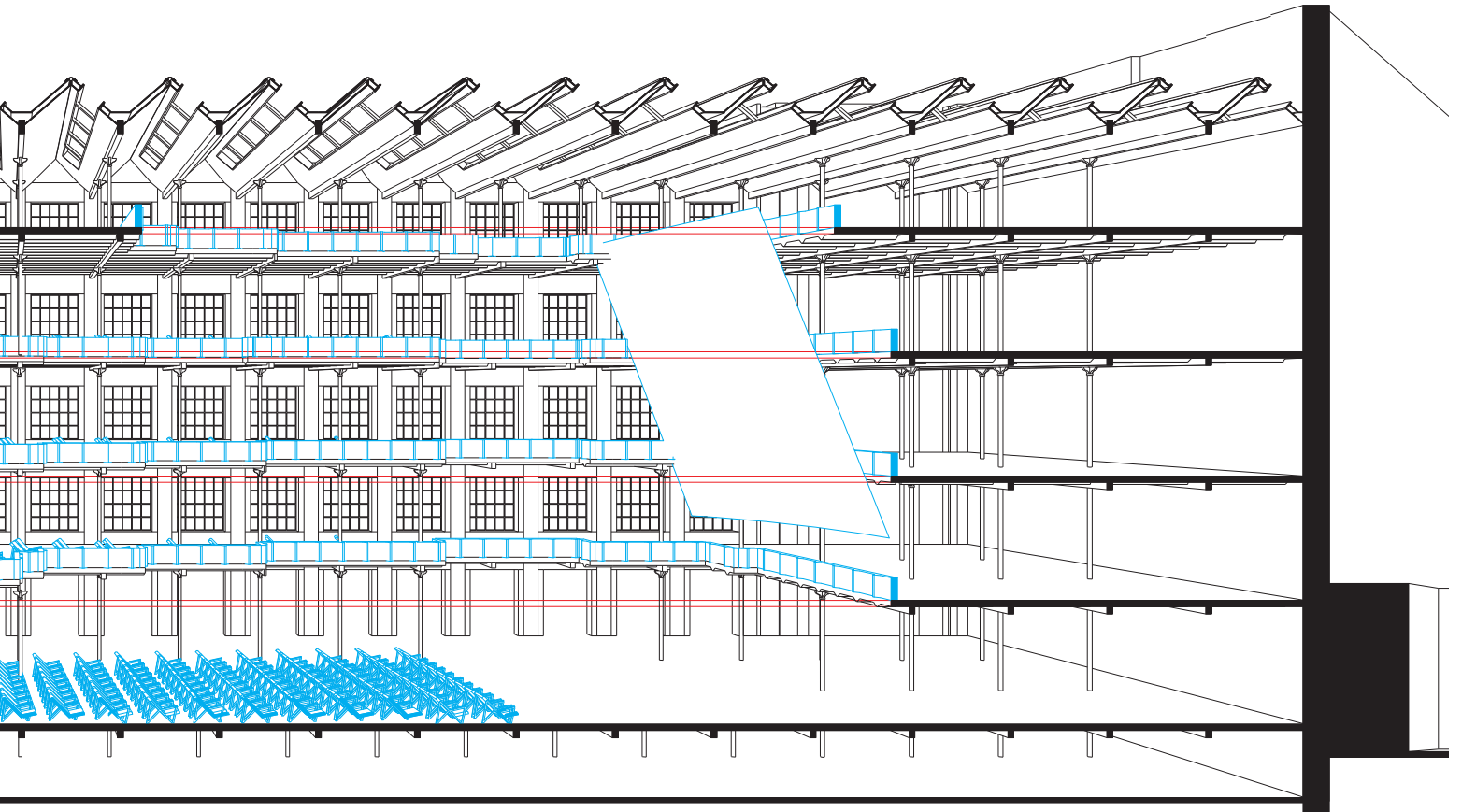


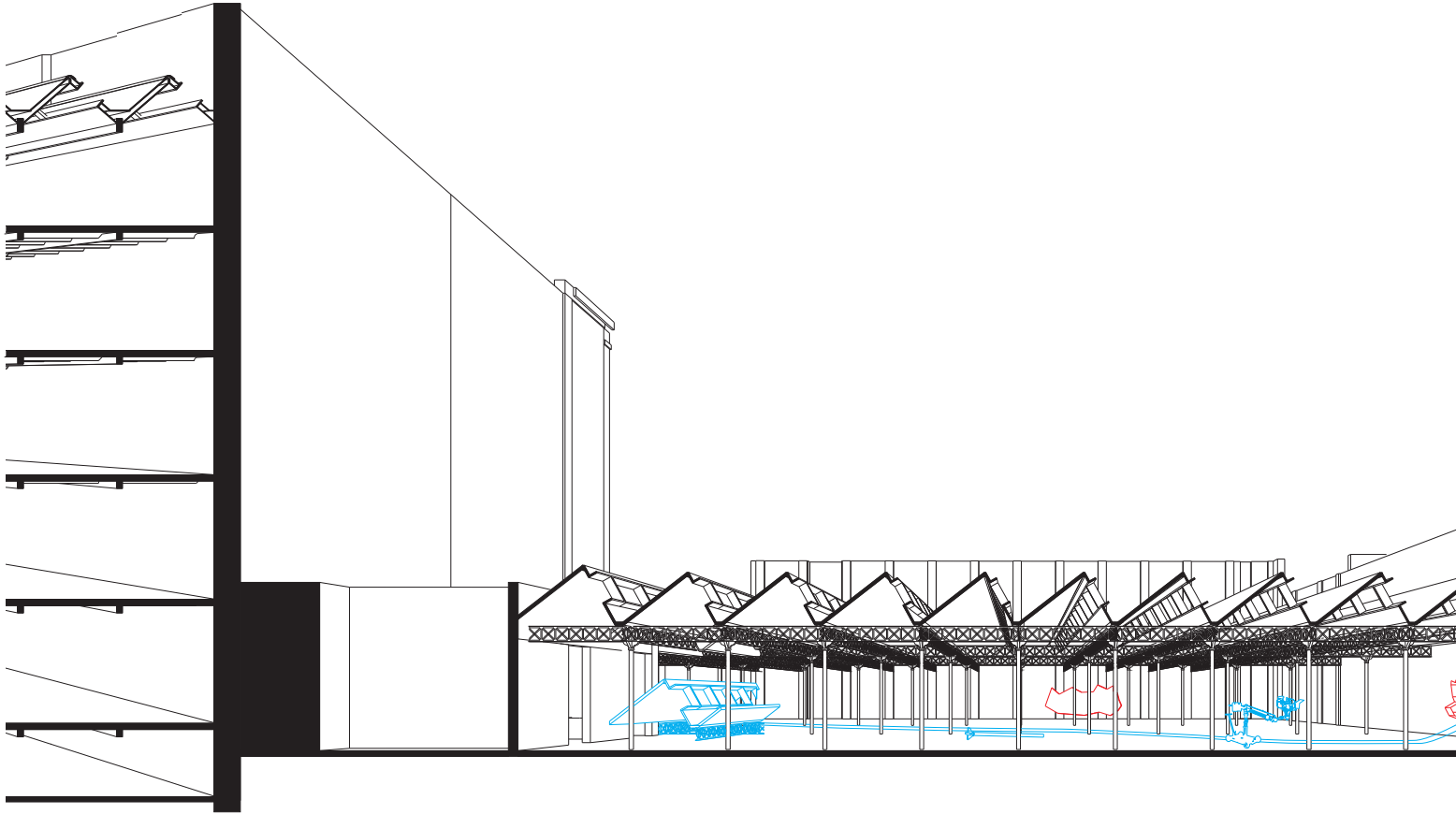
Entry to the cinema



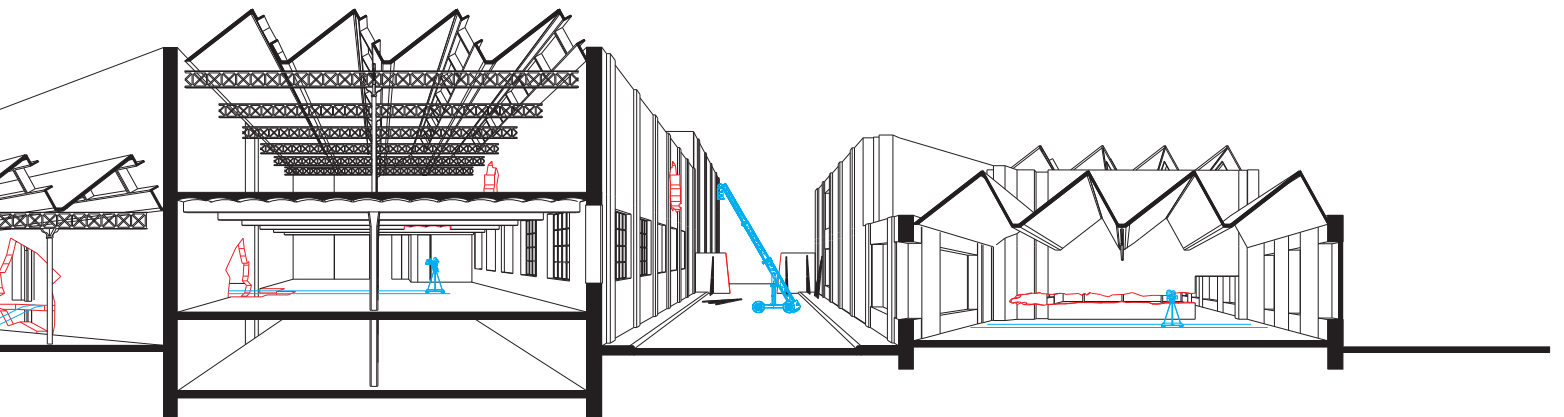


Cinema





Studios



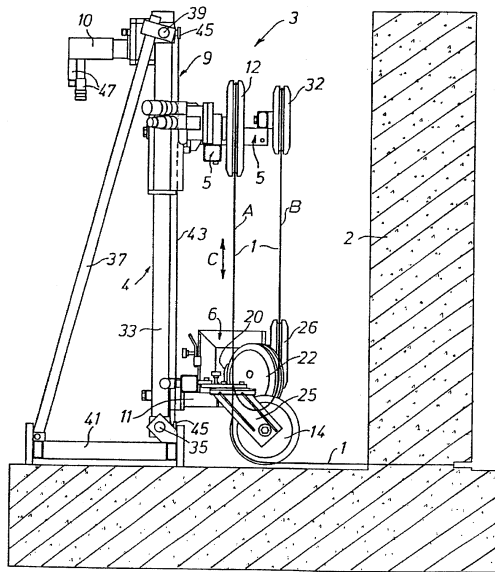


Fig.1

Wire Diamond saw
 Concrete
 Patent for Cable Saw Machine for cutting concrete bodies, rocks or the like. Hans Bieri jun. Pfäffikon, Switzerland. 1997

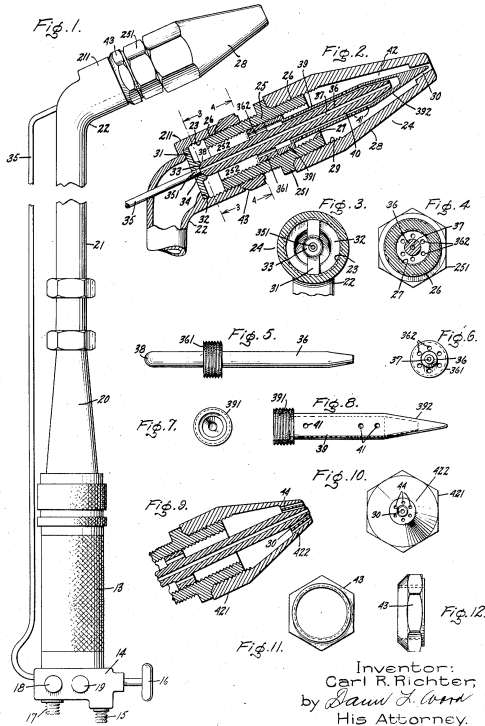
May 9, 1939.

C. R. RICHTER

2,157,269

TORCH FOR WELDING, CUTTING, AND THE LIKE

Filed May 22, 1936



Inventor:
 Carl R. Richter
 by *Samuel A. Work*
 His Attorney.

Oxygen Torch
 Metal
 Torch for, welding, cutting, and the like, Carl R. Richter, Schenectady,
 USA. 1939.

Tools and Exposed materials



Expose concrete cut



Expose metal cut

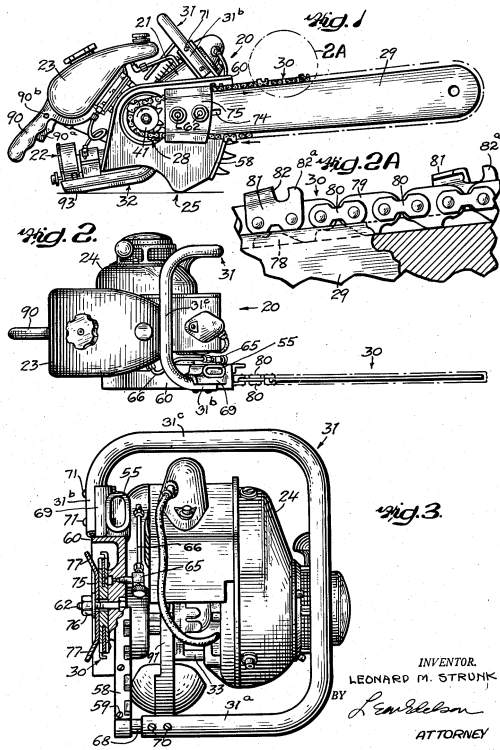
March 25, 1958

L. M. STRUNK
CHAIN SAW CONSTRUCTION

2,827,932

Filed Sept. 2, 1954

4 Sheets-Sheet 1



