



Design For The Past

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M.Arch Thesis

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Abstract

The thesis project started off with an investigation of the Coal Gas Factory in Datong City, and an interview of a former factory employee. All relevant information is covered in the Report.

This thesis project proposes for an alternative factory design solution for the past (1980s), acknowledging its inevitable failure in its future (2000s).

The design acknowledges architecture's nature of temporality, and is focused on making architecture transformative--creating space and environment for architecture to be transformed in order to accommodate updated programs and activities when its no longer able to serve its original purpose.

The Report



Coal gas factory, drone aerial view



Largest power plant in Datong



Abandoned factory exterior



Abandoned factory interior



Large amount of affordable housing around the factory area



Large scale of demolition led to both economy boom and unemployment



Foreground: areas ready to be demolished, but the demolition process was suspended due to political reasons
Background: new apartment buildings built upon demolished zones



affordable housing for retired employees of state-owned enterprises

Background

Do you know the background of this factory? When was it built?

厂子是什么背景建的时候大概是什么时候

It was built in the 1980s

80年代

It seemed that our gas plant was built in 1980s

我们煤气厂好像是80年代

In the middle of 1980s

80年代中期好像建的

I was young at that time

那会儿我还没上学

I worked in that factory

回那个厂子上班

It suffered a depression a few years later

就是没上几年单位就不景气了

We could not get good wages

就是工资各方面待遇不行了

Some of the workers resigned

有的就是他们就出来

And found other jobs

自己另谋出路

Several years later, the whole factory went bankrupt

最后连整个厂子都破产了

All workers were laid off

整个就下岗了就是下岗

What was the situation of places around the plant at that time?

当时这个厂子周边是什么情况

The surrounding areas are deserted

周边都是荒无人烟

You could find nothing there

啥都没有

Nothing. They were all deserted

都是荒无人烟

It was built them in the suburbs

都是它在郊外建的

It was desolate and uninhabited

那时候荒无人烟

When selecting the site,

它选厂址的时候

it was planned to be built in its suburbs

选厂的厂址是城外郊外的

At that time, the city was an old town

当时城还是老城南附近

(interviewer)

(采访者)

It was not far from the old city

老城离那还远

The inhabitants were far from here

居民离那还远

It was near the southern suburbs

它都离南郊区

Was the factory built because of national policies?

厂子建的时候是因为国家政策要建的吗

Yes, it was built in response to our national call

它也是国家需要

At that time, residents burnt raw coal

因为一些大戶居民都烧原煤

Coal I call it raw coal

就是煤炭 我叫原煤

Coal, Coal Gas, Natural Gas

It led to much pollution

Serious pollution

Coal is such a thing

But coal gas is advanced

Not every house

Could afford to light a stove

That factory turned coal to coal gas (interviewer)

That's right. Coal gas was clean

That was good to our country

And good to all households

With the aid of pipes, the coal was

Supplied to all households

That's right, all households

Later, coal gas was changed to natural gas. Is that right?

China carried out a lot of reforms

In fact, coal gas has disadvantages as well

Because of the coal gas

A lot of people died

They were poisoned

Because of gas leakage and pipeline leakage

Many people died

After that

Because of the shutdown of outdated production facilities

And the natural gas

Which is more convenient

More and more people began to use natural gas

When did it happen

I remembered that when I came back

In 1992, many people still use coal gas

It was very polluted

污染很厉害

Coal is such a thing

But coal gas is advanced

Not every house

Could afford to light a stove

That factory turned coal to coal gas (interviewer)

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When did it happen

I remembered that when I came back

In 1992, many people still use coal gas

Factory Lives

But they had no work to do

But things were different

For example,

In the past, a worker earned 1,000 Yuan

After the organization disappeared

One worker earned 600-700 Yuan each month

The wages were splitted (interviewer)

Of course, each worker earned lower wages

Too many workers there

Finally, the organization was overstaffed

Because of other reasons

The factory was a bit depressed then

Were there dormitories for employees or other things like that?

There were

And shift workers

From 8:00 am to 2:00 pm

From 2:00 pm to 12:00 pm

From 12:00 pm to 8:00 am the next morning

Three shifts

You have to keep the machines running right?

