# wessel herrewijnen

# The heterogeneous city of London

This course's concept of the city of London as a heterogeneous whole, raises the question of what the implied heterogeneity consists of – if not everything – and when parts together become heterogeneous. However, this complex network being heterogeneous, it does not automatically mean that its 'outcomes' are necessarily chaotic or uncontrollable. One could argue that the city has a certain balance. Whatever this balance is, might be too broad and openly interpretable to ever define for 'the heterogeneous city' as a whole as a starting point. Therefore, in this research, this hypothetical existence of balance is approached by the very idea of the existence of non-balance, uncontrollability, chaos or intensities. Then, it is in these moments when the representation of certain components of the city's heterogeneity is expressed more predominantly than others.

This fascination and hypothesis form the departure point of this research. The city will be analysed on the basis of these dominant expressions; occasions which from this point in the text will be called 'temporary intensities'.

By doing this, the city itself can be seen, as mentioned in the introduction, as 'void of activity' until the moment that it isn't. This moment has great implications, both physical as social. This can be visualized to greater effect with the concept of Actor Network Theory. John Law describes this as follows: 'Actor network theory is a disparate family of material-semiotic tools, sensibilities, and methods of analysis that treat everything in the social and natural worlds as a continuously generated effect of the webs of relations within which they are located' and that "it assumes that nothing has reality or form outside the enactment of those relations" (Law, 2009, p.141).

### **Crowd Machines**

Based on this notion, the idea of certain actors being responsible for creating temporary intensities becomes more productive. However, temporary intensities can subsequently be 'caused' by an infinite number of actors, depending on what layer or scale the term temporary intensities are perceived or defined. Within the frame of this research the term temporary intensities is analysed through the lens of actors that have the potential to generate temporary human intensities. Logically, but also in consultation with ANT, this approach also indirectly touches upon less tangible momentary intensities that occur in and around these moments, because of these moments.

As happens somewhat frequently in this research, bits of existing theory (such as ANT) here inspired new ways of thinking about and angles on the concepts that are analysed. Sparking new phrasings, and perspectives that cause the research to drift away from the theory that inspired these new views almost the moment they occur. Hereby creating the need to constantly define and sharpen a personal glossary of terms, and their meaning within the scope of the research.

From this point on, the actors responsible for generating temporary human intensities will be called 'crowd machines': Planned or spontaneous events, spectacles or actors that have the potential to (temporarily) affect or 'activate' parts of the city. Crowd machines are then the architectural component whose human residue – the crowd – is a visible spatial representation of an instance of a temporary intensity.

### The Crowd

Especially within the context of architecture and this research, it is necessary to define the term 'crowd'. For, in this specific case, the term might be less (or maybe more?) open or straight forward than how one might use it in our everyday language.

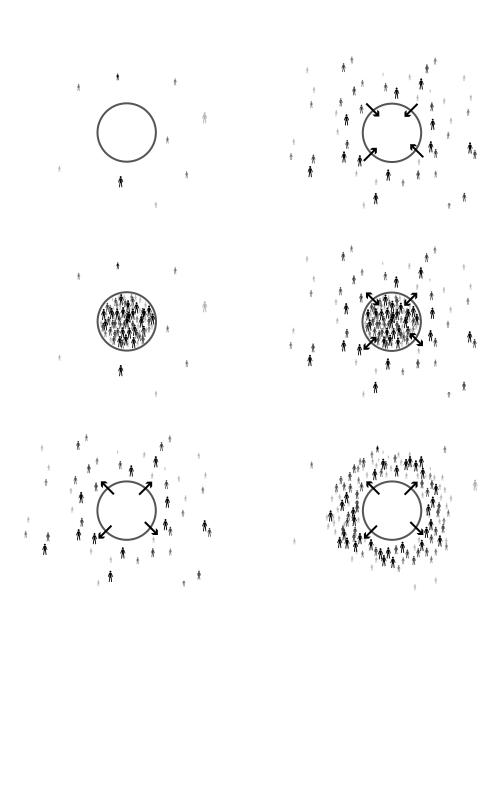
A valuable piece of writing that provided insight in how to deal with the concept of 'crowds' in general can be found in Elias Canetti's famous 'Crowds and Power'. Canetti offers a vast theory of the origin, applicability and different forms of crowds that are encountered in society throughout different layers and times.

The basic principle behind all the different types of crowds that Canetti defines, lies in the notion that 'there is nothing that man fears more than the touch of the unknown' (Canetti, 1984, p.15). Canetti states that this aversion is so intense that we try to avoid contact wherever and however possible. The crowd however, is the only moment that man can become free of this fear of being touched. It is the only situation in which the fear changes into its opposite. It is within this moment, in which body is pressed to body, and man has surrendered himself to the crowd, that he ceases to fear its touch (Canetti, 1984) p.15 The crowd becomes the interruption or even suspension of our fear of being touched, hence the human desire of being part of the crowd.

According to Canetti, this crowd can then be either open or closed. The open crowd is the natural crowd, as soon as it occurs, its focus is on growth. There are no limits whatever to its growth, it is open everywhere and, in any direction and therefore may spring up anywhere. Yet, "it disintegrates as soon as it stops growing" (Canetti, 1984, p.16) The open and spontaneous crowd is therefore both a powerful and sensitive thing: especially within the many layers and among the many factors in a city such as London, the occurrence of an open crowd can be easily sabotaged or can simply not find ways to come to fruition.

The occurrence of the closed crowd contrastingly is much more catered for within the city. The closed crowd creates a space for itself, by creating or 'accepting' its limitation. 'The closed crowd renounces growth and puts the stress on permanence' (Canetti, 1984, p.17). This permanence is guaranteed by boundaries: walls, fees, lines, acceptance etc. and by it, also limited by it: "once the space is completely filled, no one else is allowed in". Canetti offers a quite poetical closing statement to his description of the closed crowd and its building, that proved to be somewhat revelationary in the direction of this research: 'the building is waiting for them; it exists for their sake and, so long as it is there, they will be able to meet in the same manner. The space is theirs, even during the ebb, and in its emptiness it reminds them of the flood.' (Canetti, 1984, p.17).

However concrete the definitions of the open and closed crowd are, they only exist in the moment of the discharge: "before this the crowd does not actually exist; it is the discharge which creates it. This is the moment when all who belong to the crowd get rid of their differences and feel equal" (Canetti, 1984, p.17).



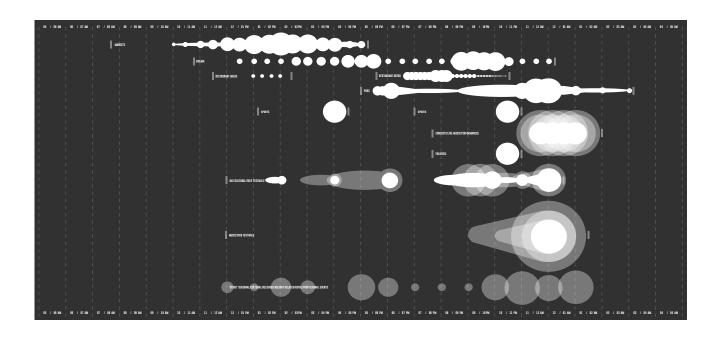
# Topological mapping

The theory described up to this point forms the framework for mapping these 'crowd machines' in London. Hereby visualizing the gravitational fields and points for temporary intensities. The types of discharge as pictured above create a distinction in the different types of crowd machines and how they 'release' their crowds. As a whole, the types of actors that can be found, fall under a number of categories: sporting venues, music venues, theatres, clubs, festivity fields, marketplaces, 4AM clusterings, and areas with high intensities of nightlife/eating out activity. (How to refer to mapping these according to qgis, open source information in research paper?).

# **Crowd Machine Rhythms**

The fact that the intensities that are analysed in this research are temporal, along with the different types of 'discharge diagrams' as illustrated in fig (S) brings in the component of time, or rhythm of crowd machines. Through a process of what maybe be most fittingly called 'digital fieldwork' the discharge moments of the different types of machines were established, both in their yearly and daily cycles. To determine discharge moments for actors for which no concrete data was found, an estimate was made through combining Google Location History data – where Google uses aggregated and anonymized data from users who have opted in to Google Location History (Google, z.d.) and available data from comparable actors in other locations. This resulted in different information sets that contain the number of events of different actors per month and location over a period of preferably at least 5 consecutive years.

Putting these data sets together and comparing their specific 'pulses' has provided great insight in the seasonal, monthly, weekly and then mostly the hourly flow and cycles of temporary intensities within the city. Hereby, making visible the clusters and cores that are charged per their 'rhythms' and location. The resulting maps, diagrams and graphs are an interplay between gradual and instant increases and decreases of discharges on the time/crowd plane. CAME TOGETHER IN GIFF

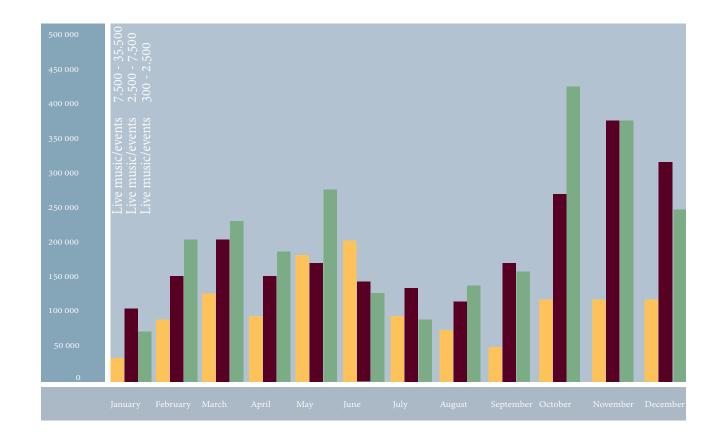


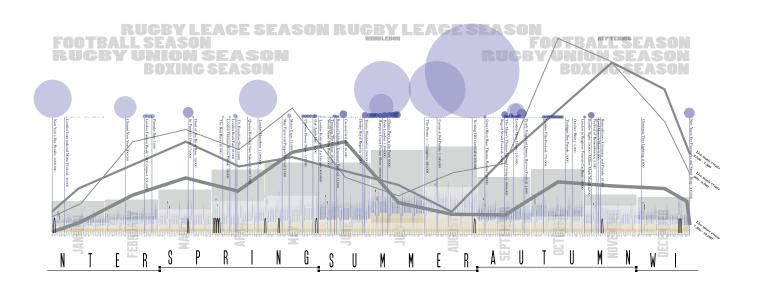
	O2 arena	O2 arena Capacity: 20.000							Average	Capacity	y Average Total
	2020	2019	2018	2017	2016	2015	2014				
Jan	0	1	1	5	1	2	2		1,7142857	20000	34285,7142
Feb	1	2	3	8	12	0	6		4,5714286	20000	91428,5714
March	2	4	2	7	14	8	8		6,4285714	20000	128571,428
April	7	4	7	3	3	3	7		4,8571429	20000	97142,8571
May	5	14	0	9		7	11		9,2	20000	18400
June	15	13	6	10		14	4		10,33	20000	20660
July	4	0	2	5			4		3,75	20000	7500
August	0	3	5	2					2,5	20000	5000
Sept	2	0	4	2	1	6	2		2,4285714	20000	48571,4285
Oct	5	7	11	4	7	4	4		6	20000	12000
Nov	10	6	5	6	4	2	6		5,5714286	20000	111428,571
Dec	2	6	5	7	6	8	3		5,2857143	20000	105714,285

