

GRADUATION
ESSAY

THE FIELD
REHINKING THE BREWERY
LONDON, UK

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ADC STUDIO
MMXXI

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GRADUATION ESSAY

MMXXI

PART I

RESEARCH PLAN

CITY RITUALS

RETHINKING BEER CULTURE

KEYWORDS:

Brewery / London / Heterogeneity / Identity / Patchwork

INTRODUCTION & BACKGROUND

As in any other metropolis, London's public life is built chaotically and meets not the individual's request, but the established traditions and cultural codes. Public life is rather shaped by patterns of social behavior and traditions that create attributes/traps.

One of London's main attractions of cultural and public life is beer, which becomes trapping as an attribute and a trap. Beer has always been an activator of public life, and the brewery has been the typology that generates this product.

"In passing through a town your attention is usually attracted by two or three buildings of large size towering above the rest, and they are generally the church, municipal buildings, and brewery, and, as a rule, the brewery is a most hideous-looking structure, without the slightest attempt at design from an architectural point of view; and, in many instances, the appearance could have been made really imposing with very little, if any, additional cost."

Towers of Strength: Brewery architecture at home and abroad

Lynn Pearson

"For hundreds of years, London was the biggest brewing centre in Britain. As recently as the early 1970s the capital had eight big breweries and two or three smaller ones, producing around seven million barrels of beer a year, a fifth of all the beer brewed in the UK. London was, in fact, one of the greatest brewing cities in the world." <http://www.glias.org.uk/journals/14-d.html>

In recent years, there has been an incredible growth of breweries in London. It suggests that the beer culture has experienced a new understanding and a broader demand for this product's consumption has formed in society. Today's London is replete with the physical rudiments of the industrialization era in the form of buildings and complexes of former and current industrial facilities, tightly woven into the urban matrix. After industrialization, transformed breweries remained in the urban fabric and became a cultural heritage that directly impacted the beer culture.

RELEVANCE

Historically, London has had a large number of pubs and a small number of breweries. At the same time, breweries were large factory structures, producing a product, but separate from the processes of drinking beer. Between 2010 and 2019, the number of breweries in London increased from 14 to 129, while from 1971 to 2010, their number varied from 8 to 33. The growth in the number of breweries over the past ten years can be attributed to the rethinking of beer-drinking culture when physical involvement in the process and place is an integral part of the process. At the same time, these breweries are located in gray zones, due to which their availability is rather limited. However, citizens' need to drink beer in a new format forces them to overcome these obstacles. Due to this format's comparative youth and its economic uncertainty, it has not yet been formed architecturally, which is why it exists in the format of a technological adaptation and not an independent typology.

THEORETICAL FRAMEWORK

Apart from the fact that this format is not articulated yet as an independent unit in architectural qualities, it is also not identified as an urban structure. If earlier the brewery was a closed, but a full-fledged independent urban unit, nowadays it is a fragment within a cluster and not a self-sufficient complex. It is of interest in London's study as a patchwork city. The subject of consideration is not the connections between individual patches, but the patches themselves, as autonomous systems, or cities within the city. Within the framework of considering such independent patches, the main interest is those structures and elements that allow patches to function fully. Aldo Rossi reflects this phenomenon in «The Architecture of the city,» where he considers the primary elements that are necessary for the formation and evolution of the city or its separate fragment. I use the term «primary element» in my glossary and use it in my project to form my design approach. For Aldo Rossi himself, the term primary element is disassembled within the San Cataldo cemetery project framework, in which he manifests the idea of primary elements where the cemetery functions as a self-sufficient complex or as a city within a city.

PROBLEM STATEMENT

London is a heterogeneous city with the complex nature of connections between its fragments, each of which is a patch in my terminology. Because of this division, the connecting tool is not the physical urban fabric and infrastructure but also socio-cultural phenomena. The phenomenon that I focus on in my research is beer culture. It is a sustainable urban ritual that has evolved over the centuries. This ritual consists of a large number of separate processes, some of which are pronounced and noticeable in the city's body, such as the process of drinking beer in pubs in London. One of the critical elements of this complex ritual chain is the brewery typology, which has lost its significance as a city element over the years. As a result of which it has lost its architectural identity and place of honor in the city. A brewery itself is a physical homogeneous object, though non-physically making the city heterogeneous. Thus, the ideal situation is that breweries have their own architectural identity and a place of honor whilst being part of that complex ritual chain.

METHODOLOGY

It is possible to say that the research is based on the method of induction. The study can be divided into four main areas: history, culture, case studies, and materiality. Historical research should reflect the period on the border of the industrialization era, which influenced breweries' typological transformations. This part also illustrates the era in which the breweries still had an identity. Cultural studies are critical in the context of contemporary cultural and social processes. Materiality is an integral part of all research as it is equally a cause and an effect of cultural, social, and physical aspects. In addition to the previous directions, the work also explores the theme of ritual in various forms.