Yes

So where did the employees live?

There were dormitories in the community

There were some dorms

Yes, yes, yes

Which is dismantled now

So there were some dorms left in the factory (interviewer)

But those dorms were demolished (interviewer)

Nothing left

There used to be dorms

上班又没活干

(这里90年代被理解为1990-2000)

就是九几年

1998年1999年那时候

将近2000年用的天然气

然后就是当时这个厂子不是带动了一批就业

对 这厂子当时带动了好多

提供了好多就业机会 好多

它厂大概当时也有1万多名职工吧

就像您说的是一共需要2000个是吧

我就给你打个比方

他需要2000个

但是招进去1万人

机构臃肿了

但是厂子的生产效率

只能够

工作岗位只需要

比方说2000个岗位

only 2,000 workers

But 10,000 workers were hired

Five workers did the job to be done by one worker

So everyone was not busy at that time

Yeah, we were not busy

And had a few days off in a week

Is that right?(interviewer)

Then, too many people came there. So many

There were too many workers

They can't be absent too many times

你不可能不来上班

Employment

At the end of 1980s

(here the 1980s is understood as the years between 1980 and 1990)

In 1990s (interviewer)

In 1980, 1999, at that time

In 2000 or so, people gradually used natural gas

At that time, did this factory provide a large

number of job opportunities?

Yes, that's right. It created many jobs

And provided a lot of job opportunities

There were about more than 10,000 workers at that time

As you said, 2,000 workers were needed, right?

For example,

2,000 were needed

But 10,000 workers were hired

The organization was overstaffed

However, the production efficiency of the factory

Was not good

They just needed

2,000 workers

only 2,000 workers

But 10,000 workers were hired

Five workers did the job to be done by one worker

So everyone was not busy at that time

Yeah, we were not busy

And had a few days off in a week

Is that right?(interviewer)

Then, too many people came there. So many

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90年代末

(这里90年代被理解为1990-2000)

就是九几年

1998年1999年那时候

将近2000年用的天然气

然后就是当时这个厂子不是带动了一批就业

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They can't be absent too many times

Housing, Welfare

Some of my friends worked there at that time

Those worked on the night shift and those doing shift work

Could a couple afford a house?

With their wages

They could not buy a house

Most people lived in houses assigned by the

state-owned enterprise they worked for

Houses at that time

Were welfare houses that assigned by state-owned enterprise

After 1999 and 2000 housing system reformed

National housing reform

Workers obtained a housing provident fund

Adding some money, they could buy a (house) interviewee

Old city

My family had the same kind of house at the time

I had two houses

One of the houses was

Allocated

After the institutional reform, I bought the house by myself

It was not expensive

When did it go out of business?

Before 2000

Or at the end of 1990s

In the late 1990s

In the late 1990 s

In 1998, in 1999

to 2000

From 1998 to 2000

It went out of business slowly or? (interviewer)

我挺喜欢的在上班的

就是减少员工减少员工这样

对的

先减好像是服务公司的

大集体的这个先下岗

国营公司最后下岗

国营最后也下岗了

下岗了是包分配别的地方

不管

就是当过兵的他给二次安排

国家有这个政策

二次安排 (音)

也是少部分

一个厂里面有多少当兵的

那剩下的人就是

自己出时

也没给个安置费什么都不给

那那那那

那那那那

谁给这个钱那那那

是不是当时也挺混乱的一个时期

</

The Report



Trucks delivering coal to the power plant

Pollution

I quit before I was laid off
I went to work for four years all together and then I quit
I like to be self-employed
I did not like that kind of life
However, such a reform
Improved our environment
Our environment became better
Later, all private mines were abolished
When was this coal mine (interviewer)
Abolished? (interviewer)
Under the leadership of President Xi,
Recently
May be recently
Ten years or so, ten years or so
Government was not extremely focused on that
When was the environment most polluted?
It started ever since I was born
It is serious, right?
Yes, very serious
How serious was it?
We could not wear white clothes
It was not suitable to wear white clothes
Because your white clothes will become black after you walk around
Things were like this all over the city
All places had similar situations
Was there many people coughing or something?
Things were like that in China
There were many high prevalence areas of lung cancers
In Beijing 301 Tumor Hospital
Almost all people getting lung cancers were from Datong