	Royal Albert Hall	Royal Albert Hall Capacity: 5500								Average Total
		2019	2018	2017	2016					
Jan										
Feb										
March		11	10	11	10			10,5	5500	5775
April		12	10	10	9			10,25	5500	5637
May		19	13	16	16			16	5500	8800
June		11	14	13	12			12,5	5500	6875
July		19	22	19	22			20,5	5500	11275
August		31	31	29	28			31	5500	17050
Sept		20	18	19	20			19	5500	10450
Oct		17	15	14	17			16	5500	8800
Nov		6	10	6	8			8	5500	4400
Dec		5	4	5	5			4,5	5500	2475

	O2 Brixton	4900				Average	Capacity	Average Tota
		2019	2018	2017	2016			
Jan		7	4	5	5	5,25	4900	2572
Feb		9	8	6	7	7,5	4900	3675
March		9	12	10	10	10,25	4900	5022
April		7	11	5	5	7	4900	3430
May		8	8	10	10	9	4900	4410
June		6	10	6	8	7,5	4900	3675
July		7	4	6	6	5,75	4900	2817
August		2	5	1	5	3,25	4900	1592
Sept		7	11	8	8	8,5	4900	4165
Oct		15	11	15	15	14	4900	6860
Nov		18	20	19	18	18,75	4900	9187
Dec		15	17	16	?	16	4900	7840

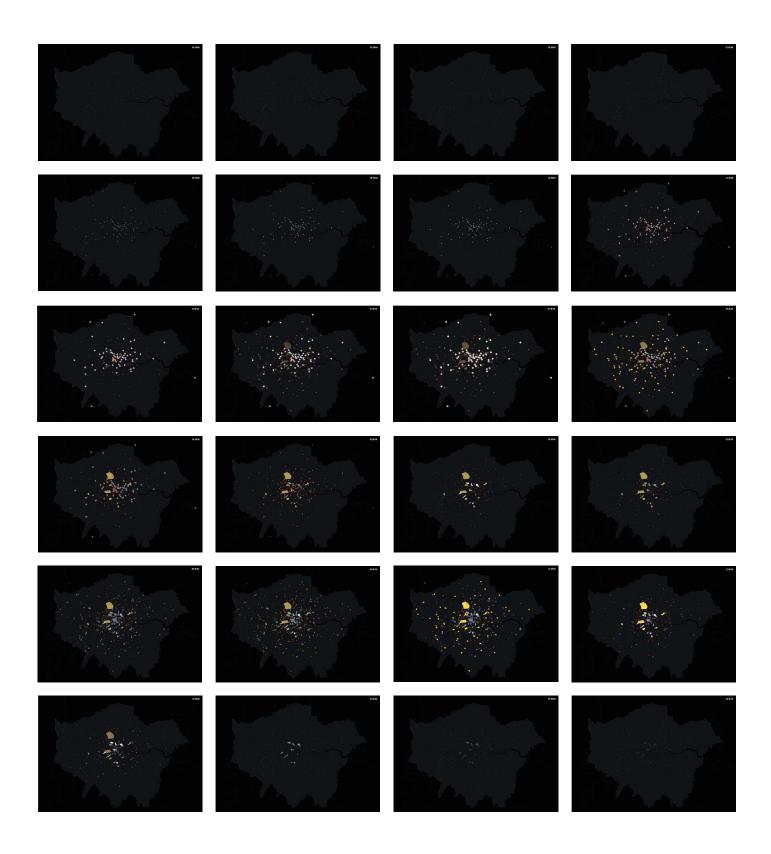
	Scala 1145			Average	Capacity	Average Total
	2020	2019	2018			
Jan	7	2	2	3,6666667	1145	4198,333333
Feb	15	12	4	10,333333	1145	11831,66667
March	13	16	6	11,666667	1145	13358,33333
April		13	6	9,5	1145	10877,5
May		19	9	14	1145	16030
June		6	7	6,5	1145	7442,5
July		7	2	4,5	1145	5152,5
August		8	6	7	1145	8015
Sept		8	8	8	1145	9160
Oct		25	18	21,5	1145	24617,5
Nov		23	15	19	1145	21755
Dec		13	12	12,5	1145	14312,5





Harking back to Canetti's statement about the ebb and flood of buildings for closed crowds, the parallel with these sudden increases and decreases is interesting. Early on in the process, the word 'sinkholes' proved to be a useful concept to approach the actors or city systems that process a crowd after its discharge. In their writing on 'architecture and the spectre of the crowd', Cameron Logan and Janina Gosseye also make the observation that crowds are often referred to by making comparisons with the characteristics of water: "Crowds are evoked using natural metaphors, especially those connected with water. Crowds ebb and flow, they come in waves and floods or as a "human stream"." (Gosseye, Logan, 2019, P.4).

The comparison with water is especially explanatory for how all this research amounts to the design direction within the scope of this project. In his writing on ANT, John Law mentions philosopher of science Michel Serres who writes about order and disorder. "in his world there are patches of order in a sea of disorder. The most interesting places lie on the boundaries between order and disorder, or where different orders rub up against one another." (Law, 2009, p.144). In this case these patches can be both of order or as disorder, of the discharge or of the 'uncharged city'. However, whether you choose to view this from the one side or the other, these boundaries are always manifestations of the same thing. It is these boundaries that will form the subject(matter) of the design:



# The Significance of Research

Crowd machines are actors that can cause temporary intensities in the city. A machine needs material to operate; in the case of Crowd Machines this working material is a certain type of people. These people have in common that they all need or want a product or a means of fulfilment that can be acquired in, through or from the machine. Each machine is 'switched on' in its own cycle or rhythm that regulates the moment in which its 'working material' arrives or is present and fills the machine, creating Canetti's closed crowd. Or, in other cases, it is the sudden presence of enough working material to fill said machine that the machine switches on (In reality the second description always applies, as even with planned events, it is not the machine itself that causes the arrival of its working material). When the machine is filled and a closed crowd, it provides fulfilment. The product is only this: fulfilment. This fulfilment can be a physical thing but might just as well be something non tangible (experiences, memories, knowledge etc.). Once the machine has provided its product of fulfilment, it switches off: the moment the working material + fulfilment is discharged as a crowd. For the machine the crowd is now nothing more than the residue of its act: the machine has discharged the crowd in its unique rhythm and washes its hands of it. This is the moment the city's rhythm encounters the rhythm of the machine: the pulse-like discharge of the machine. Maybe only this period of adapting to rhythm is always, and on every level, the moment temporary intensities are able to exist in the city. The crowd like water splashes onto the surface around the machine, and the way the city processes this sudden flood is by creating or providing city systems that are able to process or assimilate these crowds: Sinkholes as types of infrastructure (in its many forms and gradations of efficiency) such as public transport, or, systems that are able to temporarily take in and hold (small) portions of this crowd: sponges.

While all these other systems work overtime, the crowd machine is sleeping: an impregnable bastion of fulfilment, an empty statue of the crowd, an ebb reminding of its flood, its own presence of absence. A strange realisation, especially for a city as London, that its renowned 'crowd machines', are mostly sleeping statues of their own residue. OR MAYBE EVEN IDLE?

The knowledge of this research up to this point, along with precedent cases and hopefully further research through design will form the engine of the design process. The aim is to design the crowd machine not as a 'representation' of its momentary discharge and its lengthy 'presentation' of absence, but as a continuous entity within the rhythm of the city, being on the very boundary of its order and disorder. This way, the machine does not sleep, only slumber. Crowd machine(s) become(s) a crowd generator.

# Conclusion

# Reflection epilogue

#### Reflection on design process and translations

With this research and global frame of thoughts, the process gradually evolved into the design phases of the project. Translating the concept of 'crowd machines' or rather 'crowd generator' into the physical realm, led to a series of (conceptual) hybrid mega forms or structures that would become a foundation as reference projects and precedents. The first stages of this translation process were driven by these precedents, both very conceptual (such as utopian projects as Archizoom's No Stop City, projects by DOGMA, Yona Friedman etc.) and more practical projects. Obviously, well-known examples as Rogers' and Piano's Centre Pompidou or Price's Fun Palace, but just as much stand-alone public buildings and projects such as by Oscar Niemeyer, OMA (ZKM, Seattle Library) and especially Estádio Nacional de Brasília Mané Garrincha by Ícaro de Castro Mello. The latter one was especially of importance because it represents the idea of separation of the different functions of this crowd machine, whereby the traffic spaces almost become a landscape by itself, disguising or obscuring the actual program of the building. Especially within the concept of different 'machines' or actors and their particularities coming together, this has led to a reoccurring fascination.

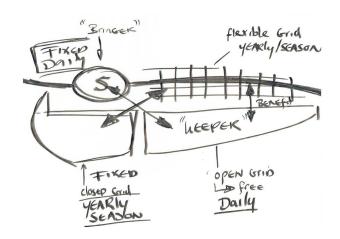
## **Bishopsgate Goods Yard Site**

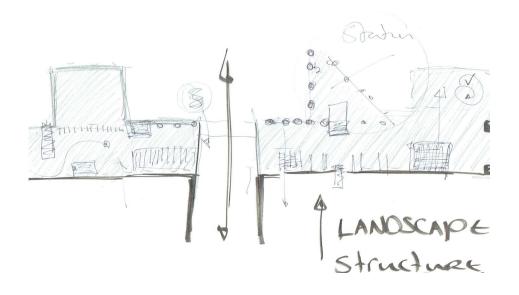
This concept naturally collided with the choice of the design site. The approach that was taken to land on certain possible sites directly derived again from the idea of 'flows' in the city as mentioned in earlier parts of the research. This flow – being of a more or less temporary nature - as a leading theme, becomes fruitful when reflecting on 'cuts' in this flow of the city. Meaning, that there are certain spatial or even social/non tangible constructs in the city that form a cut in the otherwise 'flowing' nature of temporary intensities (One could actually argue that the crowd machines themselves form just as much such a 'cut' in the city, where the flow is temporary contained, and later on pours away from).

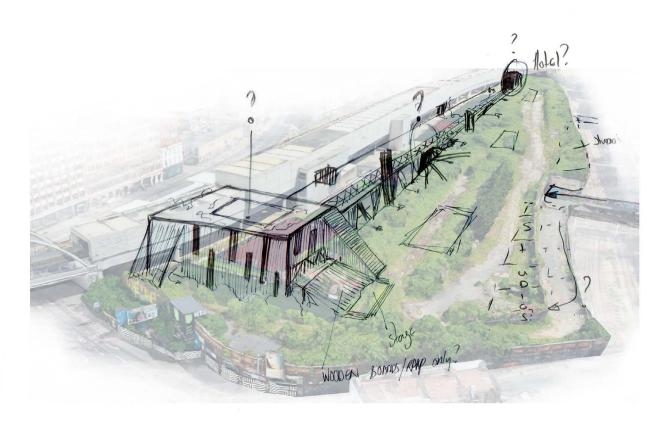
Spatially, these cuts represent themselves often as a result of infrastructure constructions that serve 'flows' on other levels. Directly surrounding the CAZ (as defined by the city of London), we find these cuts mostly caused by railway or underground infrastructure encountering and adjusting to the very perimeter of the 'active zone'. They naturally, to some extent, establish each other by their existence. Surprisingly, the zones that could be considered as and act as 'cuts' often already have site specific qualities (size, existing environment, connections etc.) that fitted the global outline of what at that moment seemed suitable for the assembly of a crowd generator form.

The former Shoreditch Bishopsgate Goods Yard was chosen for its size, location, and the unique combination of possibilities for connectivity and use of its remarkable existing structure. The location seems to be a perfect fit. The strict yet open grid of the former goods yard building with its columns, arches, and inner streets in hindsight is almost a spatial representation of a sponge!