INVENTOR
LEONARD M. STRUNK
BY *Leonard M. Strunk*
ATTORNEY

Power Chain Cutter
Brick
Chain saw construction, Leonard M. Strunk, Coatesville, USA. 1954

April 20, 1965

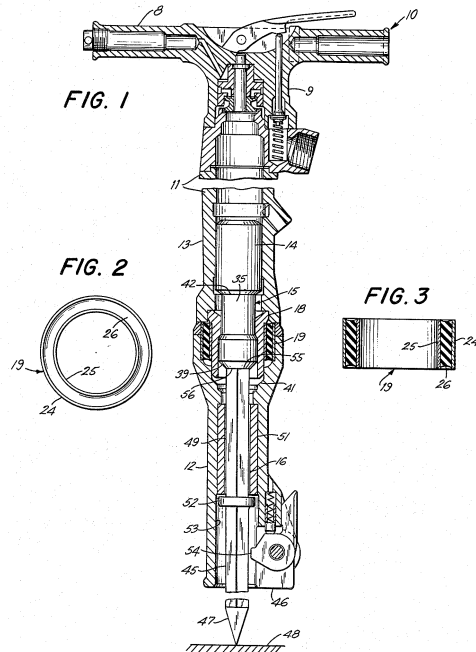
M. O'FARRELL

3,179,185

DEMOLITION TOOL WITH SHOCK ATTENUATING MEANS

Filed June 14, 1962

2 Sheets-Sheet 1



INVENTOR
MATTHEW O'FARRELL
BY *Raymond S. Muller*
ATTORNEY

Hydraulic Breaker
Concrete, Brick, etc
Patent for Demolition Tool with Shock Attenuating Means, M. O'farrell.
New York, USA .1965



Expose brick cut



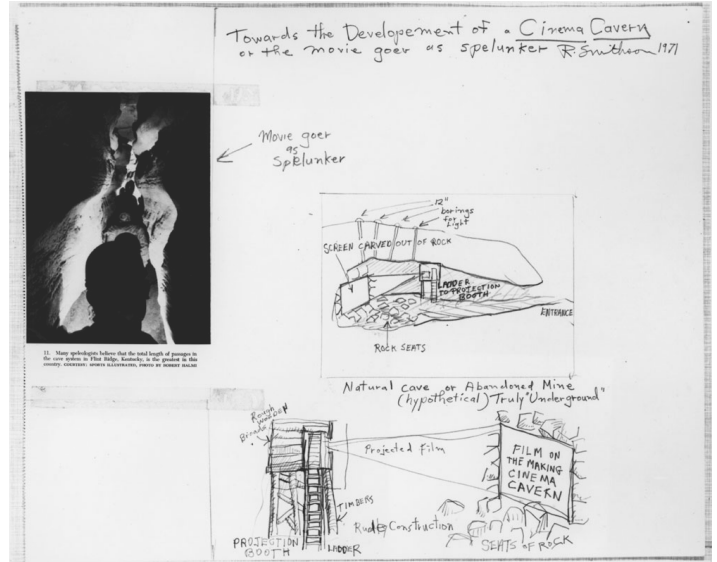
Expose Miscellaneous cut



The lights fades, the darkness surrounds you, your senses in suspension, suddenly a strong light beam project an image that take you to another place. The architectural artefact that generate the atmosphere of relaxation is of crucial importance for the individual to surrender his perceptions to the experience.