A typical Khrushchyovka in Datong, most of them got demolished

Affordable Housing (Khrushchyovka)

My father had lung cancer
I accompanied him in 301 Hospital
Those patients were from Datong
Especially those working in coal mines of Bureau of Minerals
They had lung cancers because of lung aspirations
They all had similar situations
They used to live in houses provided by the government
All departments provided housing for their stuffs
All departments
The kind of Khrushchyovka
Khrushchyovka
Recently
There were many kinds of those buildings
This kind or that kind
In the earliest days, there were no buildings but only bungalows
They provide bungalows
After the 1990s
Each department built family apartment buildings
Two families live in one apartment
If there were two bedrooms, one person will have one bedroom
The two families share one bathroom
And one kitchen
There was no living room but large corridors
The Khrushchyovkas you showed me around yesterday
I saw that two families had two apartments
That means it's newly built, isn't it?
It's late (in time)
One family had one apartment
In the earliest days, two families lived in one apartment
At the earliest time
During my childhood,

因为我父亲就是肺癌
我跟我父亲在301医院住过院
都是我们大同
尤其是煤矿局的煤矿的
都是肺砂病,肺砂病变成肺癌
都是这样的
以前都是单位分的房
各个单位都有分房
那种筒子楼
也是筒子楼
比较多
还是那种还有哪种
最早的时候没有楼房都是平房房
单位分平房
之后随着90年代以后
各个单位盖的楼房家属楼
一户住两家人家
俩卧室就一室一厅
两家人共用一个卫生间
共有一个厨房
以前没有厅都睡走廊
那天您带我转的那些筒子楼
我进去看它都是两户了
那就是说它 (时间上) 最后是吗
(时间上) 靠后了
那就是户一套房
最早的时候一套房两户人家住
最早
我们家从小



A public toilet in the old town

Resident Lives

A lot of accidents happened because of that
You know
But storied apartments have heating facilities
and water supply and drainage pipes
It's very convenient
However, people could not get along with their neighbors like before
When living in a quadrangle courtyard, we had harmonious relationships
However, after living in apartments
We could not get along with people
We like before when we lived in bungalows
We used to share water taps on every street
A street
That was enough
There were more than 20 yards in big streets
And four or five or six yards in small streets
Every street has one or two water taps to use
Public water taps
Every house had a water tank to store water
Water was stored in water tanks
We used public toilets
There were public toilets in every courtyard
For both men and women
Most of them lived together
They were all workers
And went to work together
They lived in similar environments
And has the same income
They did the same thing
Government officials and ordinary people earned the same salary
They were the same
There was no difference between them

因为这个事故出了很多
知道吗
所以楼房就是晚上有暖气了
上下水也通了
这儿方便了
但是您说咱们小时候
住的四合院跟融洽
好像住了楼房以后
对邻里关系不如住平房了
我们每个街道都有一个自来水管
一个街道
一个街道也修
大的街道20多个院子
小的街道也就四五个院子
每个街道都有一到两个水管
公共水缸
家里面都有那个储水的冰缸
就是用水缸储水
然后厕所是去公共厕所
每个院都有公共厕所的
和男女共用的
是不是其实住在一起的
点炉子因为危险
每天晚上把炉子闷好了
然后把炉子灭了也不行
晚上很冷
我们北方早晚温差大也不行
你必须得把炉子闷好
闷不好它有煤气
一中煤气全家就都闷死了
没有什么区别



A typical single story house in the old town, it is similar to the house where he lived in as a child

Resident Lives

We lived in a bungalow provided to my father
by the government
We lived in the storied apartment provided to me in 1988
In March 1988
The storied apartment
It has two bedrooms and one family lived inside
Just like the one you lived in now (interviewer)
Not that big
But the orientation
Was similar
At that time, apartments were about 50 square meters
In 1988
There was no coal gas in the house
There were pipes (for coal gas and natural gas)
And sewer tunnels
Water supply and drainage pipes
There were water supply and drainage facilities (interviewer)
When going upstairs, we carried charcoal up every day
We cooked with raw coal
Then heating facilities were installed
Storied apartments were different from bungalows
It is convenient to have access to water in storied houses
There was no need to light the stove in winter
It's dangerous to light the stove
You need to keep the stove warm every night
But you could not turn it off
It was cold in the evening
In the morning and evening temperature difference was large
You must keep the stove warm
If no, the coal gas
May kill everyone