The lack of identity of the brewery in modern London suggests a rethinking and reassessment of typology and function as such and creating a new universal model of typology for London, given the complex system of relationships in the «processes» of breweries. Presumably, this means changing and reconfiguring already existing elements of «processes» not for the sake of a new process but for the sake of new relationships. The site in this situation will adapt to the intervention,

but at the same time, expand its possibilities. Simultaneously, for the full-fledged existence of the brewery's rethought typology, it is necessary to rethink its location. This will not be the usual location for the existing London breweries. Typical breweries in London these days are a statement of the fact that this typology exists in cities. The task of the research is to understand how to create an artifact from the fact.

RESEARCH QUESTIONS

Main research question:

What needs to be done to make a brewery:

- regain identity;
- found a new relationship with London, as with a patchwork city;
- endowed with dignity in the chain of urban socio-cultural rituals?

Sub-questions:

- How is the architectural and urban identity formed and what causes it?
- What kind of relationship with the city does a brewery need to have to integrate organically?
- What determines dignity in architectural space / typology / function?

GOALS

This research pursues several goals:

- analysis of London's patchwork matrix through the prism of beer culture and, as a result, a rethinking of it and its symbiosis of influence on the city, and vice versa;
- analysis the importance of brewery typology for London;
- comprehension, rethinking, and reevaluating typology, function, process;
- the possibilities of typology, intervention as an initiator to change the nature of the connectivity of the divided areas;
- identifying the possibility of creating a new urban unit / urban type

GLOSSARY

Brewery – a place where beer is made commercially.

Beer – an alcoholic drink made from yeast-fermented malt flavoured with hops.

Drinking culture – is the set of traditions and social behaviors that surround the consumption of alcohol.

Public houses / Pubs – is an establishment licensed to serve alcoholic drinks for consumption.

Trapping – attributes and/or traps of urban communication.

Heterogeneity – the quality or state of being diverse in character or content; organic existence of city fragments differing in quality and content.

Fragmentation – a process or state of breaking or being broken into fragments; disintegration of a single structure into separate units.

Fragment – a self-sufficient urban unit striving for a separate existence.

Patchwork – an urban fabric assembled from heterogeneous urban units seeking to unite.

Patch – a self-sufficient urban unit striving to join.

Connective fabric – urban typologies contributing to the organic cohesion of heterogeneous patches and fragments of the city.

Sewing – the introduction of a binder fabric into the body of the city.

Borders – an outer edge of something; the place where dissimilar spaces meet.

Assemblage – a form of an art that is made by assembling disparate elements in 3D.

Ritual – a ceremony consisting of a series of actions performed according to a prescribed order involving specified attributes.

Rite – a ceremony, usually religious, act.

Process – a series of actions performed according to a prescribed order.

Ceremony – an event with a purpose, performed on a special occasion.

Attribute – a sign, a quality, a property, an object or a space accompanying any phenomenon.

Utility – a state of being useful, profitable, functional, or beneficial.

Industrialism – relating to the manufacturing industry.

Complex – a self-sufficient, autonomous urban unit that can function as a «city within a city.»

Cluster – an isolated urban unit within which separate elements exist independently.

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PART II

ESSAY

THE FIELD

RETHINKING THE BREWERY

KEYWORDS:

Brewery / London / Heterogeneity / Identity / Patchwork

ABSTRACT

Social life in a modern city is conditioned by long-established traditions, cultural codes, and patterns of human behavior. Such aspects will be individual for almost any city since their formation takes place over long periods. A similar activator of social life in London is the beer culture – a complex ritual chain that has lost one of the most important constituent elements – the brewery as a typology. As a result, the brewery lost its architectural identity and its place of honor in the city. The central issue addressed in this study is the search for the reasons why the brewery typology has lost its architectural identity in recent years and whether it is possible to rethink the identity of the typology as an approach to design.

The number of new London breweries is growing inexorably. Over the past ten years, it has increased more than ten times, which indicates that the beer culture has experienced a new understanding, and broader demand for the consumption of this product has formed in society. However, due to the comparative youth of the new format and approach to beer culture and its economic uncertainty, it has not yet been architecturally formed. Hence, it exists in a format of technological adaptation rather than an independent typology.

The primary method in the study is the analysis of historical and cultural analogs, and as a result, their comparison with the brewery in different qualities, such as typology, program, function, urban fabric, etc. Using this induction method, I get the necessary conclusions, which are subsequently transformed into specific architectural approaches and rules required to create a new identity of the brewery typology and a new fragment of the urban fabric in heterogeneous London.

As in any other metropolis, London's public life is built chaotically and meets not the individual's request, but the established traditions and cultural codes. Public life is rather shaped by patterns of social behavior and traditions that create attributes/traps. One of London's main attractions of cultural and public life is beer, which becomes trapping as an attribute and a trap. Beer has always been an activator of public life, and the brewery has been the typology that generates this product.