The space study by Hiroshi Sugimoto has been part of the research. By capturing a film in one shoot with very long exposure of camera, Hiroshi was able to capture the space of the cinema in the darkness, revealing the richness of the spaces in the movie palaces.

Theaters Series, Sugimoto, Hiroshi. Hiroshi Sugimoto. Vol. , Theaters I. Paris: Editions Xavier Barral. 2016.



“Going to the cinema results in a immobilization of the body. Not much gets in the way of one’s perception. All can do is look and listen. One forgets where one is sitting. The luminous screen spreads a murky light throughout the darkness”
 The Smithson’s text about his idea of building an underground cinema was very provocative in many ways. He described with special attention the body experience of watching a movie in a cinema, explaining how the immobility of the person through the attenuation of the lights and the singularity of the space, leads to the transportation of the mind into the film. Then he explained as well with rigorous detail how his idea of the underground cinema was intended to be materialize, provoking in the cut cinema project the desire for the same search and level of detail in the description of the project.

Underground Cinema, Robert Smithson, 1971

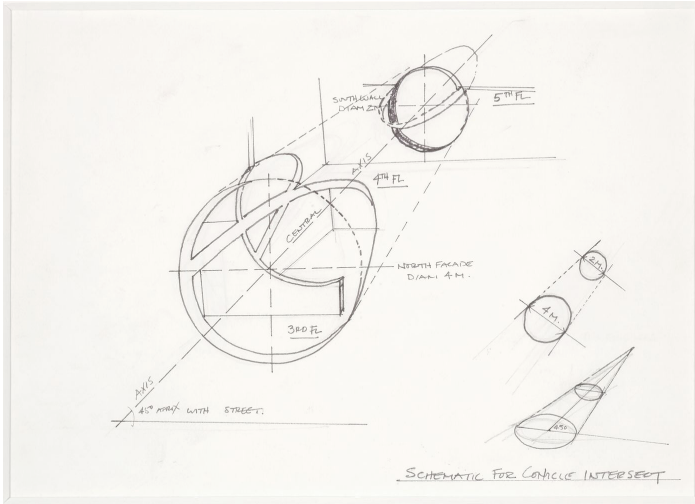


CINECITTÀ

Film sets are chaotic spaces. The Czech–French photographer capture as well as the French film director, Godard, the ruined ambience of the Italian Cinecittà. Relating the space of production of movies with their vision of the world.

Cinecittà film studios. Josef Koudelka, Italy. Rome. 2002.

Precedent Study



The conical intersection performance of Gordon Matta Clark in Paris. Explore the demolishing techniques of demolition as a way to create architecture. To generate space. While he was cutting the concrete slabs and pulling down the brick wall, he filmed the process, fixing in time the state, and therefore preserving this hole in the building beyond the real time. Successfully mixing performance, architecture and cinema production in order to achieve his communicative intentions.

Conical intersection, Gordon Matta Clark, Paris 1975



The failed project of carving a huge empty space inside a mountain by Spanish artist Chillida, instilled the project to look for aggressive techniques to reveal a certain truth of the site. By cutting straight walls he reveals the pureness of the heart of the mountain, and by controlling the light the experience of the visitor.

Montaña Tindaya project, Eduardo Chillida, Fuerteventura 1993

“The man whom we seek to honor tonight has created a new form of entertainment. When I recently I spoke from the stage of the Strand, gazing into a sea of faces marked with intelligence and culture, when I saw before me an audience such as might well have graced grand opera, I realized to the fullest what work Mr. Rothapfel had accomplished”

Toast to the “Prometheus of Exhibition .” Samuel “Roxy” Rathapfel, at a dinner in his honor on June 24. 1915. Melnick, Ross, and Andreas Fuchs. 2004. “Cinema Treasures : A New Look at Classic Movie Theaters”. St. Paul.

This speech in an important business men of New York proves the relevance of the Movie Palace in a changing society. Proving to serve as go business at the same time that promote a cultural experience.

“La photographie, c’est la vérité et le cinéma, c’est vingt-quatre fois la vérité par seconde...”

“Photography is truth. The cinema is truth twenty-four times per second”.

Jean-Luc Godard. 1963. *Le Petit Soldat*. France

Godard in this quote changed the conception of the cinema. Arguing that cinema has a tremendous power to represent the reality of the world.

“Going to the cinema results in an immobilization of the body. Not much gets in the way of one’s perception. All can do is look and listen. One forgets where one is sitting. The luminous screen spreads a murky light throughout the darkness”

“Underground Cinema” Robert Smithson, 1971. Smithson, Robert, and Jack Flam. 1996. *Robert Smithson : The Collected Writings. The documents of twentieth century art; The documents of twentieth century art*. Berkeley etc.: University of California Press.

Smithson clearly articulated in this quote the relation of the figure with the space of cinema. Making almost irrelevant the genre and the background, the spectator is anonymous in this space to listen and watch, to be transported in another reality.

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A Conversation with an Expert: José Domingo Fabre

A Conversation with an Expert: José Domingo Fabre

Submitted by on July 7, 2017

Pablo De Sola Montiel

Salomon Frausto
Head of Education

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Personalia & Relevance

Name

José Domingo Fabre (PP)

Title

Civil Engineer, Specialized in rehabilitation projects

Date of conversation

24th June 2017, Delft - Madrid.

Biography

-2012

Chief Civil Engineer and Project director in Dragados S.A. Madrid.

2012-

Independent Engineer, working as a consultant for complex projects.

Relevance

José Domingo Fabres has a large experience in complex projects. Working for one of the biggest constructor company of Spain, Dragados specializes in studying, designing and executing every kind of civil infrastructure or construction, paying particular attention to those that are most unique in their technical complexity, construction process, scale or high degree of specialization. José participated in the demolition and reconstruction of the T4 terminal airport of Barajas in Madrid after the bomb in 2006. He also participated in mayor projects in Spain like the Prado Museum. And currently he is consultant for complex projects, like the renovation of the 25 floors of the "Edificio España" in the Spanish capital. In which they pretend to preserve a 120 meters tall facade while demolishing the interior. His large experience has been of great help in analyzing and understand the site of the project. His expertise in construction and demolition helped to define certain aspects and details that the design will take advantage of. Besides he was very kind to receive read and revise my proposition for a cinema in an abandoned factory, as well as recommended me to follow the methodology proposed in the Thesis Plan.

Questions & Transcript

Transcript translated from Spanish.

PPDS: After, checking the document that I transfer, What is your opinion about the existing state of the buildings?

PP: Ok I added a series of comments in the documents As seen in the photos, the buildings are very old. And when we study a rehabilitation in an old building, we have to do a series of preliminary studies. First: It is necessary to make a very complete study of the structural state of conservation of the whole. I suppose, even though you act, Why are you what you're doing that is? A study, a job, a project?

PDS: It's half research, half project. This is for the university. So The idea is to make a research and out of it, design a possible project on a specific site. In my case the Desourmont factory.

PP: Ok, So what I see is that the plot is very large, in which you only will act in two locations.

PDS: at the moment yes.