我们最早是单位分的
政府给小房子
1988年我分的楼房
我现在记得1988年3月份左右
分的楼房
一套一户人家两卧室的
那时候的房子都是50来平米
当时是1988年时候
我刚分房没有通煤气
管道留下来了
留下管道了
有上下水
有上下水都有
还在上楼每天搬炭上去
在家用原煤做饭 有暖气了
楼房和平房它概念不一样
住楼房上下水方便不一样
冬天不用点炉子了
点炉子因为危险
每天晚上把炉子闷好了
就是把炉子灭了也不行
晚上很冷
我们北方早晚温差大也不行
你必须得把炉子闷好
闷不好它有煤气
一中煤气全家就都闷死了
都是大家不是一个厂子上班的
都互相背背也不一样



A typical quadrangle courtyard in the old town

Failed Utopia, Quadrangle Courtyards

No difference at all
Very small difference
Relatively speaking,
We might not have good material life
But we were quite happy back then?
I felt happy at that time
People did not feel stressed at that time
Now, we have better living conditions
But we are suffering too much pressure
In the past, we ate the big pot but felt no pressure
All people did the same thing
They had similar living conditions
They used meat vouchers to buy meat and oil vouchers to buy oil
Use cloth tickets to buy cloth
Each month
They did not need money
There was no need to buy anything
After living in the storied house, life was more convenient
Other things were not that good
In which aspect?
We enjoyed convenient lives
To be more specific?
We used water and heating devices
And LPG for cooking
All things became easy
But we failed to get along well with our neighbors as well as before
When we were children, we lived in a quadrangle courtyard
Now, we failed to know each other better because
We did not work in the same factory
And we did not have the same background

根本没有区别
差别很小很小
是不是就相对来说
排除物质可能没那么好
其实当时过的也挺幸福的?
那时候幸福
那时候人们觉得没有什么压力感
现在日子好了
现在好像压力大了
以前没有压力都爱吃大锅饭
老百姓都一样
生活条件都一样
就是您像生活上下水 取暖
哪方面方便了呢
哪方面方便了
再具体一点
就是您像生活上下水 取暖
做饭用的是液化气了
各方面都方便了
但是邻里邻居不如
小时候住的四合院
不是也有一部分原因
就是大家不是一个厂子上班的
都互相背背也不一样



A print shop in the old town, which is one of the few public facilities

Public Facilities

Yeah, we had different backgrounds
For example, in our community
In the past, people working in the same unit knew each other well
After the demolition
People living in this courtyard came from different places
People did not know each other
When people lived in the old building
When seeing a doctor, for example
They went to hospitals
There was a big hospital
The factory had hospitals and there was a hospital on site as well
People went to the factory hospitals; if they had small diseases
Their small diseases could be treated in the hospital
If they had big disease, they would go to big hospital
Each plant has a hospital
Every department has a hospital
Or a clinic
What about transportation?
Did you need to go far away?
There was not a big downtown at that time
There were buses and bicycles
People could take buses to distant places and ride bikes to closer places
Was it convenient to take buses?
It wasn't very convenient then
There weren't many buses then
Public transportation and the public system were not very developed
Most people rode bikes
When did the bus system
Start to be better?
After the 1990s

不一样
就是靠我们小区来说
以前都是一个单位的都认识
拆迁以后我们这个拆迁以后
这一个院大家从四面八方来的
各个单位的人谁也不认识
当时住在老楼的时候
比如说看病这些方面怎么样
都到医院
有一个大医院
单位也有医院,厂也有医院
厂医院就是小楼小穴了
小病来了这个医院就能处理了
稍微大一点的就到市里边大医院
各个厂都有医院
各个单位都有医院
医务所
那出行方面呢
比如说有需要去远的地吗
那去市区也不大
有公共车有自行车
远一点坐公交车近一点骑自行车
公交车方便吗
那来回以后
我当兵回来以后
国家给分配的工作
我就上了三年不到四年
我就不上
我觉得没意思
停薪留职自己出来
当时分配在哪