During the first steps of the design process, but similarly to some extent up to this point, the connection and approach to appropriate both the seemingly scale less roof deck of the former goods yard, as well as the spaces enclosed by the goods yard construction and the 'elevated railway tunnel' with its station form(ed) great obstacles. The themes that are of constant importance are the connection between the new and the old constructions, the public and private functions within them and the coherence of the way these things are tying, or coming together into a construct that could pass on for 'what should be a crowd generator'.







The infill of the program of this crowd generator is not a fixed list of elements that need to be implemented in order to be a 'success'. This result of this coming together of different actors into a crowd generator can simply not be tested beforehand, and obviously, this question might only be answered by years of use after realisation. The strategy however that was adapted, was to make a global plan of actors that according to this research are complementary, both in 'crowd rhythm', sizes and the (social) layers they serve. As said before, because this is a global approximation, the finished infill might still change up to the final stages, apart from some of the fixed elements that are worked out in finer detail. The program, as a whole aims to implement flexible and cultural program and spaces on both city level as well as on a more social neighbourhood scale. The idea of a music/creative arts venue with a capacity of between 3500/5000 was extracted from the research because it has both the most 'stable' yearly rhythm and is therefore also represented to a lesser extent than the smaller and larger types of such venues within the city. By implementing a music school with multipurpose rooms, along with workspaces and studios, the program should tap into the current character and social layers of the surrounding neighbourhoods. Flexible spaces in, around and on top of the goods yard site could house different programs throughout the day & seasons to cater for the actors within their different rhythms.

These fixed elements that form the core of this project became established quite early on, which proved fruitful to concretize at least some parts of the program of the construct. Meaning, that for example the materiality, structural and especially social (and private vs public) particularities of these actors could be used to inspire, shape (to some extent) and link the other parts into a more congruent part. However, just as much as this gives you some grip on the design process and the translation of the quite theoretical research into physical program, this also proves to be quite problematic:

The goods yard location that was chosen is roughly 6 hectares in size, with a giant 400-meter-long roof deck that deemed to be almost scale less when placing volumes or massing on it. The argument was made that in order to introduce (human) scale to this roof deck, the design should approach it in the other, narrower direction (roughly around 70 meters). By doing this, the entire form becomes a construct that appropriates both the remaining goods yard building as its roof deck as almost a cross section instead of a volume in linear direction. For a long period of time, this resulted in the idea of creating an elevated construction between the railway tunnel and the goods yard building which would function as some sort of mediating mega structure that both connected (and separated) functions and flows.

# **Programmatic implications**

This element of elevation immediately brings up the question of how this is structurally arranged and with it, how this results in the character of the underlying space. At this stage, the idea of creating this roughly 400-meter-long mega structure in between the goods yard and the railway tunnel, completely out of wood was first introduced. This will come up later on more extensively. This is both as a statement and personal fascination: one could argue that large scale urban projects such as this crowd generator could still be built with the current habit of constructing these kind of projects just out of concrete and steel, and cover the term 'sustainability' (whatever it may be) by focussing on flexibility, social sustainability, reducing of materials etc. and recycling/reusing principles, but I decided against this out of curiosity and again, as a statement against our current (arguably) slowly adapting discipline. On top of this, I formed the opinion that to make this project a viable proposal, it should incorporate housing as well, in order for it to also be financially more realistic.

This mega structure with its different functions, public space and the link between the different flows (either being connectors or connected by other parts) constantly proved problematic, with the specific needs of certain parts becoming of hindrance for other parts. As well as never coming together in a congruent way when part of one construction. By shifting parts of the linear volume onto and from the roof deck of the goods yard, it was tried to improve this, but the result would remain awkward and quickly loses connection with the separate parts. Meaning that the spaces around the construction would turn into mere traffic corridors and spaces instead of 'active spaces'. To harken back to the terms as used in the research part: the spaces become rather linked to the idea of sinkholes than to sponges.

The (partial) implementations of the 'head part' (music venue) and the music school/creative spaces into the western part of the goods yard construction then quickly lose their initial goal of being connected (with other elements) into a crowd generator, now that they are basically becoming infill and adapted program into and onto/around existing volumes, with public traffic spaces flowing throughout, aiming to provide connection between the parts.

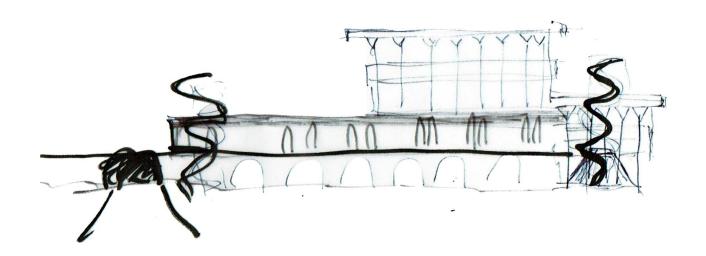
# Rethinking and recycling of ideas

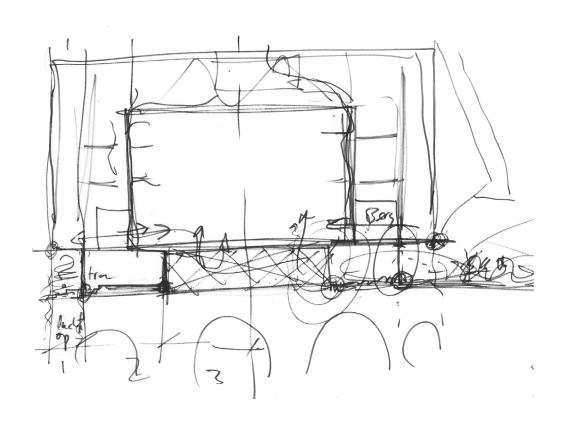
With the realisation that the current structure and approach of the generator as a mega structure serving and connecting different levels and uses, both old and new + adapting to different rhythms of temporary intensities throughout its use, only limits itself or (in a shifting way) contradicts its own goals, came the rethinking of the initial idea. As well as my personal vision of what I want my architecture to express, instead of at what at some point had become almost merely dealing with the design as an uncontrollable collection of elements that house its envisioned program and goals.

Out of this point of elaborate reflection, along with revisiting old sketches and ideas, as well as a more distanced re-evaluation of the research results as a starting position, followed a renewed concept to adapt the existing to the new and the new to the existing.

The way the previously proposed structure was trying to appropriate the goods yard and its connections to the new functions by either superimposing, or rather hovering over/next to it, and at the same time fitting into the existing shapes like tailor made puzzle pieces, might after all always lead to a disjointed set of crowd machines all over. It was at this point that the hovering or superimposing nature of the new parts on top of the goods yard as if it were a device 'landing' on the roof deck, was put into question, as it would always lead to a disconnection between the one and the other, also completely ignoring the temporality of the shifting types of program.

And this is where all the implications that were derived from the design process at this point were put together to recreate the idea of the goods yard being a sponge, similarly to how sponges were encountered during the research stages. The current approach for the implementation of the music school into the existing structure of the western part of the goods yard remains to large extent intact. However, by using the roof deck as a sort of 'permanently used temporality' (yes, really) for different actors (instead of filling up some of the openings with program to connect the different levels and the music venue), the inner streets could be used to 'activate' the program within and around the building. By opening up parts of the roof deck by creating giant spiralling staircase the concept of the Goods Yard being a sponge is further exploited in the vertical direction, maybe for the first time convincingly further connecting the separate parts into a whole. With the housing of the program bleeding (or again, flowing) into each other.





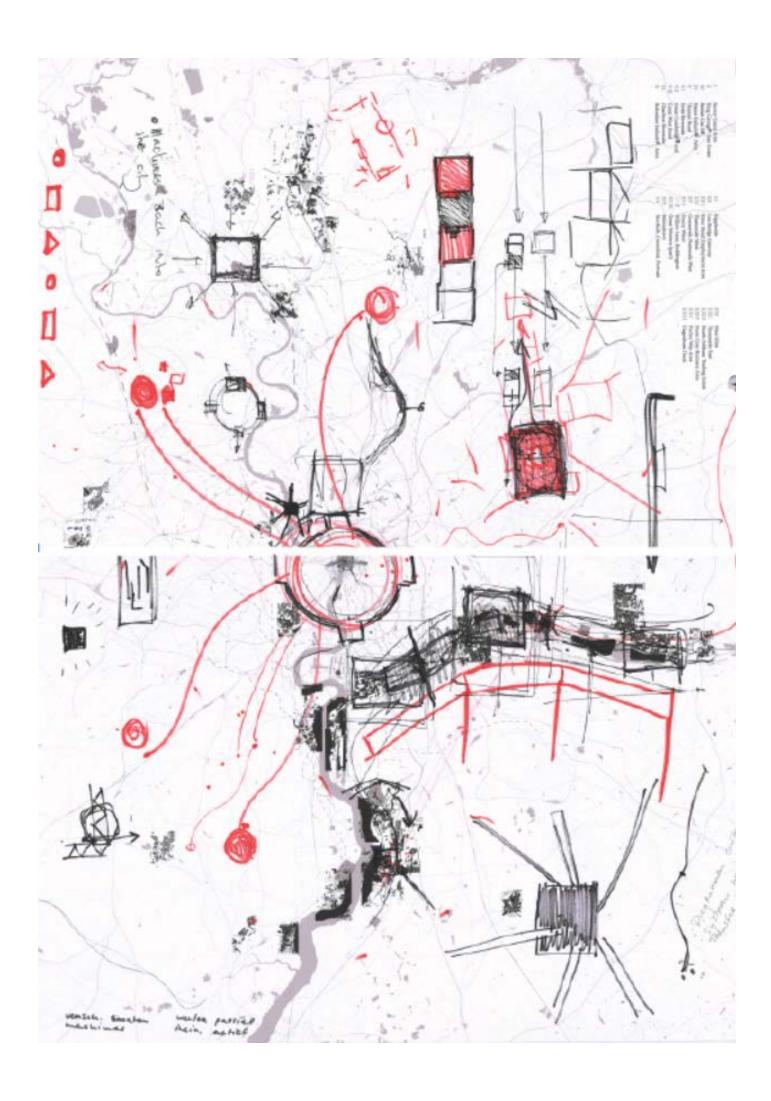
The roof deck is as mentioned considered as a loom of 'permanently used temporality'. What this means is that the roof deck after all becomes almost like a 'fairground' a gypsy camp or a camping space for activity where the different actors and their rhythms appropriate and regulate the space. Here the program underneath the deck in the goods yard (with its more local and social nature) functions as an almost supercharging 'plus', or bonus. The infill must stick strategically through the levels, connecting the different floors, the deck, and the inner streets and open spaces.

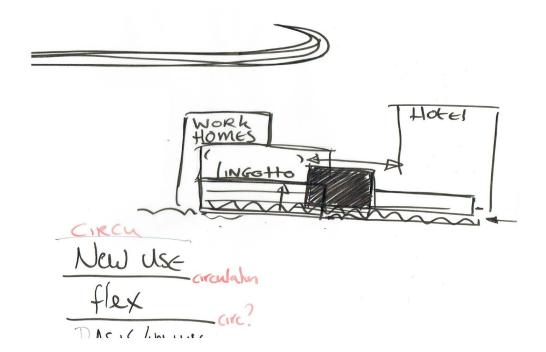
The materiality then naturally flows from this, and benefits from this interpretation. Reintroducing the concept of building in wood, which fits into the feeling of it being of a more temporal nature (without it obviously being the case), as well as being less fixed (without it obviously being the case) and obviously a 'sustainable' option (and again, it being a personal statement). This way, the new construction also has the opportunity to (re)use the existing structure as again, 'a bonus'.