PP: Rehabilitation, implies that when you act in an existing building, you become responsible for everything that may happen. That is, if we were to make a study of it. I have to make some inquiries that are the following: I have to analyse what kind of terrain I have, you would have to know what type of foundation is the current one that buildings have now. If it is a direct foundation by shoe, if it is a foundation by piles. Because you think what are you going to do, you're going to have to do new foundation. So analyze, what kind of terrain is the one you have there. If it is very good, very bad, or under what conditions it is. The you have to find out what kind of foundation, slab, shoe, pilotis, etc. Second you would have to analyse the pillars, I can see that the pillars are in concrete, so we must analyse the concrete, what type, characteristics, what resistance, in what conditions are the reinforcement bars, if there are fissured pillars, if there are no fissured pillars. And the same thing would have to be done in the beams, in the beams and in the slabs. All this means doing a test of load in some area, because even if you only do the cinema, so that a movie theatre is inside, you have to know what you are going to demolish and in which location. Because imagine that, I find the building in very bad condition, because I would say that the structure can not be maintained and must be demolished. Because one thing is to keep the facades nothing more and another thing is to have to keep the interiors. So very important you have to

analyse the façades to see if they have formations, cracks, etc. And you have to see the whole building if there are cracks if there are cracks, if there are deformations, if there are displacements. All these are analyses that must be done in a early stage of the design process. And then, analysing sheet number seven, the plan I say that there is only one tower of the existing three. And in the rehabilitation of the whole I would demand that, if you would only build the cinema, you would need an access zone, you would need to know fundamentally what you where to intervene to access it. Because seeing the drawings, I get that the building A has five meter hanging beams when I think the spans are bigger than that. And the most fundamental thing I tell you, when we make an intervention in a building we have to have three controlled conditions. 1, we have to have a clear understanding of the current state, more or less what you have here, the floor plans with the levels, the location of the pillars, but we would have to find out everything I have told you, the state of the structure, The foundation of the pillars of the beams, the slabs ones, to make tests of load, if the facades are stable, what resistance have the concrete. Because there in France I do not know, but here in Spain they make concrete that support 250-300 kilos, although they make special structures that make concrete of high resistance, that resist much more. Imagine that the resistance of the existing concrete is verified and it turns out that they have a resistance of 125 and that today is not admissible. You understand?

PDS: Yes I understand. Then after the analyse of the current state of the existing buildings. What's the next step in the process of design and preparation of the construction?

PP: Then, the second is the reformed state. The state reformed, it would be good to have the floor plans sections and elevations of everything that you want to do. If you want to do the double height in the lobby, and in the movie room. Well you'd have to make the blueprints for that and place them within the current state. And then the third situation is, the analysis and study of all the actions that have to be done, to move from the current state to the final state. When we make a reform, we have to keep in mind, what we have, what we want and what we have to do to pass from what we have to what we want.

PDS: And in your opinion, what would you recommend as an intervention inside the building? Seeing what you've seen.

PP: I now, for example, you have placed, with a criteria, the position of the cinema. Well, that theatre, you think that the cinema is inside a building in which at the moment has seven levels. Most in building A and a corner in the building of three levels. If you're going to make a movie theater in a seven-story building, of course, you ought to have or thought, I suppose, that the building will be supported on the ground floor.

PDS: Yes that's what I pretend.

PP: So, if there are seven levels now, and is three and a half meters or four high each level, because building A would be about 28 meters high. I do not know if the cinema you plan to raise has to have all the heights or does not reach up or surpasses.

PDS: My idea is not to get to the top, so somehow I would have to collect the higher loads of the structure.

PP: The problem is that if you cut all the pillars the building will not hold.

PDS: then it will be necessary to make a structure, to make a bridge around the movie theatre and charge everything above.

PP: Come on, yes you can, but I mean you do not have it defined right now. Because you can make an assumption and use the current structure. Because that's what you're doing now is an assumption. Because logically, imagine that you want to make a cinema in the middle, because you have to think how you do the access to the cinema, and those things. Because you can start and take the current building. You have to draw all the buildings and all the levels. But then I would have to do the study I told you earlier. Because if before the building was before a fabric factory with looms and stuff. Of course the overloads that endure those slabs have to be considerable. You understand?

PDS: Yes

PP: That may not be in bad condition, but you have to see if over time that has not been in use it got rotten. Because in the photos it seems that there is even vegetation in cover areas, which must have accumulation of much soil and humidity. Well you have to see in what conditions the building is. Because the first thing is to know what you have and in what state it is. Second you have to do a

reformed state, that if you want to put a double height access and a movie theatre, you have to do a study of what kind of structure a movie theatre has. Because it can not have intermediate pillars, it has to have big spans. So you have to see what project you want to do. You have to have plans, elevations and sections. And then you have to connect the current state with the reformed state.

PDS: And then the structure that connects the new program and the old building, which would be better to do it in concrete or metallic? Or what kind of material would you use for the structure?

PP: It depends, I do not know the type of structure. But imagine that you make a very unique structure for the auditorium, and that maybe the width of the room, according to the scheme you have here, has a span of thirty meters. It is necessary to think that to save the thirty meters we must make some fat pillars in front to support a structure that saves the thirty meters. And that is usually done with metal structure.

And then, the entrance area, you draw some alignments of intermediate pillars. But in the scheme that you have drawn to me in red it turns out that you have to demolish all three levels. Because the slabs that remains from the demolition until the front, are so small that I have no choice but to take it out as well. But this building also has three levels. Which I say, do I throw two or make the hole in both?

PDS: Then of course, it would be better to make it a bit smaller and retain some pillars within the existing structure.

PP: Exactly, because now you have demolish have span of a pillar, a pillar and again half span, as you say, if I leave it between pillars, and you analyse and see that the pillars Which exist are in good condition, you could demolish the floor of the first floor and the second leaving the sides giving double the heigh and leaning on the pillars that already exist. You understand?

PDS: Of course,

PP: Then in the concrete pillars that already exist you can apply some metal plates, and then some metal beams with which you can solve the double height.

PDS: If I'm going to act inside the building and I'm just going to demolish some levels and not all seven, for example. What kind of machinery is used

for the partial demolition of the building?

PP: Well, I'll tell you, if you do not have to demolish the seven floors, they come with demolition machines that have little ones that can go over and demolish. But there are many things inside the building that must be done by hand. You understand? Because if you demolish a building you do it with an outside machinery that is eating it with bites.

PP: But if you have to maintain the facades, you are forced, what needs to be done is to first put scaffolding sustaining the whole building, and then go demolishing the building from top to bottom. Because as well you can not be demolished from above throwing the debris to the levels below because they could fall.

PDS: Then it would have to be done piece by piece, right?

PP: What it would have to do is a shoring, around the whole building of which you are going to act. It is also done in some cases, where you open a five-by-five hole between pillars and then pull the debris out there. You understand?

PDS: YES, and what kind of machinery would be the best to cut this type of concrete?

PP: What I tell you is that they use, if we have propped up the levels to avoid problems, many times they are forced to do it with compressor by hand. And usually help, with the outside installation of a crane. Well, then we should study the foundation of the crane, depending on the terrain. Well as the building is quite large, you need two or three cranes. But to pull out the beams and pull out material.

PDS: then I would have to open a hole in the roof to get things out, right?

PP: Of course, but if you want to demolish, you have to always start on the roof .

PDS: Then I'm forced to always start from above, and demolish a part of the deck.

PP: You can not start through the middle, understand?

PDS: I had another question here. Yes. You have worked many years in dredging, have not you, if you could give me a reference of some building that

could serve as an example to study the structure.

PP: Well, if I have been visiting now, for example, I have been visiting a building that I had work on before being in Dragados. A company that was called Huarte. And then they have been forced at the Puerta del Sol, and they have been forced to maintain the facade, because it is a very fat limitation. Right now in Madrid they want to remake the Torre España, which is one hundred twenty-five hundred and fifty meters high, and the facade has no value, nothing, however, they want to keep it. And demolish the interior building, putting some scaffolding stabilizers for a facade of one hundred and twenty meters. it's expensive, and difficult to understand, do you understand?