People have to use public water taps and carry water back home

Lives in the Past

After 1995
With the reform and opening up after 1995
Let's talk about your childhood experience,
you can be more specific
I did not like studying in primary school
I've been playing around since I was a kid
I liked to be a soldier
Did you go to state-owned schools?(interviewer)
The primary school
The public school
Belonged to the community or (interviewer)
The public schools in the city
Did you take bus to go to school? (interviewer)
No, it was less than 5 minutes from the place I lived
There were schools within a few blocks
There was a school between two or three blocks
It took us about 5 minutes to walk to school
I joined the army when I was 16
I had been a soldier for ten years
I felt good in the army
It helped me a lot in my future life
It changed me a lot
Made me a better person in the society
After I came back from the army
My country assigned me a job
I worked in that position for more than three years less than four years
Then I quit
I was not interested in it
Retained the job but suspended the salary
Where were you go?

1995年以后了
随着改革开放以后1995年以后了
光谈谈您可以详细一点
我的经历怎么说呢
我不喜欢上学也是学不进去
从小时候上小学也是国家的
小学
公立学校
是在社区里的还是
就是市里边公立的公立学校
坐公交去
不用 我离家不是5分钟就到了
他们几个街道里边就有学校
两三个街道中间有个学校
步行5分钟就到学校了
我16岁当的兵
16岁当的兵我当了十年兵
在部队干我的挺挺的
对我以后的造器人生帮助很大
改变了好多
对我到了社会上帮助很大
我当兵回来以后
国家给分配的工作
我就上了三年不到四年
我就不上
我觉得没意思
停薪留职自己出来
当时分配在哪



The old town is planned to be demolished

The Old Town

A quiet company
I quit my work and then did my own business
Till now
I thought that the demolition was good
It was good for the development of Datong
I supported it
I didn't understand it at the time
As economy develops
Old things must be eliminated
Something new will come
Well, can I take it that way
It means that
We must give up something
Although the history and culture
Those old things
Are only valuable
In order to develop our economy
To have a better life
We have to give up something
It doesn't mean giving up
It means eliminating
It does not mean that we want to give up old things
Old and traditional things are good
But there's something else
Such as buildings
Something, all things
Some things you have to use
The old things catch up

当初业务公司变质的
我就不上班了我自己一直干
干到现在
我感觉吧这拆迁挺好的
对大同以后发展挺好的
我也挺支持的
当时不理解后来在理解了
当时也有点不理解
因为随着经济各方面发展吧
老的东西必须淘汰
再定新的东西了
那我能不能这么理解
就是相当于就是
我们需要牺牲一部分
我们对历史文化的这方面的
这些老的东西
虽然它很有价值
但是我们为了经济发展
为了生活更好
我们放弃一部分
它不是放弃
它必须得淘汰
不是咱们想放弃
老的东西有的好多都是好的
但是新的东西
建筑方面各方面
有的东西它也是各方面
有的东西你都用现在的东西
老的跟现在的肯定不兼容不

The History



1950s PRC China was just established, a new town was built around the gate of the ancient city which had been destroyed during the wars.

1970s Multi-story residential building was introduced to Datong city as part of planned-economy system, those buildings are allocated to people as public-owned dormitories not properties. (People couldn't buy or sell real estates.)

1990s The coal gas factory was built under a planned-economy (planned and designed by the public sectors, no private sectors are involved.) China was transitioning from planned-economy to a market-economy.

1998 Beginning of the market-economy (free market), residential buildings became private properties, people started to lawfully buy and sell real estates.

2000s The factory and its surrounding worker dormitories are abandoned because of a sudden change in policies concerning the coal gas.

2010s Large scale of demolition across the city, high-rise residential buildings took over the place.