London is a heterogeneous city with the complex nature of connections between its fragments, each of which is a patch in my terminology. Because of this division, the connecting tool is not the physical urban fabric and infrastructure but also socio-cultural phenomena. The phenomenon that I focus on in my research is beer culture. It is a sustainable urban ritual that has evolved over the centuries. This ritual consists of a large number of separate processes, some of which are pronounced and noticeable in the city's body, such as the process of drinking beer in pubs in London. And what is essential, the typology of the pub as space was naturally located in the body of the city and evolved into the modern canonical pub space, woven from traditions, both spatial and behavioral. The same cannot be said about the typology and the space that triggers the entire process of this complex ritual chain. The brewery, historically located in the body of the city and an integral part of it, has lost its significance as an object in the body of the city in the course of the evolution of the city and technology. As a result, the brewery lost its architectural identity and its place of honour in the city. A brewery is a homogeneous physical structure that makes a city heterogeneous through its activities, even though it is physically disconnected from the city.

To confirm the hypothesis, it was necessary to understand the history of breweries and consider the metamorphoses that occurred with this typology. Historically, London has had a large number of pubs and a small number of breweries. At the same time, breweries were large factory structures that produced the product but separated from the processes of drinking beer. Breweries have developed rapidly and increased in size since the 18th century to meet the increasing demand for beer and adapt to changes in science and technology, particularly the introduction of steam engines in brewing manufactories and the widespread use of metal equipment. While hop drying manufactories continued to dry hops on

farms, a new typology of the improved industrial brewery was introduced in the 19th century using modern mechanical mashing, improved controlled heating, interior spaces for new cooling methods, and a new profession serving the new type of building is the brewer engineer.

As in many other industries, the utilitarian architectural feature of breweries was the direction of vertical integration of processes in one volume, which gave rise to a new typology - the «Victorian beer tower,» which accommodated containers for alcoholic beverages, crushers, a mash tank, and a wort receiver, as well as a broader range of functions - from malting to bottling - all in one vertical space. This technology worked due to gravity, where the first stages of the process began at the top of the tower, gradually lowering the liquid to ground level. Thus, the brewing process itself as a sequence of actions has hardly changed since the time of Ancient Egypt, but the technologies that contribute to the production have kept pace with the times. Large breweries, both familiar-looking and tower-shaped, are often monumental in their scale and architectural ambitions, especially during the construction boom of industrial buildings in Europe in the 1880s and 1900s. In many European cities today, there are at least one or more industrial and innovative buildings by the standards of the beginning of the XX century, which differ in the volume of the tower.

A striking example of this typology of the old brewery manufactory is the Oxfordshire brewery Hook Norton built in 1872, listed in the heritage list of England «Historic England: Industrial Buildings,» which also serves as an example of a combination of utilitarianism and vernacular decor, as a Victorian floral ornament. The towers, which were often decorated with ornaments that distinguished one brewery from another, have always been an important part of the image and identity of the brewery and the appearance of the area and its time. It is believed that the importance of preserving brewery towers increases if they are inscribed and form part of a well-preserved integrated landscape. Most often, it even happens that breweries and manufacturers that have lost their towers are often simply not included in the list of English architectural heritage.

Unfortunately, no such towers have survived in London at all. Moreover, of more than a hundred breweries located in London, as of 2020, only four historical buildings have been preserved.

In recent years, there has been an incredible growth of breweries in London. Between 2010 and 2019, the number of breweries in London increased from 14 to 129, while from 1971 to 2010, their number varied from 8 to 33. It suggests that the beer culture has experienced a new understanding and a broader demand for this product's consumption has formed in society. Today's London is replete with the physical rudiments of the industrialization era in the form of buildings and complexes of former and current industrial facilities, tightly woven into the urban matrix. After industrialization, transformed breweries remained in the urban fabric and became a cultural heritage that directly impacted the beer culture. The growth in the number of breweries over the past ten years can be attributed to the rethinking of beer-drinking culture when physical involvement in the process and place is an integral part of the process. It is a crucial aspect since it should be noted that the newly appeared breweries are primarily small private productions and not extensive manufactories. Although these types of breweries are mostly small in size and volume, they are still located in gray areas, which is primarily characteristic of large production buildings; because of this factor, the availability of new small breweries is quite limited to visit and is still excluded from the broad urban context. However, due to the gradual evolution of the format of beer consumption as a phenomenon of urban activity, citizens overcome these obstacles for the opportunity to fall into the «unconventional» urban trap. Due to this format's comparative youth and its economic uncertainty, it has not yet been formed architecturally, which is why it exists in the format of a technological adaptation and not an independent typology.

Apart from the fact that this format is not articulated yet as an independent unit in architectural qualities, it is also not identified as an urban structure. If earlier the brewery was a closed, but a full-fledged independent urban unit, nowadays it is a fragment within a cluster and not a self-sufficient complex. It is of interest to the study of London as a patchwork city made up of fragments. At the same time, the subjects of consideration are not the connective links between individual patches, which would be extremely important in the case of pubs, as a link in the urban fabric, but the patches themselves are essential as autonomous systems or cities within a city. As part of the consideration of such independent patches, the main interest is those structures and elements that allow the patches to

function as full-fledged separate units. Aldo Rossi reflects this phenomenon in the «Architecture of the City,» where he considers the primary elements necessary for the formation and evolution of the city or its individual fragment. I use the term «primary element» in my glossary and use it in my project to shape my approach to design. For Aldo Rossi himself, the term «primary element» is understood within the San Cataldo Cemetery project framework. He manifests the idea of primary elements, where the cemetery functions as a self-sufficient complex or as a city within a city, which in turn applies to the historical brewery that was such a complex. However, the modern London brewery at its current moment of evolution is still a fragment within a cluster, which does not allow it to be a self-sufficient urban element.