PDS Yes

PP: But in your case, well in part you put the cinema in a position that takes part of a facade. And in the other, if you are obliged to maintain it, you put some stabilizing scaffolding. They keep the facade while you connect the old and new structures.

PDS: And you would not recommend intervening in the facade? Let's say it would be better to reduce the size of the cinema, and fit it inside the original building. Would it be much cheaper.

PP: With which criteria have you decided to put it that way?

PDS: I just put it that way so you gave me your opinion, I wanted to provoke this discussion.

PP: Ahhh, you should put it parallel to the longitudinal facade. And if you confirm that the distance between the facades is fifty meters. According to this it seems that there are thirty. Ideally, the simplest would be doing the building inside. Removing only the three internal pillars. That is, leaving the alignment of pillars parallel to the facade. You see that you have both facades and in the middle you see that you have five pillars.

PDS: Yes, I see it.

PP: If you leave the line of pillars that goes parallel to the facade on each side and you remove the three intermediates. You make construction much easier.

PDS: Construction is much easier. And would it be more economical?

PP: Because you could keep facade and the first alignment cradle with a much smaller performance, than if you demolish the pillar that is glued to the facade.

PDS: Okay. Well thank you very much Pepe.

PP: Well, I'm going to call Olga now, I'll leave the documents to her on Monday. And what we can do is that you talk with some other colleague. That if they have some system some criterion. Or if they tell you some companies that are dedicated to that. But what I've told you, are all the issues you have to update and analyse.

PDS: Ok, thanks, this has been very useful. Thank you so much for your time.

PP: well we'll be in touch.

Fabrica Desurmont!

Fotos:

- ① Aérea vertical
- ② Aérea lateral. Perímetro. Análisis
- ③A Vista cercana } Zona de entrada
- ③B Vista lejana }
- ④ Vista interior de Nave (¿A?)

Esquemas:

- ⑤ del sistema constructivo original del Edificio A (Ver comentarios)
- ⑥ Sección del edificio A (Ver comentarios)
- ⑦ Situación actual de los edificios (Ver comentarios) (Se giran 180° para que se correspondan con las fotos ① y ②)
- ⑧ Proposición de intervención (Ver comentarios)

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①



2





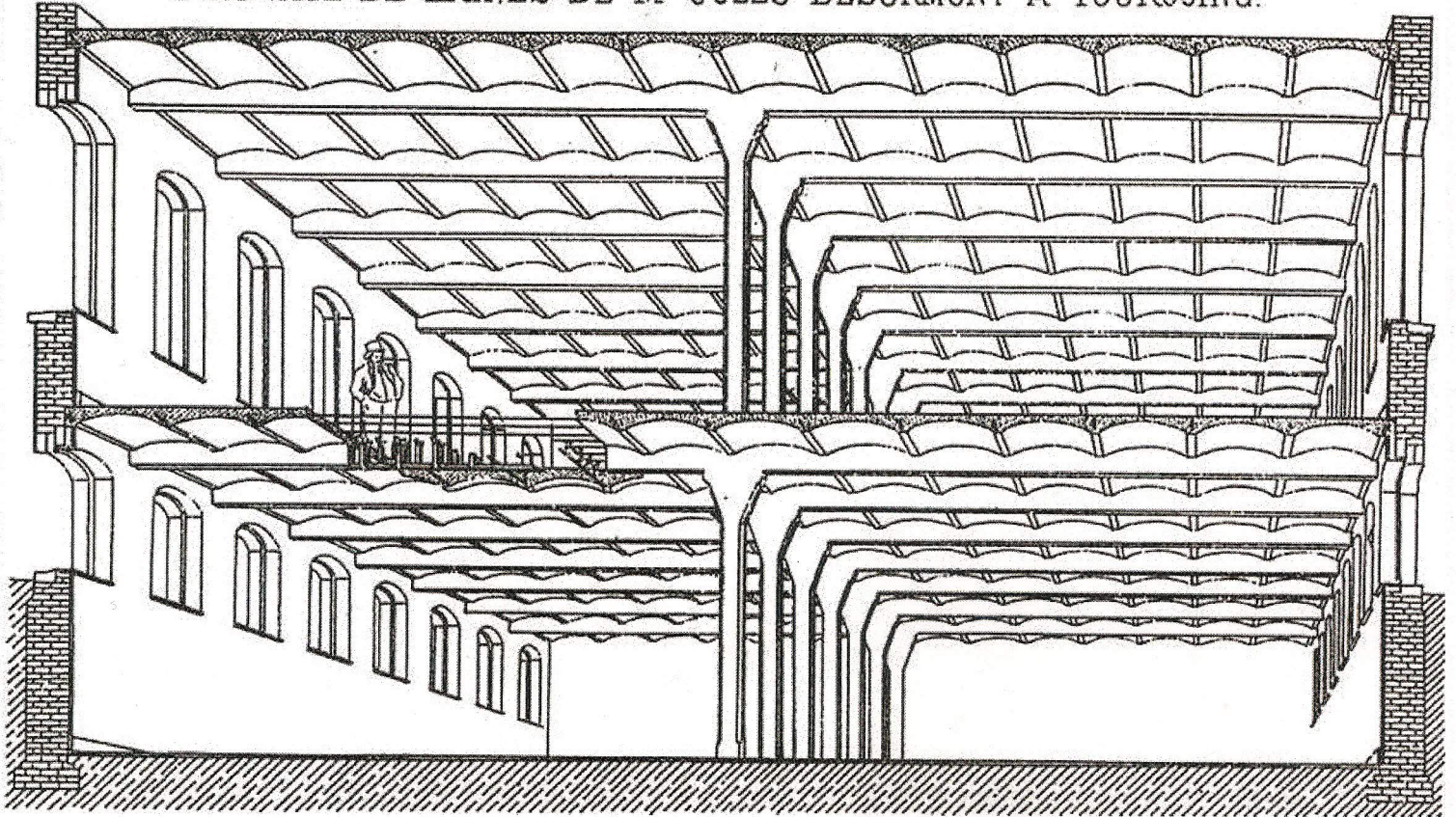
Vista interior de un edificio (¿A?)

④

- No se observan pilares en fachada
- Viguetas en pilares (do) y 6 interiores (según ⑤ esquema del sistema constructivo original del edificio A)

Esquema del sistema constructivo original del edificio A

PLANCHERS & POUTRAISONS EN BÉTON DE CIMENT ARMÉ.
Procédé Hennebique breveté
PEIGNAGE DE LAINES DE M^r JULES DESURMONT À TOURCOING.



EDIFICIO A

(5)

- El esquema solo tiene:
 - Fachadas + Una alineación interior de pilares
 - Dos niveles
 - Viguetas de forjado en alineaciones de fachada y pilares, con 6 entre ellas

- El edificio real:

- Fachada + CINCO alineaciones interiores de pilares
- Siete niveles (no 7 como en la sección del

- Esquema (6):

• Solo 6 niveles

- 5 viguetas de forjado entre pilares

- Vigas de cualquier entre porticos en las alineaciones de pilares

Sección del edificio A

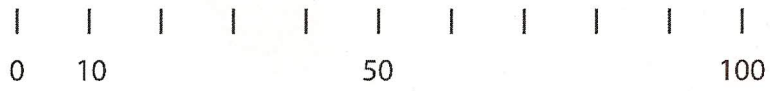


- No está confirmado que existan pilares en fachada (6)
- En el esquema del sistema constructivo del edificio A
- Están dibujados sólo 6 niveles
- La representación de las viguetas no se corresponde con el esquema del sistema constructivo (5).
- Se representan vigas de cuelgue entre pilares no indicadas en el esquema del sistema constructivo (6)
- Huecos en el primer nivel (?) (6)

Situación actual de los edificios



(L)



PARTICULARES

1) Nueva sala de cine

- Interficie entre dos edificios de 7 y 3 niveles
- Planta, alzados y secciones del nuevo edificio. Niveles
- Conexión de estructuras nueva y existente. Niveles
- Accesos hasta la sala. Situación de la guía.