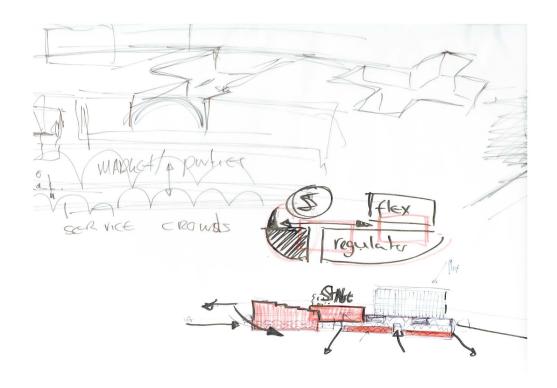
At that point in the design steps into a global project, this all means that using the specifics of each of the mentioned parts are compared or rather, viewed together to find combinations that could benefit from each other to either work as a climate system or share/reduce space/materials/energy etc. At the same time this concept of rethinking and combining separate parts to find beneficial cross links to reduce energy/spaces and share recourses. These are too numerous to mention and probably not substantial to a reflection but the concept of the greater 'generator' and the separate parts of it following a similar approach is noteworthy at this point.

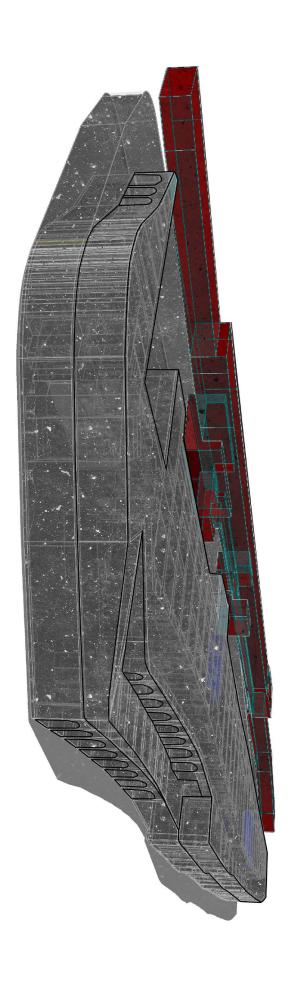


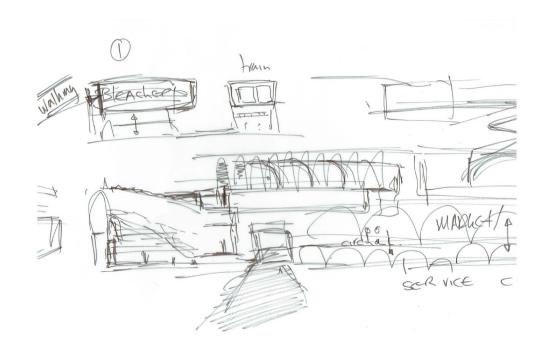