Of course, it is impossible to design without relying on the existing experience of other people or projects. Despite the fact that I initially took as the topic not some ephemeral concept, but a specific typology, this does not mean that examples of existing breweries will become my precedents. Although I am also considering such cases, since this is an important part of the study. In my research, I draw on precedents that can help me understand the program, theory, history, and potential sites where my project might be located. The main goal of working with use cases was my desire to adopt any ideas regarding the approach to design as such. The word «adopt» here might be replaced with «borrow» or «steal». I believe there is nothing wrong with the concept of stealing some approaches in order to come up with the best possible design solutions. For instance, I have stolen Renato Rizzi's approach to architecture that he calls «first aesthetic, then ethic.» Unfortunately, architecture is quite limited, yet in my understanding, it is impossible to develop something new in it. Any architecture is a recombination of already existing «elements,» and each «element» can be brought in through «theft». I believe it is essential to master the ability to accurately, precisely, and elegantly «steal elements» while having a complete understanding of the prerequisites, causes, and consequences of this «theft» indeed. Thus, in this case, the approach to the generation of architecture and architectural form can be divided into two fundamental parts, one of which is aimed at working with the architectural form and its elements in a pure distilled form, independent of the function or any other external circumstances.

One of the primary precedents that I often look back at is the San Cataldo Cemetery in Modena designed by Aldo Rossi and Gianni Bragheri in 1971. The San Cataldo project is based on the position of Aldo Rossi, which he expressed in his book «Architecture of the City.» He talked about the city elements while analyzing the materials, forms, and location, and the metaphysics of the elements. Rossi also researched «the study of a typology of buildings in relation to the city.» The classification of typologies allows Aldo Rossi to explore the city at the fragmentation level, which he later applied in the San Cataldo project. San Cataldo is, in a sense, an attempt at systematization through the dismemberment of urban typologies. It is a complex that embodies the city. It raises the question of what a modern city consists of and why specific components are necessary. The cemetery is the city of the dead, in which time is in a different paradigm. On the cemetery's general plan, we can see the use of platonic forms: square, triangle, and circle. Each element has its meaning. For example, a square (aka crypt) is a metaphor for an abandoned house, as evidenced by the presence of windows. Coming out of the crypt, (according to the original project, which was not completed), a person had to get into the triangle that personifies the city and the endless path. A person walking this path must do it without the perception of time. There is a grave pit at the end of the way; it is also a mass grave, a circle that personifies an abandoned city factory.

I think the statement of Peter Eisenman is essential: «Rossi's project is also a metaphor for the futility of redemption in the sanctuary.» The whole cemetery can also be called a complex, enclosed by a solid wall, but still accessible to visitors. If you compare this to the breweries in London, the difference between a complex and a cluster becomes obvious. Most breweries are located in industrial and gray areas and do not have any visitor access. At the same time, they share the space closed to the city with other functions, which does not make the entire zone a complex, but rather a cluster. Returning to the question of breweries' architectural identity, I want to point out that there was no smooth transition from monumental breweries to simple sheds made of metal profiled sheets. At the same time, this fact is not influenced by beer's attitude since its popularity is only growing. In the past, the brewery had an identity and was an urban architectural highlight. Today, the presence of a brewery in the city is a fact. In my project, I want to turn this fact into an artifact.

One can imagine that Aldo Rossi attempted to restructure the urban typologies that made up the cemetery complex. And here, I want to pay the most attention to the word «restructuring.» He did not rethink typology. It would have been possible to reevaluate the typologies in the same way, but Rossi resystematized the city. Choosing from all the re-terms, it seems essential to me to reevaluate the brewery's typology in my project. For me, the key factors are working with an object as a complex and with those attributes that allow it to be an integral, self-sufficient unit. Although San Cataldo, like London breweries, is in a gray zone, due to endowing each element with meaning and symbolism, the Aldo Rossi project's cemetery in the city's gray fabric continues to work as a complex. At the same time, it could become part of a cluster due to its proximity to the old cemetery, and in this case, it would not differ in any way, including from the industrial zone. Likewise, in an industrial object, endowing it with semantic attributes transfers it to a different level of perception. To some extent, it takes it out of context, transferring it from the category of fact in place to the category of an extra-spatial artifact. The secondary precedent is a volume by Piranesi. His experimental Campo Marzo design was described and analysed by Stanley Allen in *Assemblage* magazine in 1989. It should be understood that there is a big difference in methodology from the most famous marble plan, which is a fixation, while Campo Marzo is roughly an analytical reconstruction. The text itself has three main parts-chapters: site, context, and program. I borrow those as my own approach to proceeding with the design.