2) Lobby de entrada a doble altura

- Edificio B. Tres niveles
- La actuación afecta a todos los pilares interiores

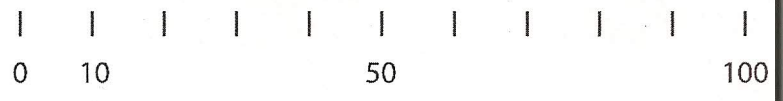
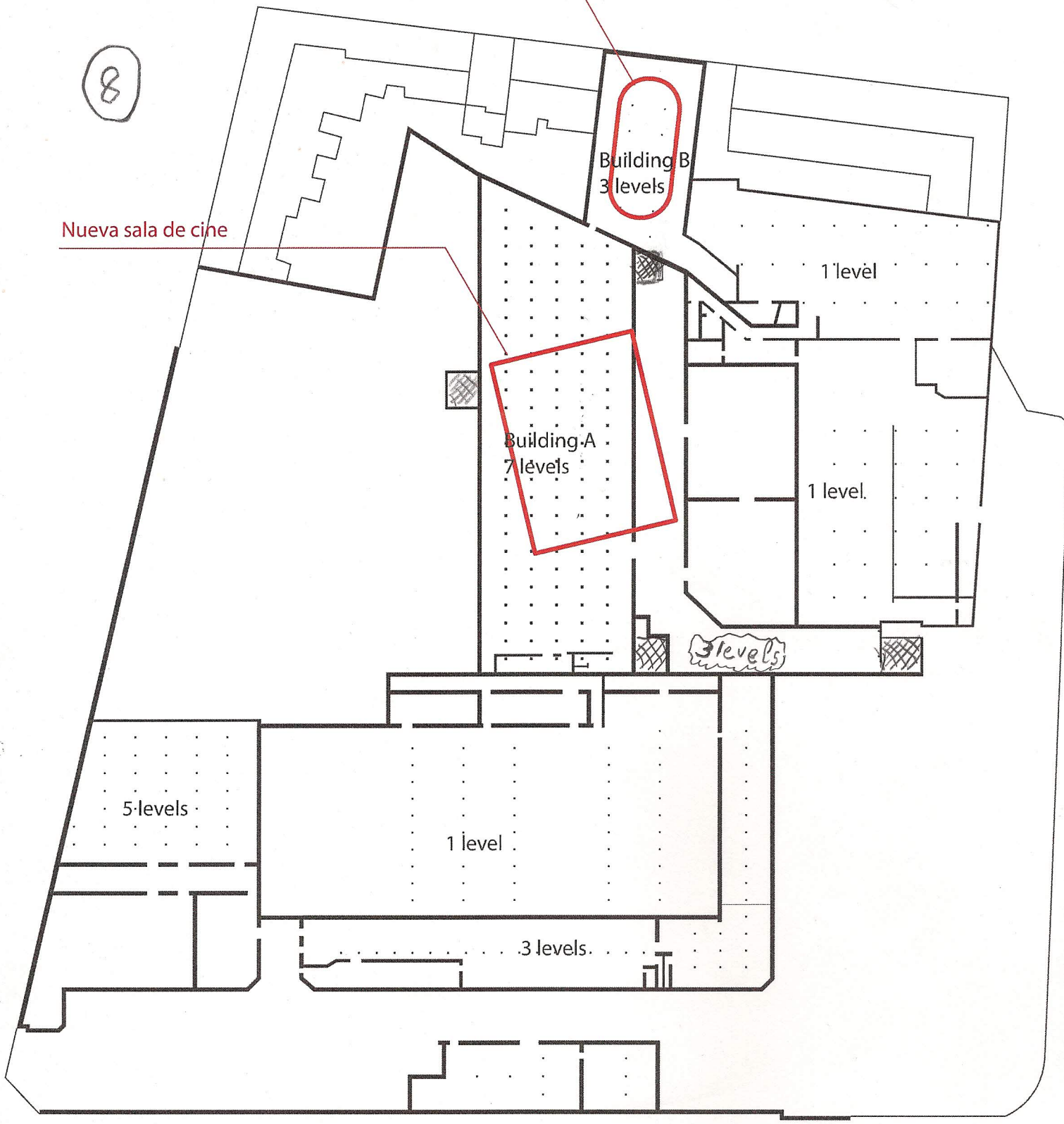
Proposición de intervención

Lobby de entrada a doble altura



8

Nueva sala de cine



COMENTARIOS GENERALES

- * Según se observa en las fotos, los edificios son muy antiguos
- * Es preciso hacer un estudio muy completo del estado de conservación estructural de los elementos de los edificios:

- Terreno
- Cimentación
- Pilares
- Vigas
- Viguetas
- Forjados
- Pruebas de carga.
- Fachadas (estabilidad)
- Vegetación en las plantas (más en cubiertas)
- Hormigones
- Armaduras
- Fisuras, grietas, deformaciones, desplazamientos,

⑦ Situación actual de los edificios. Niveles.

- No se identifican los niveles de edificios perimetrales
- No se indican las torres en el edificio A
- La rehabilitación del conjunto exigirá una actuación en cada uno de los edificios, que tienen soluciones estructurales diferentes (distintos luses entre pilares)
- Edificio A:
 - Luses de vigas de cuelgue de $\approx 5,00$ m.
 - Luses de viguetas: 3,50 m.

⑧ Proposición de intervención

GENERAL (Tres situaciones)

1) - Estado actual:

- Distribución de pilares. Vigas principales (de cuelgue). Viguetas.
Niveles de las plantas → Plantas

2) - Estado reformado:

- Plantas, secciones, alzados

3) - Estudio de las actuaciones a realizar para pasar del estado actual

al reformado: Demoliciones, estructura nueva, conexión entre ellas, etc.

A Conversation with an Expert: Martin Groetenberg

A Conversation with an Expert: Martin Groetenberg

October, 2017

Pablo De Sola Montiel

Salomon Frausto
Head of Education
Ido Avissar
Thomas Weaver
Diederik De Koning
Thesis Advisors

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Personalia & Relevance

Name

Martin Groetenberg (M)

Title

Audiovisual artist, general and creative director of Tungsten Pro BV
Professor at Gerrit Rietveld Academie, Amsterdam

Date of conversation

11th October 2017, Broek in Waterland.

Biography

1979-1984

Master's degree, Audiovisual design, Cum Laude, at Gerrit Rietveld Academie, Amsterdam.

1991-

General and Creative Director of Tungsten Pro.

1990-

Professor at Gerrit Rietveld Academie, Amsterdam

Relevance

Tungsten Studio, founded in 1991 produces films and audiovisual installations as autonomous work or commissioned by museums, cultural institutions, government institutions and companies. Tungsten Studio Originated from the world and mentality of modern art. The artistic direction is in the hands of managing director Martin Grootenboer. Grootenboer graduated cum laude in 1985 at the Gerrit Rietveld Academy, since 1987 he's a teacher at the same academy for which he received the 'Jos Houweling Award for Art Education' in 2006. From 1987 to 1993 he worked in various positions at Dogtroep and VPRO. In 1996, his documentary Double You Street got nominated for the Joris Yvens Award at the International Documentary Film Festival Amsterdam.

The clientele of Tungsten consists out of a large number of prominent Dutch and foreign museums, including the Stedelijk Museum, The National Museum of Ethnology, The Royal Library and the National Archives in The Hague, The Van Gogh Museum in Amsterdam, The Museum for Communication in The Hague, Space Expo (ESA), The Multatuli Museum, The Maritime Museum, The Rijksmuseum Amsterdam, The Israel Museum, Wold Expo 2010 Shanghai / China, The Municipal Museum The Hague (GEM) and a range of reputable companies such as Heineken, Telfort, Apple / iCentre, Dutch Fund, Brand Bier, ING International, Rabobank and the ministries of home affairs and Rijkswaterstaat (RSW).

Questions & Transcript

Conversation transcript:

Martin Groetenberg (M)
Pablo De Sola Montiel (P)

M: How long does this study takes?

P: Is one year and half. I actually started in September last year and we have one semester of introduction project, a second semester project. For example I went to Buenos Aires and we did a master plan for part of the city. And the third semester is about thesis project for the graduation. So we conduct a research and then apply that research to a project, but then you don't know where the boundaries are anymore between them.

P: This is the ongoing project, Cut Cinema. And is all this idea of editing, cutting, montage. Resolve into cutting a building.