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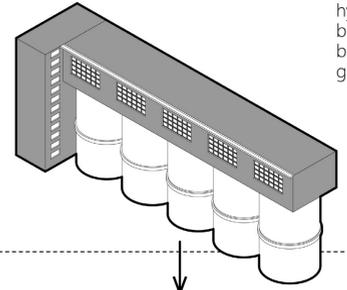
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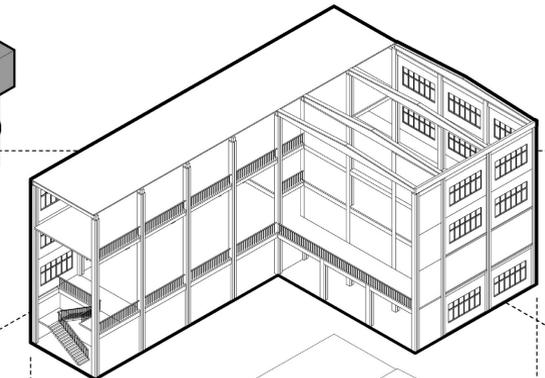
Phase 1
The Adjustment



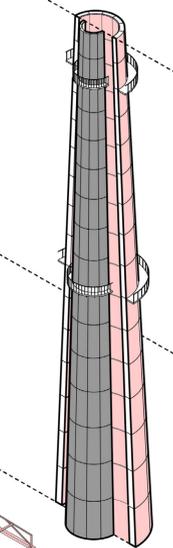
A typical coal condensation building has cylinder shaped structures to stack and compress coals, however, they are not ideal geometries to be transformed to accommodate other programs. In Phase 1 it is changed into a cube shape with steel frame structures which could be utilized more easily in Phase 2.



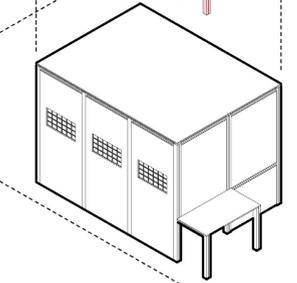
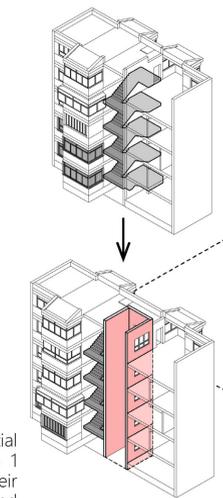
The furnace building is originally separated from hydraulic main and control rooms, they are combined together so that in Phase 2 the combined building would be able to accommodate all programs that are necessary for a library.



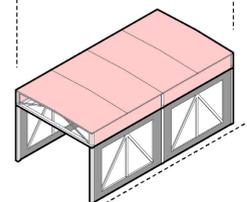
In Phase 2 the industrial chimney would be transformed into a sightseeing tower, but its original size was too small for spiral staircases and an elevator, therefore the diameter is doubled in Phase 1.



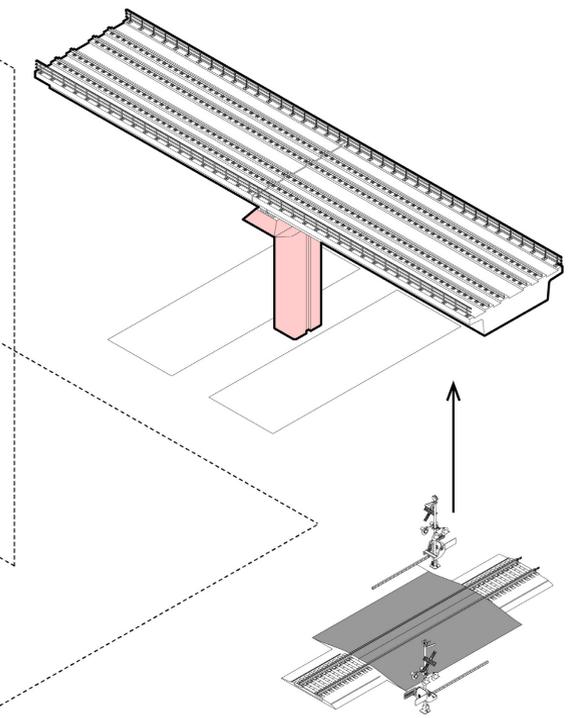
The multi-story residential buildings in design Phase 1 are slightly modified: their corridors are elongated and lightwells are created, which creates space for elevator installation in design Phase 2.