Piranesi was interested in an unobvious place. While the project aims to reconstruct historic Rome, it focuses on the area outside the city walls. In fact, the marginal zone interests him because it was the second center precisely in the 18th century. The marginality of this zone seems to be a paradox, because he simultaneously denies and confirms the importance of history. Moreover, the reconstruction itself is, in a sense, a fantasy architectural combinatorial. The primary motivation for a specific work method is that for Piranesi, time is represented by the accumulation of material and its decay and transformation.

While finding a site, it was essential to choose a non-obvious place for the brewery's typology to go beyond the usual gray areas. Based on the research, it was decided that relying on regular contextual analysis will not become a method

for identifying a place where it is necessary to completely rethink the building as space and its place in the patch of the city. The reference point was the brewing process itself in the broadest possible context; in my opinion, it is in the process that the keys to all decisions are located. Thus, based on the brewing process, the hop field becomes the source material for beer and acts as a site for the location of this typology. At the first stage, this field exists as a pure category without reference to the actual site. The hop field is a structure and technology; in order for the hops to grow in the right way, it needs a system of columns and cables located on a particular grid. With its specific dimensions, such a grid becomes an endless plot for the location of the brewery building on it. At the same time, the dimensions of this grid will later become a module that will be subordinated to the volumetric and spatial solutions of the brewery architecture. And in the next step, this hop grid, which is already a site itself, is embedded in the body of London, which does not exist in any particular city grid. By embedding the new fragment with a new grid, a new patch of the city is added, which rebuilds its fabric.

I have selected the site that seems to be the most suitable. Firstly, because it responds to the aims and categories that I set. The site is located in the center, which will allow the best way to maintain the intervention and thereby reinforce its status. Its dimensions are best suited for implementation in this place. Now it is a place for universal events. I am altering the city and changing the status of the patch from «universal» to «ceremonial-urban» without taking away the social importance of the place. As a consequence of such an implementation, I give a new quality to this place, which at the moment is a universal platform, but will eventually have an individual character.

Allen points out that Piranesi represents some structural elements not as a structure but as an ornament, and provides a comparison of the ornament on architecture and small architectural forms with the details of the elaboration of marble statues, particularly the drapery. The entire Campo Marzo can be perceived as an ornament that Piranesi creates to fill the main fragments' voids. And here, it is important to remember Tafuri's quote that I showed earlier that Campo Marzo is a pile of fragments. Basically, Piranesi does the «editing» of campo marzo based on the main fragments, and this is «growing history». We are talking about the text as a source and how, as

a result, Piranesi comes to campo Marzo as an urban architectural ornament, which is grown from the text. Such an approach cannot be borrowed by me. If Campo Marzo is an analytical reconstruction, then I am aiming for an entirely new object that should be created the basis of research.

But there is one more excellent example of the text's joint work and the program: the Sansedon contract, on which we can see the facade of the palace, and the program described by the text, which can also be read as a plan. But there is a huge difference: the campo marzo program is grown from «text», and if it is simple, then the text gave rise to the image. And in the case of a contract, rather the opposite, the image becomes the starting point for creating text. In my case, I am creating an image from the text, which is a program.

As a result of the research, my architectural task is to create a new type of brewery with its own unique identity, which breweries had in their historical precedents I researched previously. In my project, I'm trying to create a new piece of urban fabric. I do not create a connective link, but react to what exists now, through the prism of what existed before.

In most modern breweries, the challenge is to optimize the process to use space efficiently. Therefore, it usually looks like several tanks standing in the same room. That is why there are no attributes that could turn the process into a ritual in such a representation of the brewing process. I want to attempt to rethink this process in an architectural sense. I started by re-examining the process. It turned out that the whole sequence can be represented in the form of seven main steps and each stage has specific characteristics and qualities that can be translated into architecture. For example, heating is required at the boiling stage, which will turn into steam, which must go out through the pipes or chimneys, which leads to the mandatory presence of certain elements.

I also returned to one of the original agendas, namely materiality. Initially, using the example of old monumental breweries, I talked about the importance of such a material as coal, which became a form of architecture. Because of its use in the technology of the time, chimneys were needed as an almost unmistakable marker of a building's function. For my project such a material is hop, which becomes a material for brewing, a

material for the site, also site itself, since I use hop field's grid as a starting point.

The program is the creation of a «regular city park, « which will become an architectural and cultural event for all citizens. The main aim is to allow residents to feel involved in the production of the significant cultural and social product - beer, which is achieved through a connection with the hop field, which is the «park.»

The chambers are original spaces that are shaped by pure categories of individual brewing processes. Each of these chambers has been reduced to a pure «temple» space. Moreover, the entire complex is a brewery, which means that it should be able to function as a production fully. Thus, these pure chambers need a «functional field» that will provide them with all the necessary functionality. In turn, the «functional field» with chambers is located in the initial «raw field» for brewing - the hop field, which has its own strict grid, necessary for the proper cultivation of raw materials. So we get a «fractal» in which we have both the initial and the final, from raw materials to products, from nature to the city, from open urban space to production functions.