M: Like a metaphor?

P: Literally.

M: hahaha literally

P: I found a very nice building in the north of France. In Lille. It was a textile factory. It consist in a huge complex of buildings. The building is in a very precarious state, is it ruins. Like many other buildings in the Eurometropolis of Lille. So my idea is to cut new spaces inside the existing building.

M: So this is a proposal for the city hall?

P: No this is an academic project. So the idea is to construct an space of cinema and around sets studios, and use the building as a background for the films. To do movies about the post-industrial city.

M: Permanent?

P: Permanent. So I'm kind exploring films techniques of methods film in relation with the space. To know where do I have to cut, to allow films to be shots. For example, if I want a long shot, the relation between spaces a so on.

M: I can show you later, we have a studio there. I can show you.

P: Yes, because, what I would like also is if you can

talk me a little about what are you doing here. It will be great. Because I don't know much about filming actually.

M: What we are doing... First of all, I did art academy so direction of audio visual. That is a big difference from film school. More like art but anyway it became a big department in the Art School. And now I teach there. And the company I started in 1991. So it was already thirty years or so. And I started not because to make a big business out it but I realize when went to art school and I left the academy, I realize that was the need for film use in different spaces. Not only in cinema, because also museums has change a lot. Is not like here is the item and very hoho and a filthy pillow but experience became quite important and fashionable. I have the word experience now, but anyway it became... And I was quite handy with techniques, so I did quite well and I got big assignments from government, suddenly, with slide projectors. To make, for example, a ministry that existed for 200 years and they want to celebrate it with queen and the king. And I got many of those assignments to make something nice out of it. So I always have been interested to take the film out of the screen, let say. To make it a bit different. So really use the space, and that was also important, it was never the same. And it is never. Is always custom made. Like you in your building, you don't want to a recipe, you always have to find a thing to find a solution. But anyway I also painter, but this was to strong and dragged me into the film into the business. And I started a little studio and then I lost the little studio, because is business. And the is crisis. And is a lot to do with money, unfortunately. Anyway, now, after losing the studio and building it up again, and move a few studios. So now suddenly we are settle here, a bit outside Amsterdam. And we found this old industrial space, which was used for transferring frozen meat. So is cooling environment. That's why all the tiles and all the doors, for the lorries could come. But then I started to build the studio here again

P: And did you the renovation? To adapt it

M: Well... yeah, but step by step. I didn't like anymore the system of an investor to put money and then you have to wait until. A bit like you are owned by the investor. But anyway it became quite successful again. So I collect all the items that we need, and of course I know where to find them. And it became film studio again. I show you around a bit later because this place consists of three main

halls, each one like this 200 square metres. In total 600-700 square metres, which is actually quite a lot. And I will show you as well the studio we rent, just for people to make commercials, video clips, art movies, so they need a green screen. Chroma key.

P: they use it a lot?

M: Yeah they use it a lot.

P: Is it very fashionable now, right? And use a lot of digital stuff.

M: Because technique evolve a lot, so it became much easy. In the old days, the film was analogue, it was beautiful. And still been used, but very difficult to make... let say you have horizontal editing, but there is also a vertical editing. Which is call compositing. So you put layers on top of each other.

P: Of the film?

M: Of the film, but some of the layers, of course are transparent some parts. that's why you can see.

P: Is a laborious process.

M: Exactly, and the green screen is only to make it transparent. The green is not important.

P: Yeah of course. It is just a weird colour that is not present in the movie.

M: That is one of the reasons, true. But it is also the less influence in the colour of the skin tone. You can also make a red screen studio, but then everybody becomes tomato. It is not very handy. And Blue is also still use but that's depend a little. If you make a movie which is a... I don't know with a lot of sea and the ocean and water, then you probably are going to use a blue screen. Because there is always a little be of spill. A bit of blueish, greenish on the items. But you don't see it of course if you have a good equipment and light it in the right way. So we made one green screen studio. And this is more or less production area, where everybody eats and meet and work with the computers. Like yesterday, they were 50 people here, working. And the other hall, heheheh, well it became more or less the left overs of the sets. Because people built film sets and then they say we come next week to pick it up. And it never happens.

P: But is nice right?

M: Is nice, but I want to have the space. Anyway. That's one part of what we do here, renting the space to other people to use it themselves. But the other part of the company is to creating part is to...

P: Production

M: Yeah, production, and because of this art academy background we are really in the cultural world, musea and buildings. And building sites.

P: So you have as well commissions to shot outside the studio?

M: Yeah Yeah, sure.

P: do you think is half-half.

M: Studio and outside?

P: Yeah,

M: Yeah. But the thing is that everybody... To get the film is very short period, so maybe if you want to make a movie of half an hour, one hour. You work on it half a year, a year or so. But then the film itself is just a week. But a week is very short, but then the whole organization, planning, get the money, to get the people. Many people involve, all have to be in the same day. In the same place. So many reasons of why things get distorted. It makes it very labour intensive. SO the filming is very condensed, very concentrate, very stressful. Very intensive. Long days. And then postproduction starts, this is also classic, you get all the video tapes or the hard discs or the celluloid developed. You get back and the you look at the raw material, and then you get depress, is always like this. 'Ohh this how is possible? I spend years of preparation. Look at the actors is an idiot'. And the slowly you get out of this depression and you start editing. This is classic, it always happens. Well maybe it wasn't too bad. The postproduction is very creative process, there is where you make the movie. I always tell people through away the script the moment you start filming and editing. Because the film has its own rhythm. Because the most important factor is time. Is a time base art. Is a big difference with building, which is what it is. And of course you have time and weather and lights, and daytime night-time. But in film the difficult thing is that you claim time to the audience. You have to sit to hour, watch my movie, is my party, you have to watch it. Better be good, otherwise I'm going to steal one hour of your life, which is very precious. So that's what makes

difficult, people get bored in 10 minutes, so you have to through a piece of meat. Is the rhythm, like music?

P: That is what Mauricio tries to teach us.

M: That's what we do here in fact. You come in a funny hour because there is an office upstairs. Where we have the computers, where we do the editing. But we decided to go to bring everything here. So now we are building here and try to make it a little more postproduction studio. And then the people want to have lunch when they have to go there later.

P: OK, I wanted to ask you: I you have a special relation, technique to relate the space you're your filming with the movement of the camera? If for horizontal spaces you use a certain movement of the camera, or vertical ones? Or do you use it to make contradictions? Using the movement of the camera in relation with the space.

M: Is a good question, in a sense, one of the most important things is the speed of the camera, of the movements. Because when you watch let's say on the iPhone a movie a football match where the ball is going from left to right in two second. But here is only ten centimetres. If you project the same movie in a wall, which is ten meters, is also 2 second but suddenly its travel 10 metres. Is a little of a mind fuck. So is something the everybody should remember, when you project in the space. That the space should be much slower, and this is very tricky, because of course everybody is working in the screens and because sometimes we work twenty or thirty people. And everybody is freelance nowadays, so not everybody has experience, and always have to tell them shout them, slower, slower. This is one of the biggest challenges. And then there is... We do a lot of panoramas, like very strangely shaped films, use white screen, but sometimes, three metres high and forty long, like really a moving wall actually. So there is very important that the movements are smooth and slow. Monumental in a way. Is completely different than editing a movie for television or screen.

P: And all of this you have to prepare it before shooting? You have to know exactly which are the movement that you have to do, and which space are you working in. Right?

M: But what is maybe interesting. Let say that you have a long ratio 1:10, but there is no camera that

film this strange ratio, yeah ok you can cut if you have a resolution 4k, 4000 pixels, you can cut by 1000 or 500 or something. You can cut and make it all black of course, but you through away a lot of pixels and resolution, is not a good idea. So you have to film it, let's say with a normal camera and in fact you film, let's say 1,2,3,4,5 like as much as you need. Now if the shot is moving is a big problem, because how to... Or you put ten cameras with the same lenses, the same setting, which is out of the question, is too expensive, all the cameras are different. So you do it with one camera, on a dolly. But the moment you start pushing the dolly. Is human...

P: Traction right?