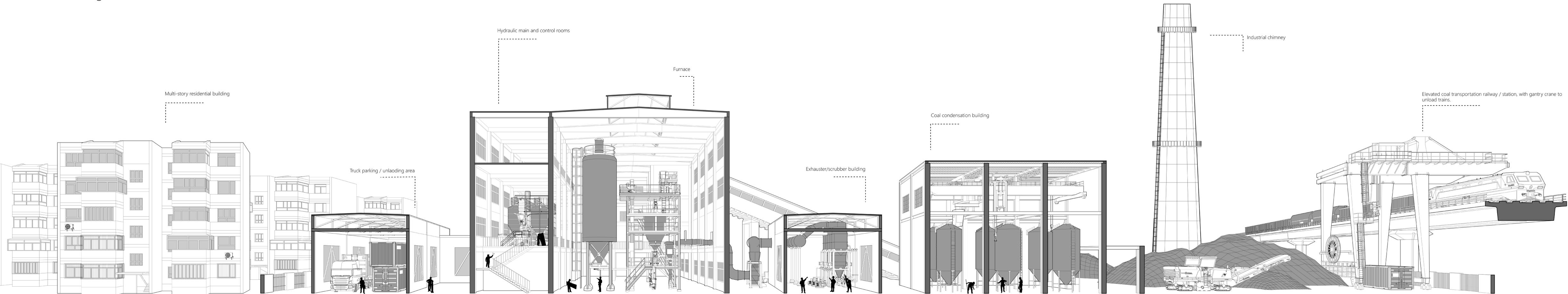
The ceiling height of general single-story buildings is increased by additional truss structure so that they meet height requirements of most ball-games. They would then be transformed into sport centers and gyms.



In Phase 1 railways that were specialised for coal transportation were elevated above ground so that it wouldn't cut off communications between communities.



Phase 1
The Rearrangement



Phase 2 The Adaptation

Based on the redesign, the factory would still serve its original purpose starting from the 1980s, with buildings rearranged and adjusted.

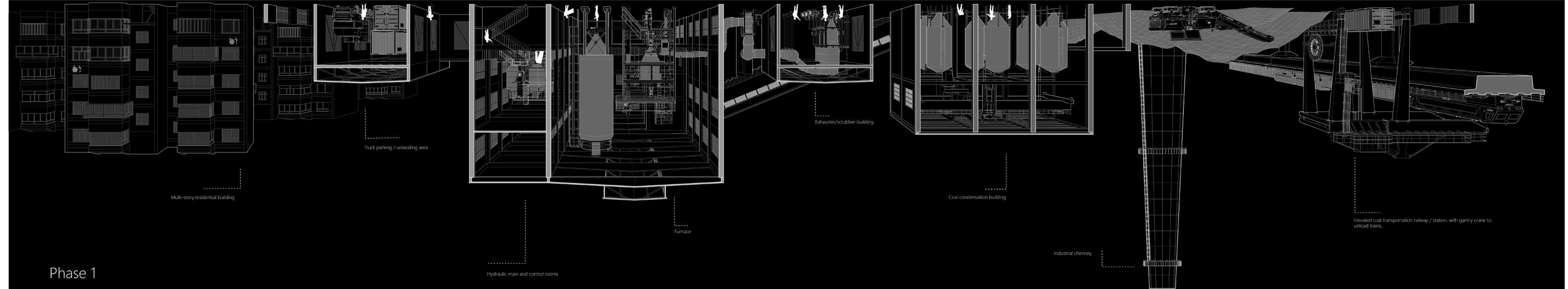
Phase 2



The factory would then be repurposed and transformed into a community center which includes a library, gyms, art galleries, open parks, etc.

The selection of programs is based on the interview and urban policies of local government.

Phase 1



This article discusses the potential impact that architecture could have on the environment. Architecture has never been a leading force of environmental change, but architecture is responsible for it in a way that architecture should be a facilitator to provide conditions for potential changes in society. With the concept of “modularised architecture” and “customised architecture”, this article calls for a localised design thinking that focuses on the relationship between architecture and its environment in terms of culture and history.