Since the task was primarily the search for a new identity and not just creating a functional building, it was vital to divide the study into several parallel branches, which ultimately allowed me to find the solution. On the one hand, thanks to functional research, it became possible to develop a practical part of the project to fulfill its function. But the most important was the establishment of cultural and phenomenological aspects, the categories related to the issues of pure architectural concepts, the issues of the structure and functioning of the modern city. As a result, the combination of these factors, considered in a vacuum, eventually allowed me to solve the problem of finding a new identity for the building and its place in the city, which supported the qualities inherent in it.

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PART III

REFLECTION

REFLECTION

RETHINKING THE BREWERY

Analyzing the work done at the final stage, I will give a critical assessment of the work process and the choices made earlier, comparing them with the result.

ADC studio, in which architecture is the main focus, provides an opportunity to touch all disciplines such as landscape, urbanism, and building technology. Yet, the range of problems considered makes me think about urban, social, and technological aspects. As stated in the ADC studio agenda description, students explore how architectural design can enclose ideas and experiments while simultaneously balancing several heterogeneous components and entities. In my project, I work with the intersection of many architectural and urban aspects that work as a single organism. In addition, I touch upon the technical aspects of production, creating a new cultural and social environment for the citizens, rethink the approach and attitude to industrial buildings and their connection with the city and the citizens through the thin fabric of the green urban landscape.

It is possible to say that the research is based on the method of induction. Having initially only the fact that we work with heterogeneous London, it seemed essential to me to find a specific aspect that would allow me to conduct research in a much narrower direction. I assumed that London is a heterogeneous city with the complex nature of connections between its fragments, each of which is a patch in my terminology. Because of this fragmentation in the city, the connecting elements are not the physical urban fabric and infrastructure but also sociocultural phenomena. The phenomenon that I focus on in my research is beer culture. It is a sustainable urban ritual that has evolved over the centuries. One of the critical elements of this complex chain is the brewery, which has lost its significance as a city element over the years. As a result, it has lost its architectural identity and place of appreciation in the city.

Thus, I identified the most crucial approach to research for further design: I initially researched the typology that I would design. I have divided my research into four main areas: history, culture, case studies, and materiality. Historical research focuses on the period bordering industrialization, which profoundly influenced breweries' typological transformations. This period also illustrates the era in which the breweries still

had an identity. Cultural studies are critical in the context of understanding the contemporary cultural and social processes. Finally, materiality is an integral part of all research as it is equally a cause and an effect of cultural, social, and physical aspects. This method fully justified itself since I already had all the necessary information about the breweries by the initial design time. However, suppose my approach was to study a more abstract concept, such as «identity» in general, I doubt that I would be able to concretize the area of research or choose a specific typology in the future.

Knowing what typology I will design and the problems I need to solve in my project, I wondered what needs to be done to restore individuality to the brewery and rethink this typology. How can it find a new relationship with London, and how can it bestow dignity in the chain of urban sociocultural rituals?

The lack of identity for a brewery in modern London implies a rethinking and reassessment of typology and function as such and the creation of a new typology for London, given the complex system of relationships in the «processes» of breweries. Presumably, this means changing and reconfiguring already existing elements of «processes» not for the sake of a new production process, but for the sake of new social relations. Thus, the research challenge is to understand how to create an artifact from a fact.

The ideal situation is that breweries have their own architectural identity and place of appreciation, being part of a complex sociocultural chain. That is why I am not aiming to create a new brewing process, but I want to combine technology, architecture, and people. My main goal was to rethink every aspect (architectural language, identity, process optimization, etc.) of the modern London brewery, including its location in the city. My whole project is based on the meaning of the phenomenon of beer drinking culture, where brewing as a starting material means more production, manufacturing, craft than consumption or consumer behavior. Therefore the entire production process is crucial for me: from growing hops to drinking beer. Beer as a product is, in any case, a social trap, which means it is an attribute of urban communications. Therefore, in my project, I wanted to create a trap of a new quality, ridding this term of negative

connotations. I reimagined the brewery, giving it unique architectural and atmospheric qualities, giving it a new personality, and creating new relationships between the city, the brewery, and the people.

Another important aspect was trying to understand the reason for the high growth in the number of breweries in London over the past ten years (from 11 to 129!). It can be explained by rethinking the culture of beer consumption when physical participation in the process and place is an integral part of the process. It also indicates a greater shift and interest in mass and mass-produced consumer goods in things and experiences, thus changing economic and social relations. These breweries are located in gray areas, which makes their availability very limited. However, the need for citizens to drink beer in a new format makes them overcome these obstacles. Due to the comparative youth of this format and its economic uncertainty, it has not yet formed and matured architecturally; therefore it exists in the format of technological adaptation, and not an independent typology. As part of my project, I perform a new interpretation of this industrial typology and its place in a modern city. This understanding applies to both the workflow and its architectural language.

Since the entire cycle from hops cultivation to the final product consumption is crucial to me, I chose the brewing process as the central theme for my work. To do so, I isolate out the most important from the entire chain of the process and consider it as separate units endowed with individual spatial, material, and technical qualities. Thus, the brewery will become a complex consisting of self-sufficient elements, each of which plays a specific role and can go beyond a simple utilitarian configuration.