M: Traction. And is human rhythm. Because if I film let's say with three cameras, but you can also film with one camera. First this, I move the camera and I do this and then I move again and do this. And that's the same. Or you can do it at the same time or you can do it several times.

P: But then you have to cut and edit the movie.

M: Yeah, later you cut and edit it. But if you want to do it in one, let's say, a dolly shot. For example, you can check on the website, we did something for the royal library. And they have bookshelves, endless, fifty metres only books, books, books. And we went with the camera alongside, but we knew later we have to make a panorama out of it, so you see old books, new books etc. So you have the film with all the information you need. And is not people walking, are books that are standing still. That made it easier.

P: Because there are also these movies that takes long shots along the walls with the actor walking along with the camera.

M: That's possible, but then when we start editing, and this was many years ago, and it was on film. Not video, analogue. And we had a dolly that we pushed and then what you can do with the composition later, in the computer, you can choose the first part of the movie, you glue to the left, the second part of the footage you glue to the right side and on and on. But then the whole film was breathing, because I can't walk in the same speed, they best operator can't do this. So now, but only a few years or so, there is equipment that is automated, digital, to which you can program the time and speed. And those it all the time exactly, and then you can

easily glue part together and have the seamless panorama. This is a very good example of the royal library, because we had very strange problems, because there were also corridors like this, and the camera goes like this and you have the perspective, with only one focal point. But not here you have suddenly like ... all this triangles of the corridors, very strange. And they have to meet in front. It was such a challenge, we had to glue the front of the cover on top of the film, that's what I meant with composition, the vertical edition. Otherwise it looks like this perspective doesn't exist. But we also made 360 panoramas. Which is a bit the same, but then you don't want to have the beamers, there is no 360 beamers, so you have to make a star with the projectors, and overlap. You fade one to the right and the other to the left, then you put it over and you don't see anything. This is special software.

P: And to film it, you use one camera? and standard one or one of the new 360 ones?

M: Its depend, what decides this is the resolution. If there would be a camera, because the lenses are more or less possible to have half a circle, ok maybe is a bit distorted which you can correct. But the resolution is always shitty. Because three times 4k is 12k and there is no camera that does 12k. So is much better to glue HD next of each other.

P: And what about the vertical movements?

M: Yeah, is a bit the same. Only that is a bit easier and now it becomes a bit technical. If you move the camera like this and you have this in the frame and in the background you have all the vertical lines then it plays trick with the shot speed, and the speed of the camera, which is a 25 frames second, which is for the human brain its ok but in fact is not that much information. So if you have let's say a piece of time, one second, and you can cut it up in 25 pieces.

P: or 24 right?

M: That depends on the electricity, in Europe is 25, in America is 24. Is because the electricity here is 50000 kilohertz so that's hade to be divide by five, that's why you get 25 frame a second. In America 60000 kilohertz, so 24 makes the division. But the thing is if you cut one second in 25 pieces, and somebody is moving, in fact you make 25 pictures, but if you make 50 pictures, you have much more information also in a second. You have much more detail; it becomes much more sharp.

All the commercials that we see in television, they usually shot on 50 frames, not because they want slow motion. Because if you play it in 25 is slow motion. But if you play it at 50 it looks normal but sharper than 25.

P: so you can see better the object.

M: Exactly, specially fast moving objects. So talking about this line, so if you go 25 you can have the effect of this old wheels of the western movies that seems like they are going backwards, because your brain imagines the position of the spines of the wheels in different order than the reality. That's why for horizontal view is important to increase the frame rate. In vertical is not so important, only if you have falls, in a vertical building for instances. For example, in filming a waterfall is immediately recommended to pass to 500 frames per second, because if you do normal speed is like a photo camera, it's get shaky and blur, because 25 frames per second is one fifth of the second and that's actually a lot. Thing get blurry. Only if you go higher than 100, you can see all the snapshots of the water moving. So that's the main difference between vertical and horizontal frame. So is always better to have more frame rate. But higher frame rat pays price, light. Because the shot speed gets shorter, so you need more light for the same situation.

P: So everything needs to be brighter?

M: Or darker, more contrasted. If I film you now 25 frames a second and I switch to 50 its get darker. Like a photo camera.

P: is the opening of the camera right?

M: Yes, the opening.

P: How do you manage to control light?

M: You put lights, but in day time is a problem, because then with the film camera you can only... let's say professional equipment.

P: For example, these studios where in green-houses, for the light. This is the Edison one, black Maria is called, it was able to turn around, open and close big windows.

M: Yeah beautiful, but if you depend on the daylight, the conditions change through the day, you can't work with it. Maybe in California where the sun,

that's why Hollywood is in Hollywood. It's always the same weather. There you have open air studios, green screen, blue screen, and no roof. This is only there. Normally is always indoor, because you have to control the light. Not like different, you start 9 o'clock in the morning and at 4 the camera has to change. It has consequences. Because you can open the lens to get more light coming. But you also pay the price, you have to less depth of field, so the character of the whole shot changes, maybe the light is the same the focus is different because the lens acts differently with different opening. So it has a lot to do with technique. You chose and judge the camera on this, on the measure of the contrast that can take. How much contrast can make, before it gets white. Because you want all the steps, all the greys.

P: This are other ones, Paris. And this a concept diagram that shows the coordination of the montage of voices, music, film, and composition alongside with the movement of the camera, to edit the film as a whole.

Because I was imagining, that if a film is edited every 2,5 second, is edited by many pieces right? I was wandering if I edit the building, if I cut the building can I reduce the edition of the film? Is one of the hypotheses. I can imagine taking one shot from this space to another here moving the camera through he walls taking the whole thing happening nonstop. I know that the coordination and preparation is difficult for this kind of takes.

M: Yeah, but is very nice, or you film different shots angles or you planned very well. You make the story board in on shot, and you edit in the camera. There is a lot of famous video clip, Unfinished Sympathy by Massive Attack.... Is one shot, and there you can really see that there are different scenes because someone walking on the street, the camera is going backwards all the time, and there is people coming in and out of frame all the time. But there is really a storyboard in one go.

P: Yeah, that's one of the chapter of my booklet, scenes of movies exploring this technique of the long shot.

M: That is typical of filmmakers, who know how it works, and is always a challenge to make new. Like new language, new possibilities. But what I told you about this dolly thing is the key to many things.

P: you have to find the right guy who is able to push the dolly in a perfect speed.

M: Yeah hahaha, but it doesn't exist. Now there are new things like robotic arms that allow you to play with time. But let me show you around.

....

In the green screen studio, with a third person.

P: Do you have to paint it often?

Studio Assistant: Not every time, but we got twenty dancers dancing, and you cannot see it but it looks very bad, very.

M: SO what you see, is not the biggest green screen, not the smallest. But the whole trick is the green just to tell the computer instead of green we want transparence. But the corners are important that there are no lights. That's why there is no shadows, but also the tones changes. And there is also what they called eggs studios, where you step in and is all white like this but also the ceiling, 360. And there you really have to lay down, because your brain gets completely fuck up. Is mainly used for cars because of the uniformity of the light.

P: So the light reflections doesn't appear in the film.

M: And this are led lights, which take very little space.

P: And this high is it standard?

M: It depends of the productions, for bigger one you need higher for other small is enough. But you don't need to hung somebody very high to make it like is flying it can be here only. You can have green cables.

P: for the actors you make marks on the floor with what they have to do?

M: Yes and what is even more important is this kind of stickers in the wall, because if the camera moves and there is an actor, the background also has to move late. But how do you know? So you need the marks for the computer to tell him to follow that markers for the background to follow the perspective and the speed.

And if you use a dolly and wheels are not perfect you cannot see it here, but when you screen its enlarge the momentum and the movement, like one millimeter here is two meter on the screen.

P: Yeah,

M: And this is for the sound, is very important for your cinema, studio, if you want to record sound to not have eco. That's why there are curtains to block sound, because behind we have tiles.

P: What kind of fabric are made the curtains?

M: Is cotton with salt, salty water to fireproof as well. But looks we are in the freezer, that is why is so popular, because most studios don't have this. When I saw this building I though is perfect for studio. In fact, a studio is a simple thing to design, because is an empty box. So this is 10 by 20 by 4 meters.