CHANGED/UNCHANGED

It is critical to fully define the term environment with respect to architecture in the first place. Mohsen and David in their book *On Weathering* understand the environment mostly as pure natural processes that have direct effects on architecture, while David Gissen came up with the term “subnature”¹ to describe some natural forces entangled with human activities. Meanwhile Dan Barasch argued that abandoned architecture itself would become an important social context as part of the environment.² It is obvious that all their definitions of environment fall in to one of the two categories:

- 1.the act of nature
- 2.human society

This article focuses more on the social aspect of the environment with the belief that human interference is the dominant factor that determines the form of architecture. As environmental change continues over time, it makes the final state of architecture necessarily indefinite.³ Thus it is important to examine how architecture would react to such changes actively or passively, to see if architecture has evolved or remained unchanged.

Examples of passive reactions are the coal gas plant in Datong, China (documented by Research Network on Urban Ruins in Contemporary China) and other abandoned factories in the same area.⁴ It was built in the 1980s when China’s industry was fast growing, and was shut down in 2008 when the local government was shifting to a more sustainable energy policy. It is clear to see that when confronted with environmental change (in this case the change in government policy and the local economy), the factory had limited resources to adapt to such change and ended up with partial demolition. An important reason for such failure was that the factory was a result of “modularised” architecture, meaning that its design was policy/regulation driven. The factory was proposed only because the government policy required one at a specific time spot, and the form of the architecture is only based on the local building code. In this sense it was modularised because a factory in Beijing and a factory in Datong would look the same despite the fact that they are hundreds of miles away, since the building code for a factory is almost the same across China. Such modularised architecture failed to consider the local culture and history and has little connections to the local communities, which explains why they had low resistance to change. Their passive position prevented potentials to impact society.

¹ SubNature: Architecture's Other Environments: Epilogue, David Gissen

² Ruin and Redemption in Architecture, Dan Barasch

³ On Weathering: The Life of Buildings in Time, Mohsen Mostafavi

⁴ Ash is purest white, Zhangke Jia

PHANTOM PAIN

Phantom pain is originally defined as "pain that is localised in the region of the removed body part". In the film preview it is used to describe the illusion or mirage of architecture that had already been removed, also to describe the emotions that ruin experience brings. Phantom pain is the only proof of people's inhabitation in history and such emotion peaks when there is evidence showing people's attempt to customise the factory for their needs while it was intended to be the least inhabitable place by policies and regulations.

Ruins are also memorials that witnessed the history of environmental change, through the map series that documented the chronological order of the changes that took place in the same factory area, it is obvious to see that policies and regulations are not the only factor that determines the development of an area. Local people collectively and spontaneously reshape the place they are living in without the push of urban planners or policy makers. Modularised architecture loses its ability to have dialogue with those changes over time, as urban planners tend to take a pure rational thinking like Corbusier and his Radiant City⁵ in regulating people's lives. The rigidity of policies and regulations jeopardised the connection between public infrastructures and local communities.

Customised architecture on the other hand should be "inherently humanist, site and user specific, integrated into the larger social network"⁶. Architect's job here is to incite possibilities for potential change by listening to the needs of local people and integrating architecture into local communities. This sometimes means that there shouldn't be a clear border that separates one program from another by zoning code. If people spontaneously decide to inhabit places that are never intended to be inhabitable, architects should respect that choice and adjust accordingly. In this sense architecture's impact on society is invisible but sustainable. Architecture lobby for itself when it is the most integrated into peoples' lives, inhabitants would find their own way spontaneously to adapt the place they live in to the changing environment.

⁵ Towards a new architecture, Le Corbusier

⁶ Effecting Social Change--Architecture as Servitude, Lauren Jones

FAREWELL

The coal gas plant in Datong is a good example that the policy/urban planning driven architecture is no longer suitable for the current society, although back to the 80s it might be the best solution. To achieve a customized architecture one needs to look carefully at the environmental change in chronological order, which reveals the real needs of local communities. And by collaging those needs together one would be able to come up with a new type of design thinking that argues for the inhabitants rather than instructing them. The failure of the coal gas plant could be a farewell speech of modularised architecture, and customised architecture with the help of culture and history of local communities, should be the design thinking we adopt for the upcoming public infrastructures.

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“Architecture is not about steering social outcomes toward an ideal through architectural composition, but instead aims to provide the conditions to allow social factors and processes to guide and define architecture.”