# Process Collected drawings & sketches

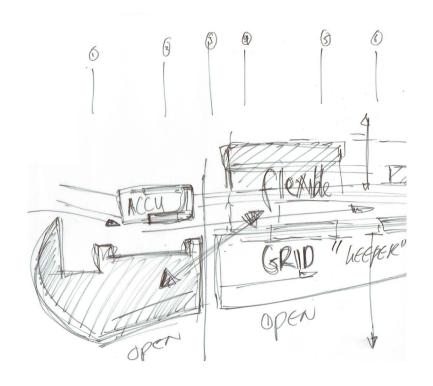


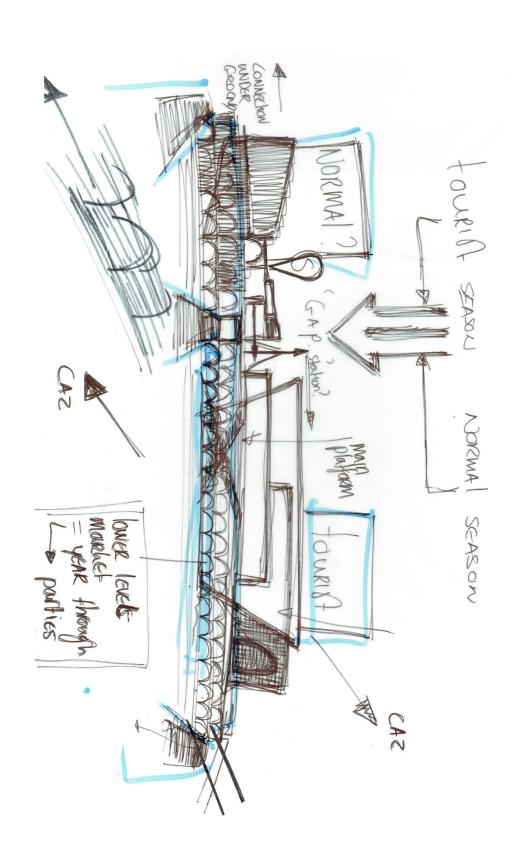


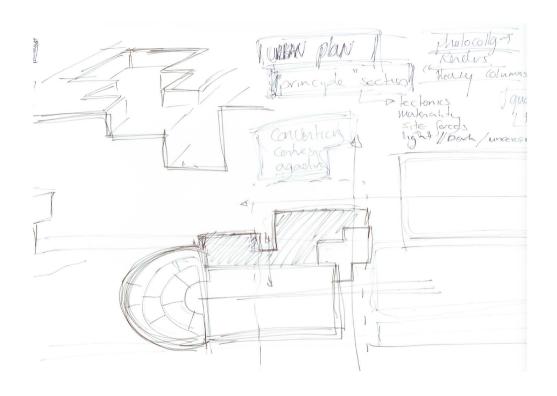


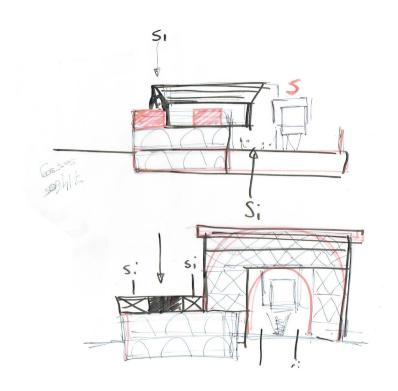


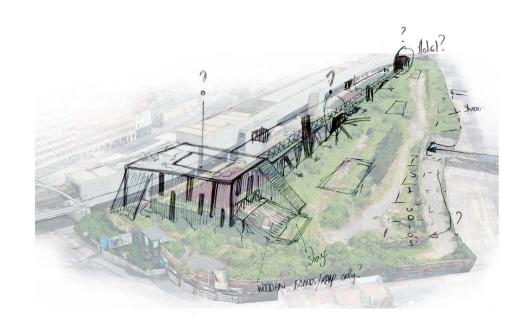


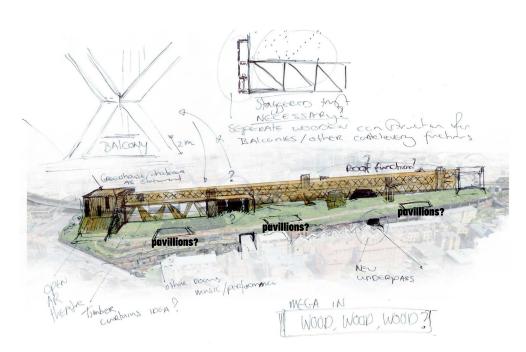


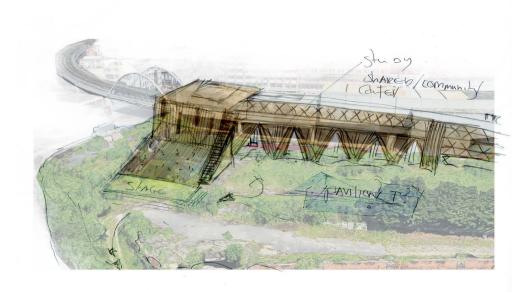


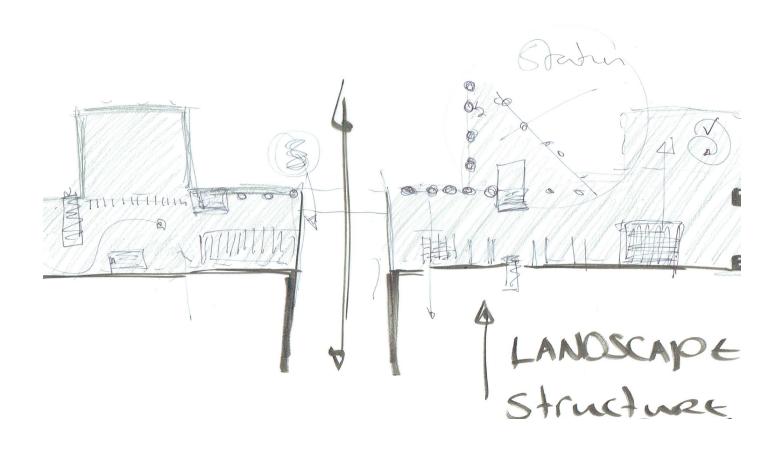


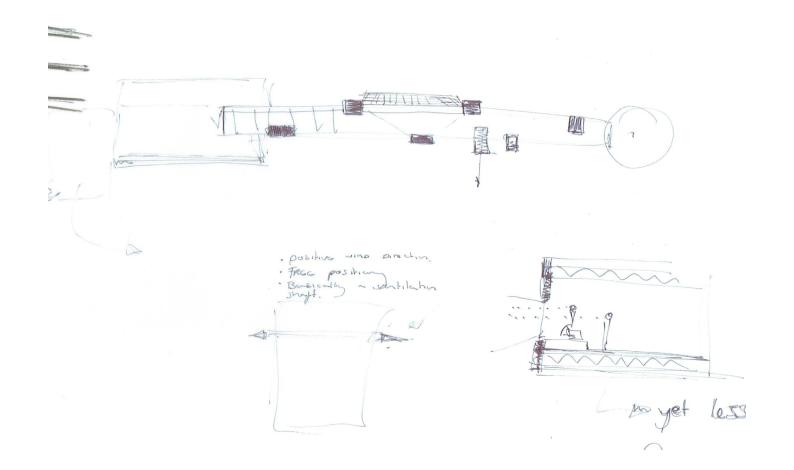


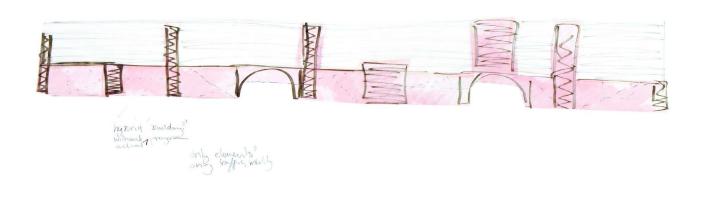


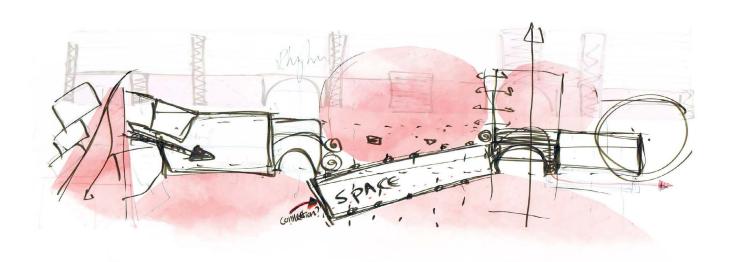


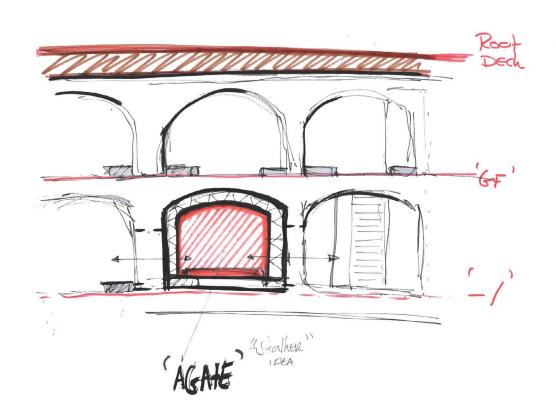


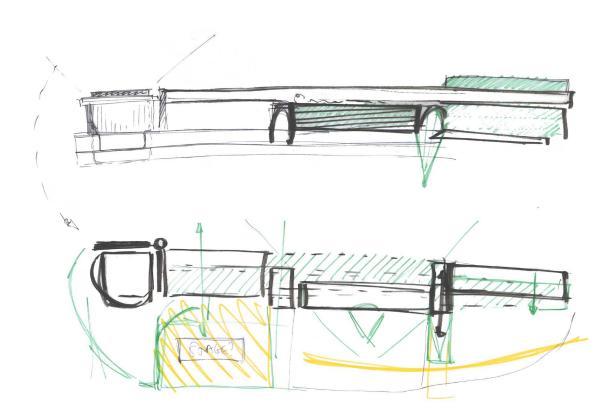












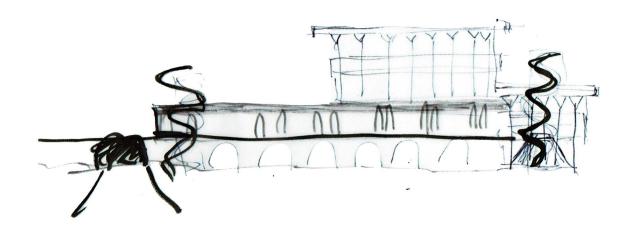




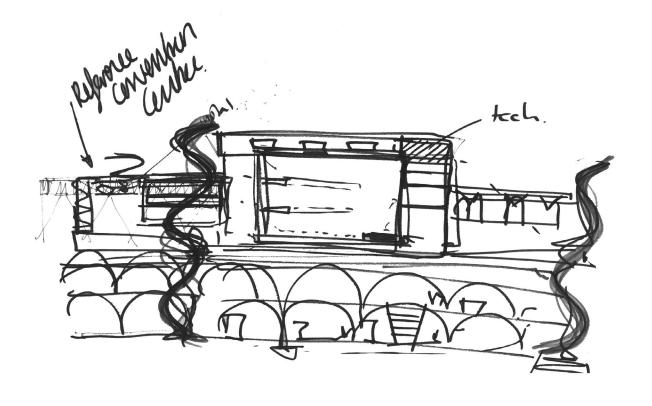


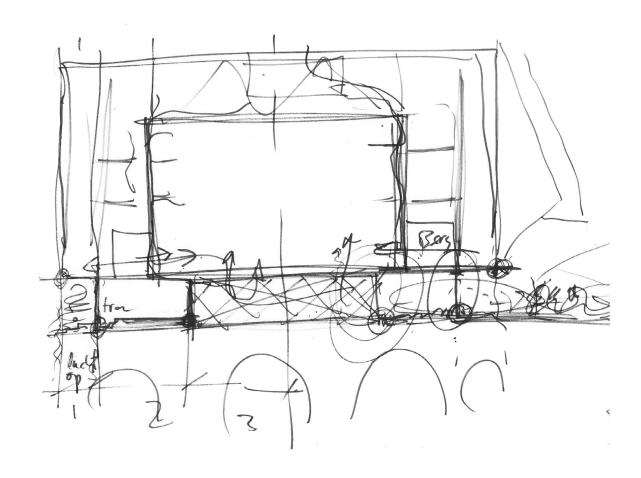


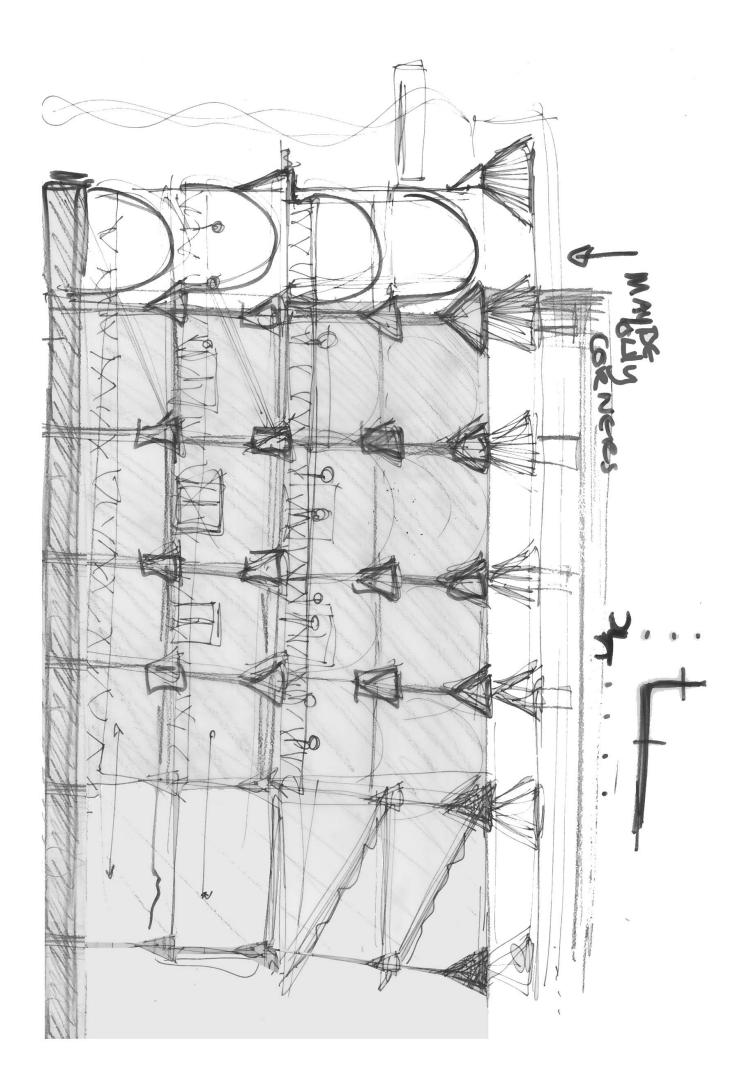
# Process Final design, between P3 and P4