One of the main ethical problems that I faced in the process of first research and then the design was the question of the location of the production function. Based on previous research, it seemed obvious to locate the brewery, if not out of town, then at least in gray zones or brownfields. However, such an approach would counter the concept of creating a new identity for the modern brewery. Thus, I decided to locate my building in the city and formally in its very center - in the City of London. In this case, the choice of the site fell on one of the most important «voids» of the center. The area I have chosen is called

HAC Grounds, which means that it belongs to The Honorable Artillery Company and is partially owned by the royal family. (An interesting fact is that the location of breweries on royal lands is not a new idea. In the Sandringham Palace of Queen Elizabeth II of Great Britain, beer was brewed from organic hops, which grows on the estate. * (<https://edition.cnn.com/travel/article/queen-elizabeth-beer-intl-scli-gbr/index.html>) The conclusion from this is that the site is semi-private / semi-accessible, and not everyone can get inside, which in my opinion, is not very correct. This site is a natural diamond in the heart of London, and I desire to make it accessible to everyone by placing a crucial social typology on this territory. The public part is the hop garden, accessible to everyone. At the same time, the garden works for both the city and the brewery, producing some of the essential ingredients for brewing. The park is thus a transit between two zones - the city and the production.

To highlight the importance of the new complex, I propose calling it a center for the London Brewing Alliance, which includes most of the city's breweries. In addition to the possibility of using the equipment, they will have access to all production and office areas, for example, conference rooms and tasting pubs for presentations, exchange of experience, and other forms of interaction within the framework of brewing. Thus, the brewing complex becomes valuable for almost all groups of potential users. For the townspeople - like a park and pubs, for the alliance - like a new center, for workers from the brewing industry - like new jobs.

However, the site's value for the city presumes the most delicate intervention, with the potential to restore the original «void.» The choice of the primary building material was the second major ethical dilemma that I encountered while working on the project. In addition to the delicacy, the material had to reflect the new identity of the typology. Both of these factors, in my opinion, were ideally reflected in the construction of rammed earth, which is dug directly on the site. Earth is the primary material that is used to build a brewery complex. Earth is local material that is abundant in the selected area. Earth is taken directly on site by the builder properties of the object. Thus, the building literally grows out of place. The earth is free material; it does not need to be produced or transported; it is a ready-made building material right under your feet.

Earth is an entirely neutral material. In the event of termination of operation, a building from the ground can simply be turned into earth and the foundation pit from which it was removed can be filled up again. After calculations, I was able to find the perfect balance of the volumes of the pits and above-ground parts of the brewery complex, and design in such a way that all the excavated earth was used for construction.

Critically assessing the research, I can say that all the individual topics for consideration were presented in certain conclusions, transformed into architecture, and presented in the final project. It confirms that the methods I identified at the very beginning turned out to be workable. One of the essential qualities that a project can have is the ability to be described verbally while conveying both formal aspects like functional zoning and ephemeral things like atmosphere. I wrote such a text as an epilogue to this reflection, which you can find in the appendix.

PART IV

EPILOGUE

EPILOGUE

RETHINKING THE BREWERY

We watch a Guest entering the park from the south entrance. Entering the gate, he sees in front of him tall rows of hops, about eight meters high, creating landscape rooms. The visitor walks along the rows of wooden paths, moving from one room to another. Above the hop rows, he sees a chimney with steam coming out of it in the distance. The Guest is unaware that this pipe is part of the beer brewing room. The Guest has no idea that a large brewery is hidden inside the park from such a distance. This brewery will show through the hops when a guest gets very close to it, but it will still seem like a mirage. While the visitor is walking, he can observe how the filling of the landscape rooms inside the garden changes: there is a cherry orchard, behind it, in the distance, citrus fruits grow, very close to a flower meadow and a small vegetable garden with herbs. There is also a pond nearby in the shade of hops. Plants replace each other, and they hardly see the end. The Guest walks along the next row of intoxicants and meets the gardener, who collects fresh herbs from the meadow. They briefly greet each other, and the gardener goes into the garden's depths, where he disappears from the Guest. In the shady park, it is easy to retire to spend time enjoying nature. The gardener continued along the paths north to the side entrance to the brewery. His workrooms are located next to the maturation tower. He collected the herbs needed for the specialty craft beers

that members of the Brewing Alliance brew today. The Guest reaches the last row of hops that hides the brewery, crosses it, and sees a long, low, earth-colored wall. He looks around, approaches, and sees that the building walls are indeed made of earth. The Guest touches the wall; it is pleasant to the touch, a little rough and warm, tactile, layered. There are openings in the wall, and people are visible inside. The Guest looks in and sees a small crowd of people packing bottles and kegs of beer. This space could be called a pub, but now it is clearly closed. Directly behind the pub, you can see a room from the ground. The Guest returns to the street and walks along the building towards the colonnade that frames the brewery's main entrance. He walks inside and finds himself in a warm space of a strange shape, where the administrator greets him. There is a stained glass window behind the reception desk, allowing you to see the brewery inside: although the Guest was resting in the park, work is full swing here. The part that is accessible for viewing looks like an office; on the left is a semicircular wall with a showcase. The Guest comes close and observes a large circular room, fifteen meters in diameter, five-story, with columns going in a circle on each floor. There are large atriiums in the center of each floor, which from the ground level allow you to view everything that happens below. Along the outer walls within each floor are tall metal vats, evidently involved in the brewing process. At the same moment, the Guest sees several people descend from the upper floor along the ramp and hide inside the brewery, disappearing from sight. They were alliance brewers who had rented several vats in the maturation tower, who had come in today for a scheduled product check. Their beer was kept there for several weeks, which is not very long for a maturation process. Today is the time for bottling the resulting drink. Such tastings are enough. Sometimes, if a new or unusual variety has ripened, he arranges large events that invite guests from the park. The Guest goes back to the street and continues along the complex until he reaches its edge. Instead of a corner, the same tower is installed; in front of it is a terrace on which the brewers already familiar to him sit drinking matured beer. Having turned, he finds himself in a narrow space, relative to the rest of the park, filled with the hum of people. The Guest sees several people with glasses of beer on another terrace in front of the complex's second pub. He goes inside the chamber premises of the

pub and sees the same wall opposite with narrow openings. Approaching her, he looks into them and sees a narrow, long room with an atrium in the center and a staircase leading down. It is a two-story fermentation room; on the lower tier, there are narrow and tall iron tankers in which the wort is fermented. After looking around the room, the Guest returns to the street and moves towards the park's northern part. In front of him, drunken rows are reopened, surrounded by hills, meadows, and flower beds. The Guest continues to explore the complex and, while walking along a shady garden of lemon trees, comes to a wooden deck that resembles a terrace. Looking inside, he sees concrete columns and a large crowd of people. The Guest goes inside and realizes that this is another pub, but with a different atmosphere from the previous one. This pub is much lighter in color and at the end is framed by another colonnade that runs in a semicircle. Behind this colonnade, a stained glass window is visible, which opens up an overview of a large circular room, the floor of which is one story below ground level. In the center is a large metal vat, from which a pipe runs to the very ceiling. The Guest finally found the pipe that was visible at the entrance to the park. After looking around the room again and noticing the concrete bar, the Guest decides to go up to it and grab a pint of beer. Then, going out into the street, the Guest goes to the left side of the park and sees a cozy amphitheater buried in the building's body. He climbs a few steps and sits down facing the park. Several more drunken rows open to his eyes, between which are two small gardens with lush trees. Behind the amphitheater rises a wall with narrow openings through which you can see a square room with four cruciform columns. Between them are iron mashing vats. A truncated pyramid-shaped roof dominates each vat. To the left of the amphitheater, very close, there is another entrance to the territory for cars and other equipment. The Guest sees a car entering the territory and turning into the technical parking lot to the left of the brewery. A brewery worker arrived. The eastern facade of the brewery, hidden from the park guests, houses a large number of technical rooms. So, for example, there is a warehouse of clean water to the left of the mashing room since it is first added at this stage of the process. There is a point for collecting and serving finished beer near the bottling room at the very bottom. You can see a garage for a truck and a place from which a bundle of pipes diverges through which beer is pumped

into any of the brewing rooms in the complex. It is enough for the truck to drive into the garage and connect to the pipe network. In the center of the facade, opposite the crushing room, there is a large storage area for grain and hops and malt germination. The worker passes all these technical areas and heads to the entrance to the brewery. He passes the checkpoint and finds himself inside. This space is different from what is available to the Guest. If the brewing rooms are made of earth, then the internal structures are completely wooden. They are also small rooms with corridors around them. The entire space is dotted with wooden columns, but partitions are almost nowhere to be seen. In some places, curtains are visible, somewhere assembled, somewhere closed. The Employee walks forward, bypassing the dressing room area, and goes straight into the meeting room, where other brewers from the alliance are already waiting for him. All together, move down to the large conference room, passing through the triangular filtration room. There is a staircase in the corner of the room, and in the center of the floor, there are three pipes from the vats located underground. After the conference, everyone proceeded together to the office, which the Guest saw behind the reception area at the very beginning of his walk. The office has a small number of full-time employees who do most of the paperwork: the brewery is both the beer alliance's headquarters and independent production. Having signed the necessary papers, the Employee goes to the common room, located next to the Boiling Room. While being in it, he observes the rest of the employees and their movements. Inside the brewery, any room can be accessed freely, and a system of wooden rooms and surrounding corridors keeps distances to a minimum. Engineers walk around, checking ventilation chambers, boilers, electrical cabinets and other technical blocks located inside. Other people also pass through the break room, heading to the cafeteria area next to the fermentation room. Staff food is prepared in the kitchen located just above, but at the same time, the kitchen also works for the pub on the north side of the complex, where the Guest picked up a beer at the end of his walk. The Employee walked to the boiling room side and went out into the gallery with columns, finding himself in a pub. Grabbing a beer, he went out to the park. Looking around the drunken rows, he walked to the amphitheater, and climbing the steps, sat down not far from the Guest.