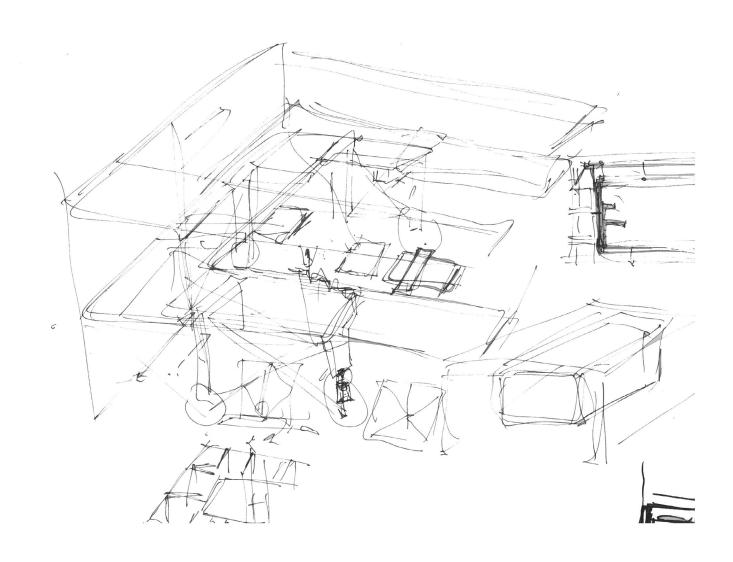


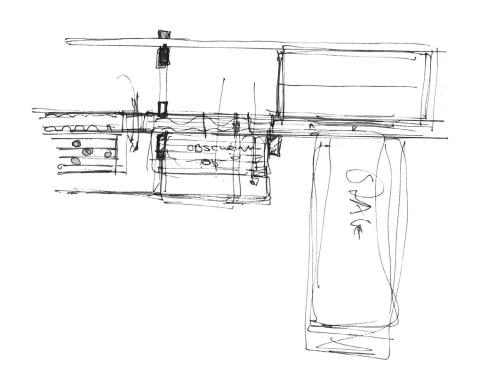










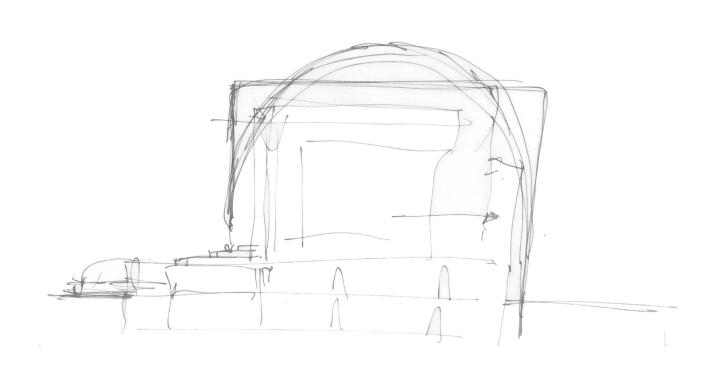


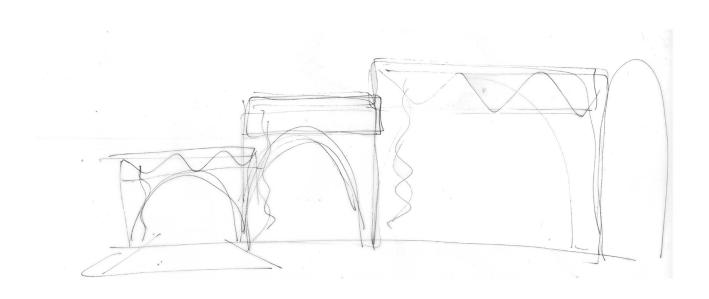


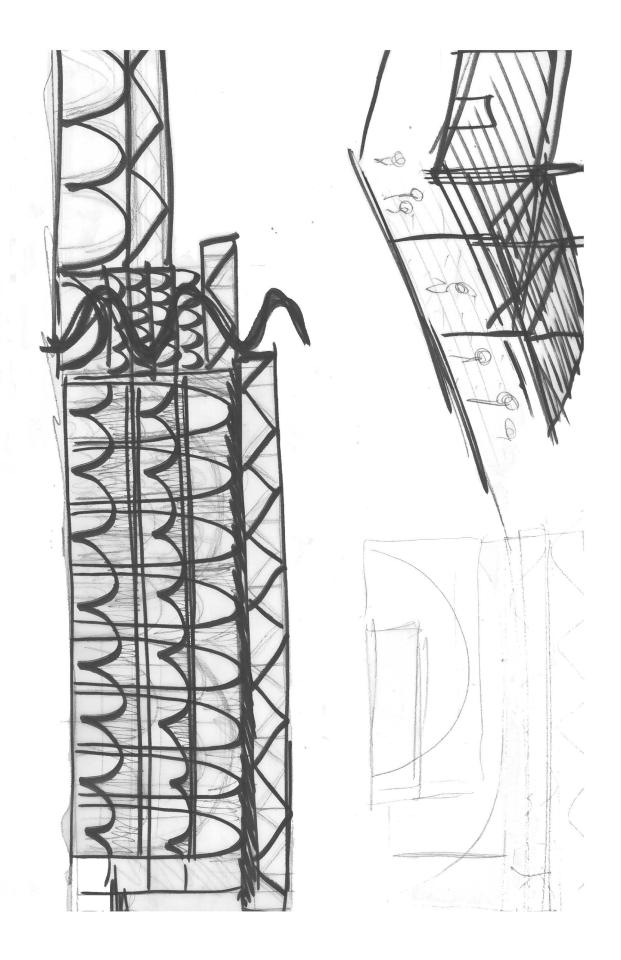


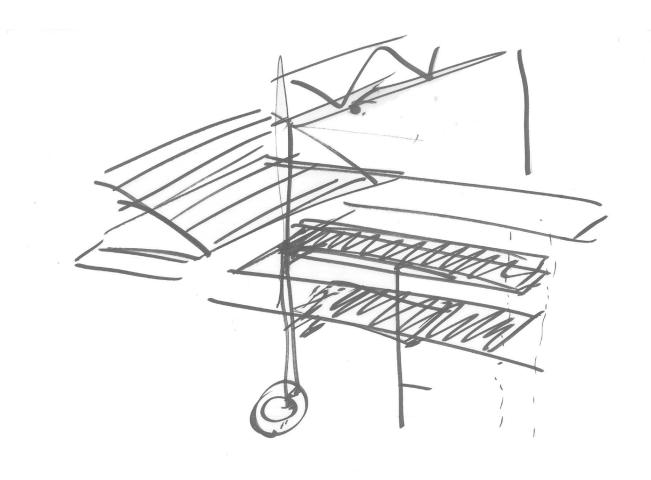


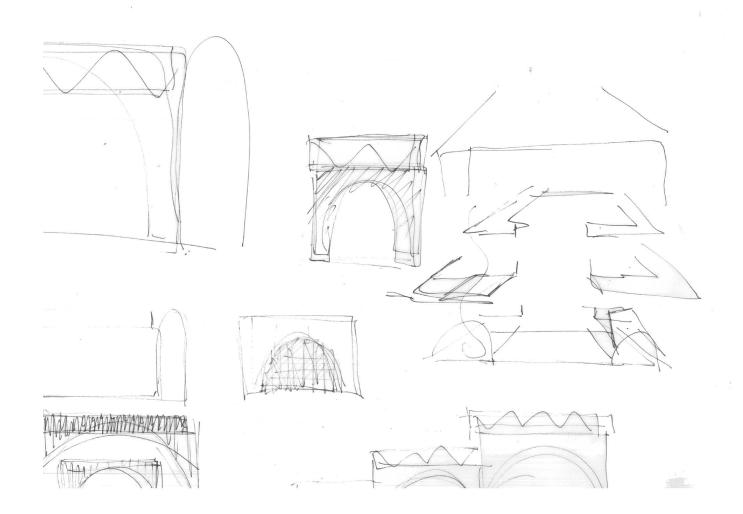


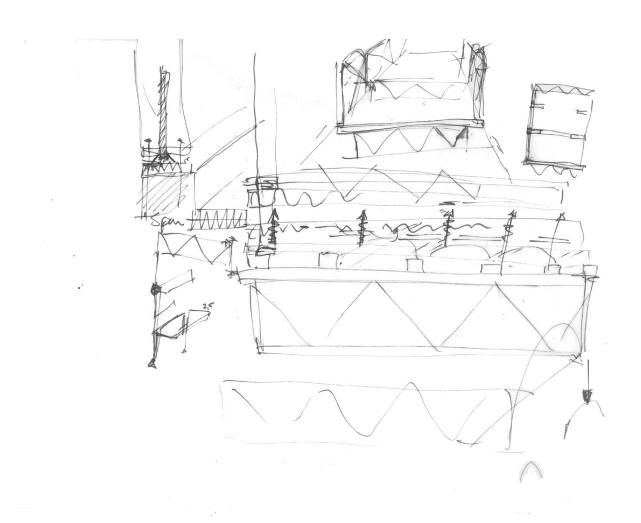


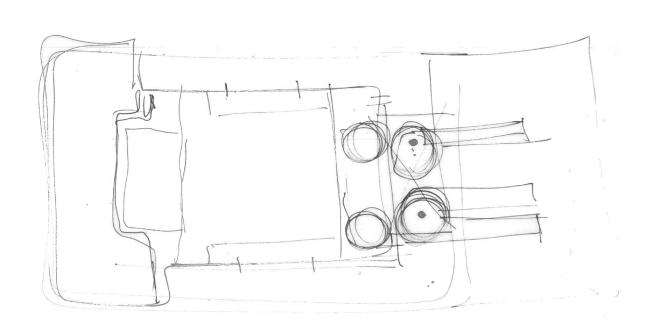


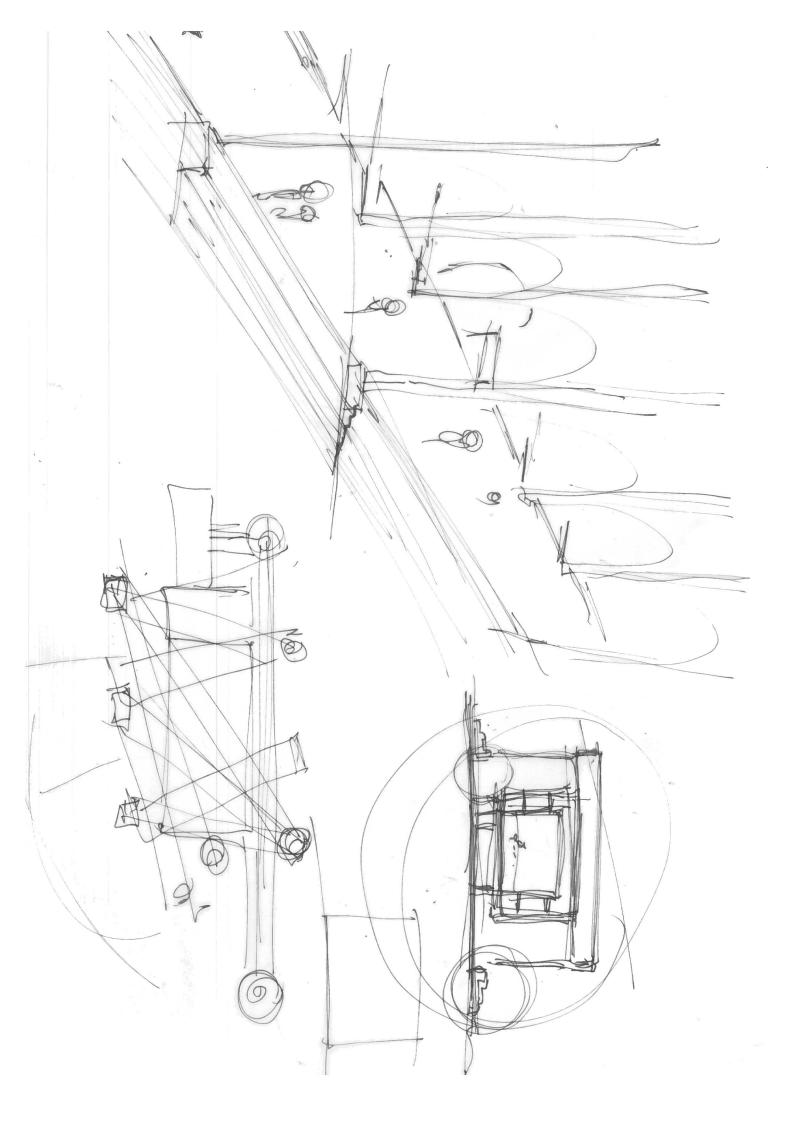






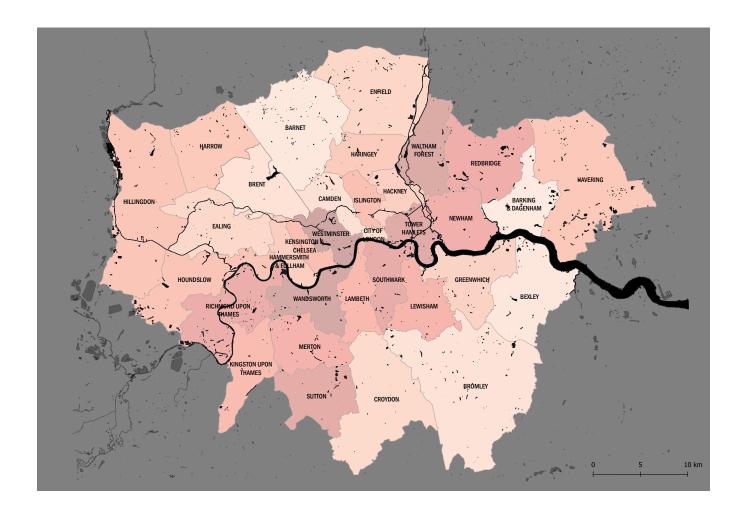




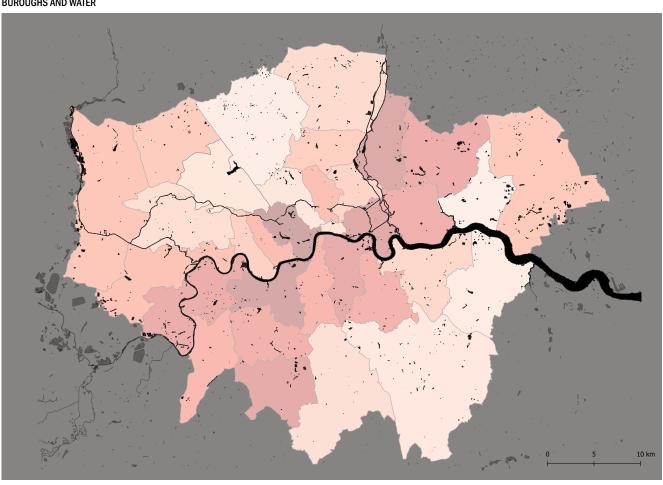


Research
Maps and graphics

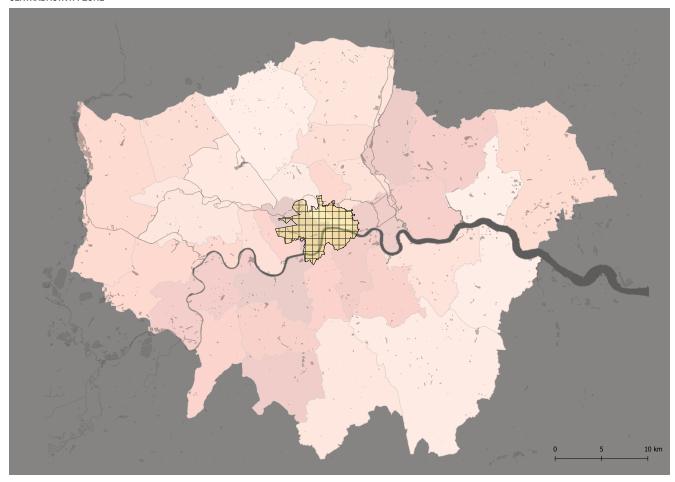
'location finding'

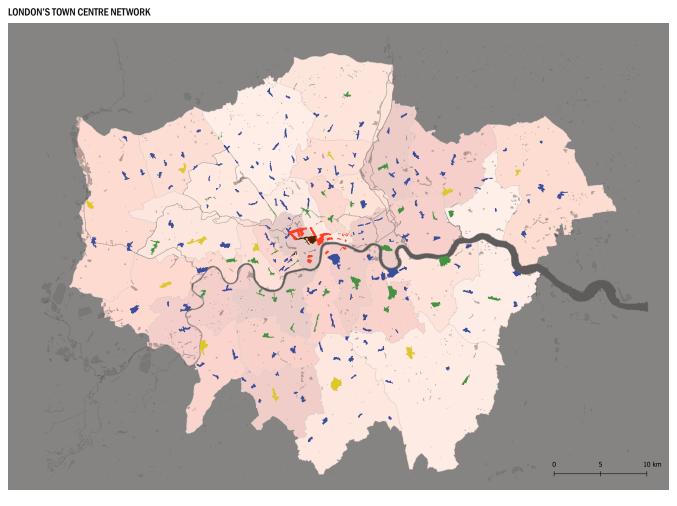


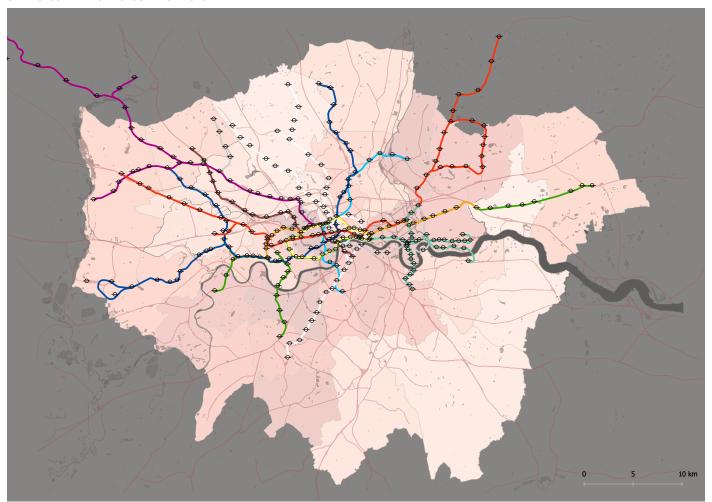
# BUROUGHS AND WATER

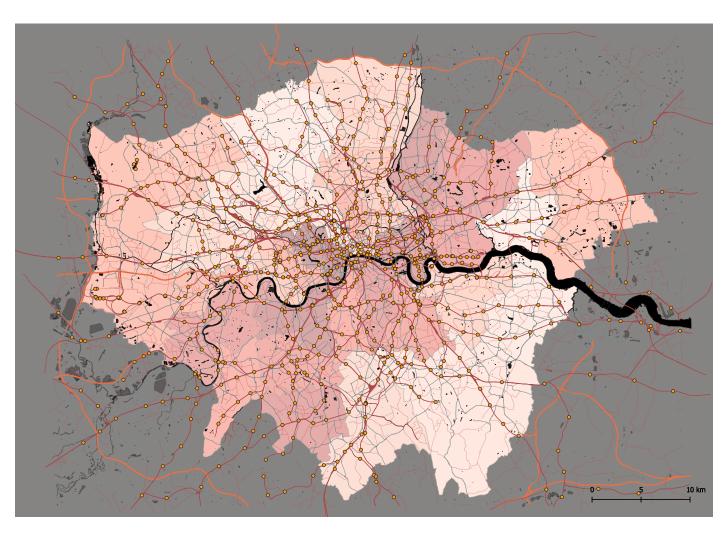


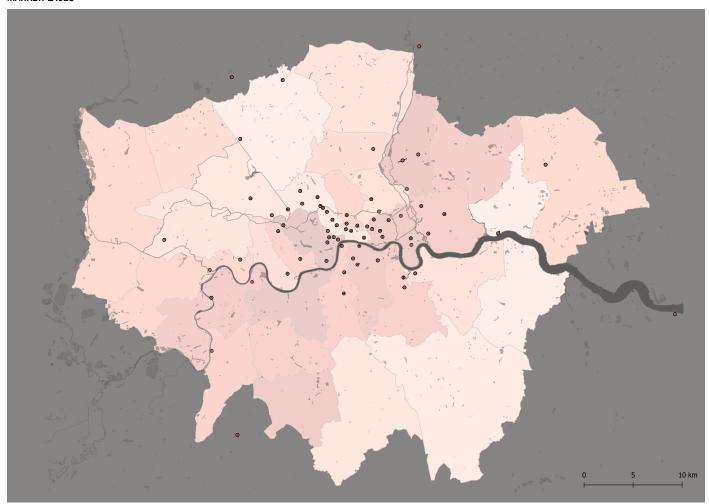
# CENTRAL ACTIVITY ZONE



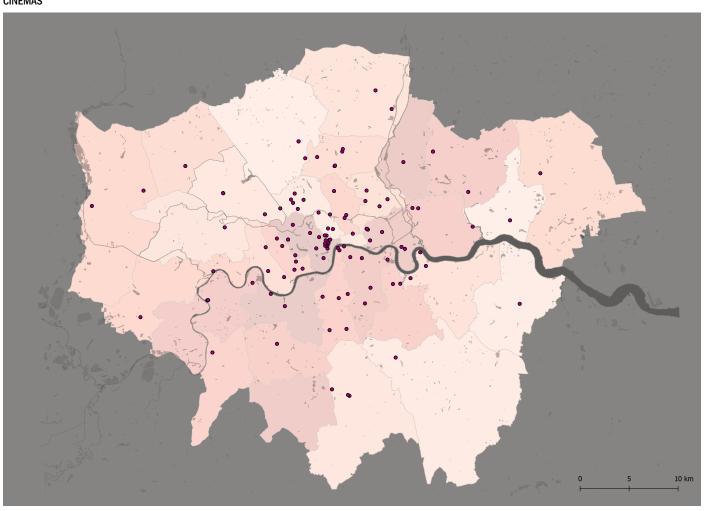


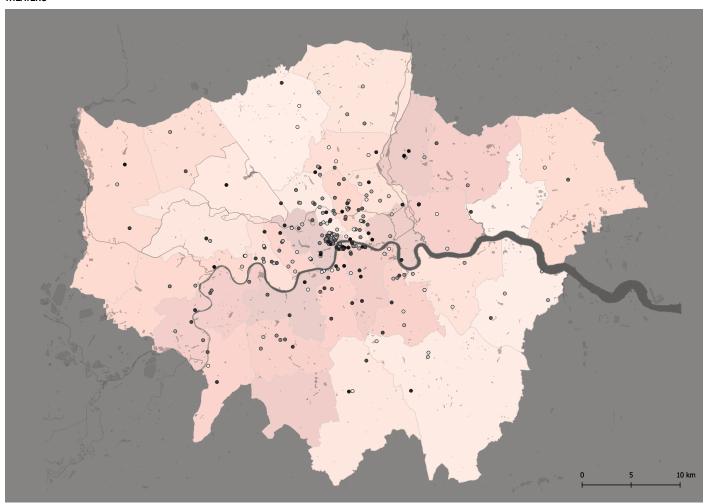




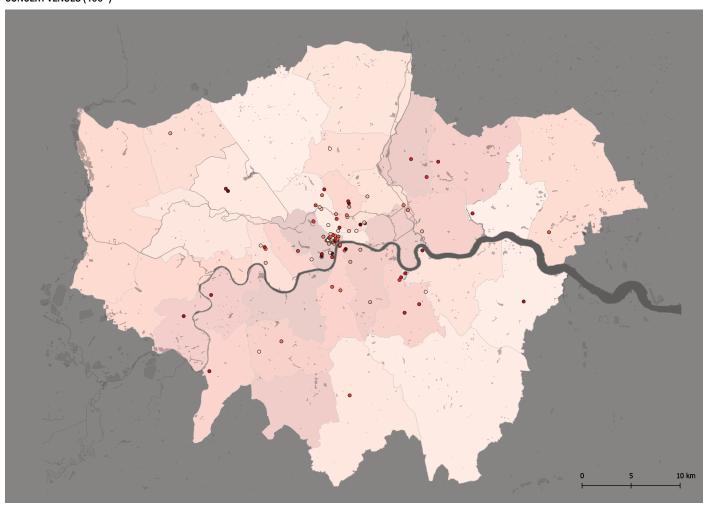


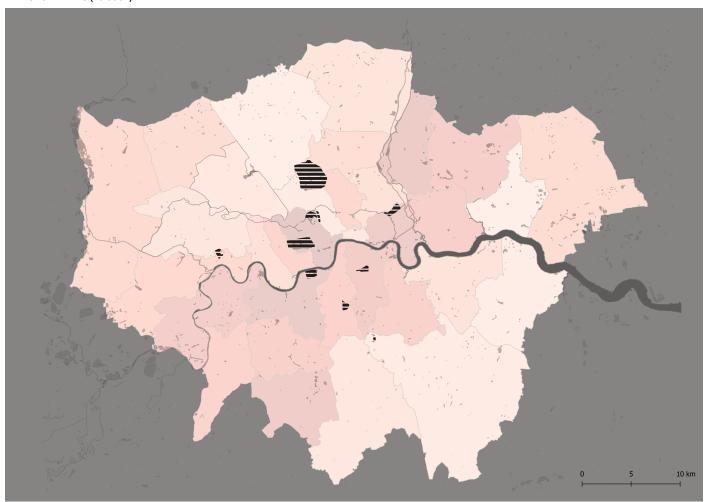
#### **CINEMAS**



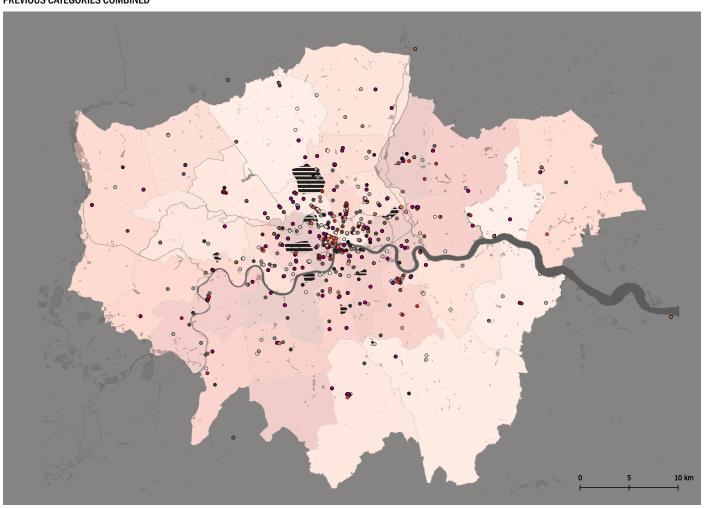


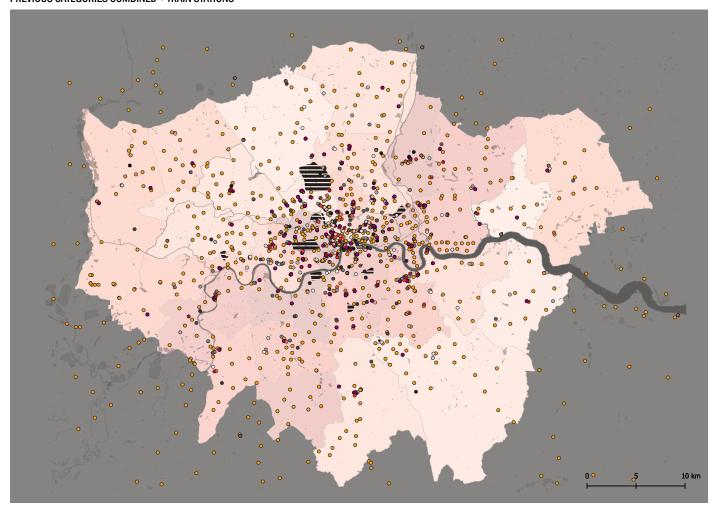
CONCERT VENUES (400+)

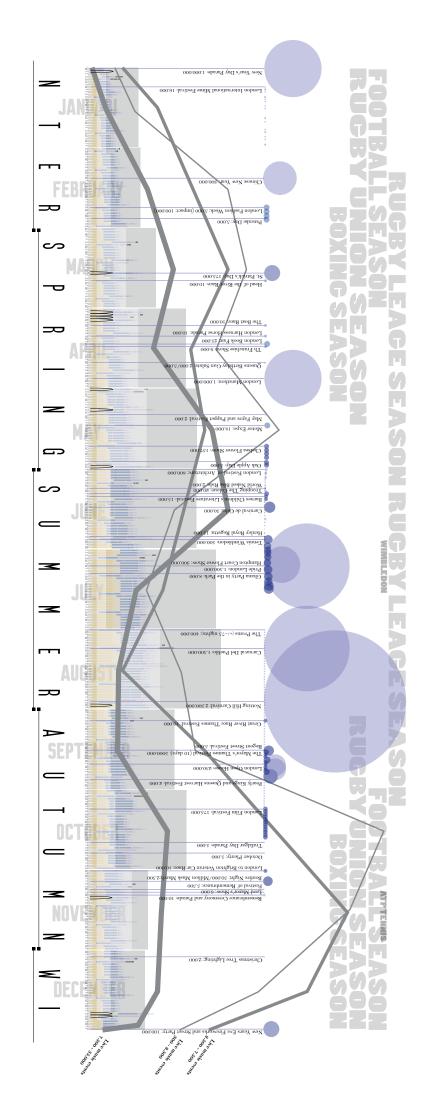


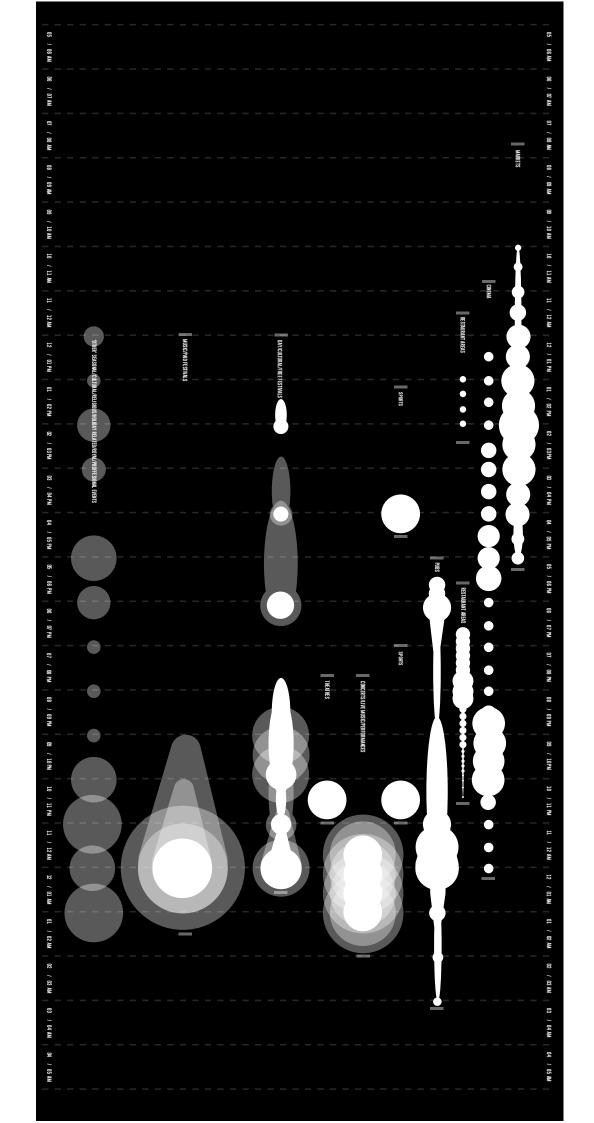


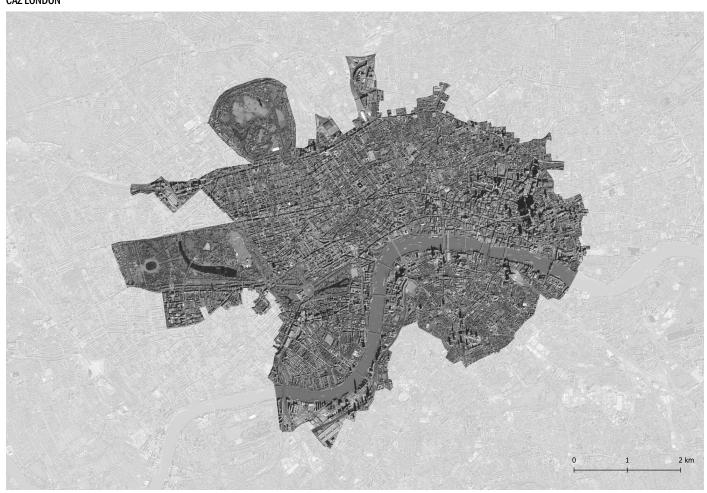
PREVIOUS CATEGORIES COMBINED



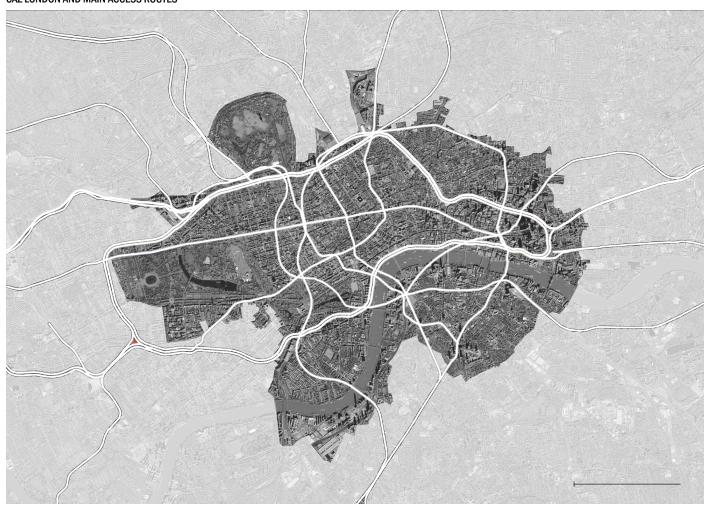




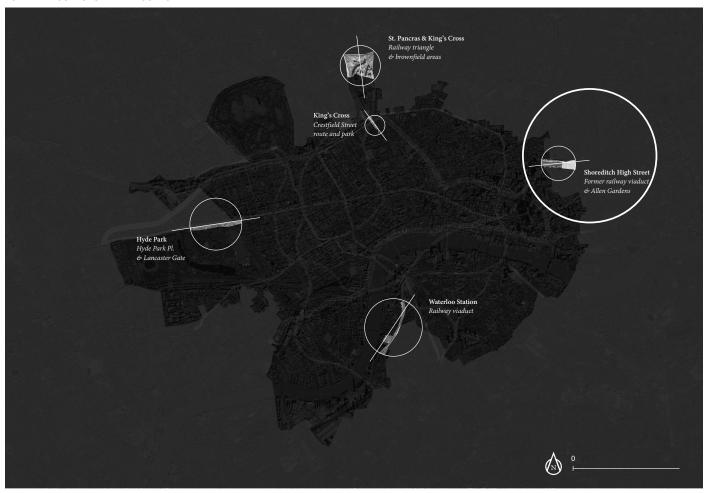




#### CAZ LONDON AND MAIN ACCESS ROUTES

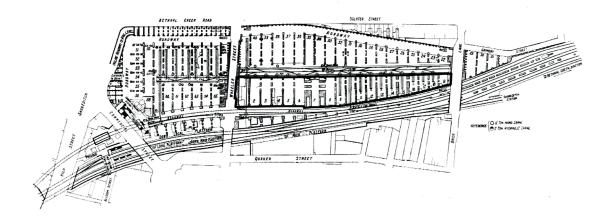


# POTENTIAL LOCATIONS + FINAL LOCATION

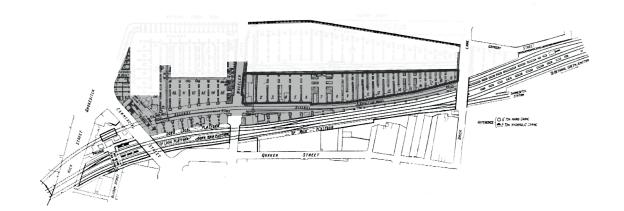


#### LOCATION





floorplan 1875/1964



floorplan after '64 fire



Photos: http://londonfirejournal.blogspot.com/2008/02/bishopsgate-1964.html

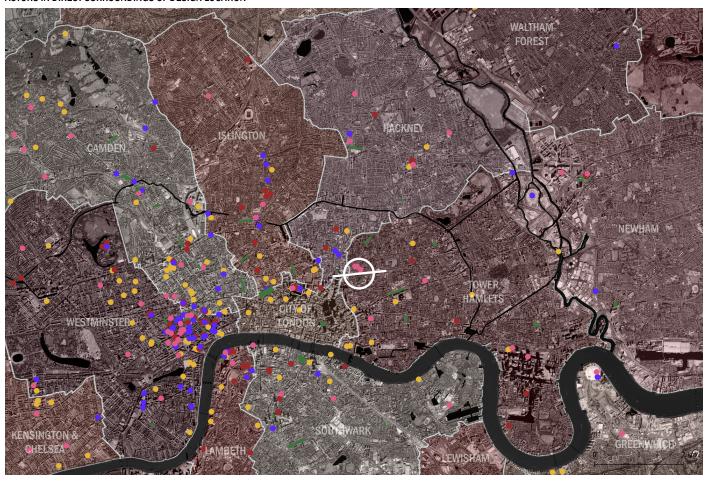


 $Photos: https://cutt.ly/rjnVGQO,\ \ http://londonfirejournal.blogspot.com/2008/02/bishopsgate-1964.html$ 

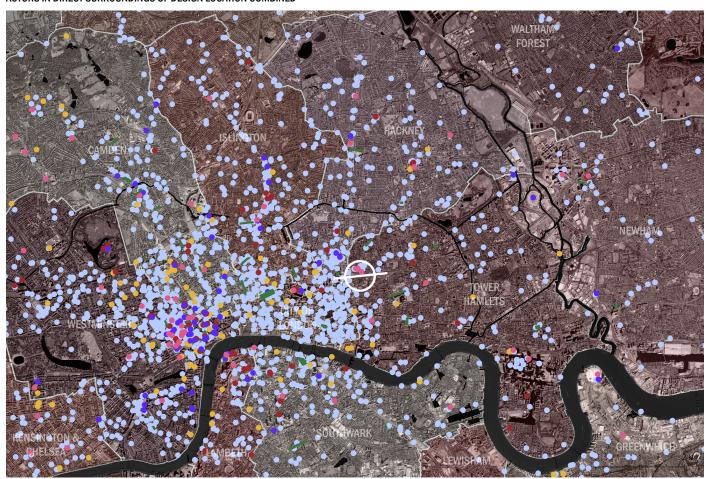




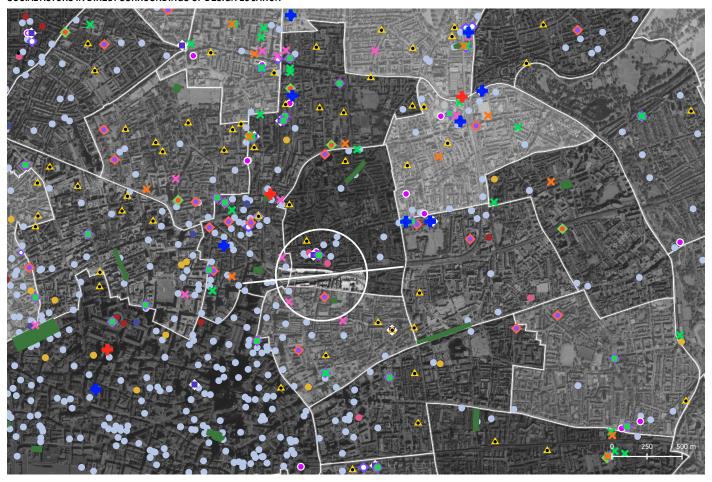
#### ACTORS IN DIRECT SURROUNDINGS OF DESIGN LOCATION

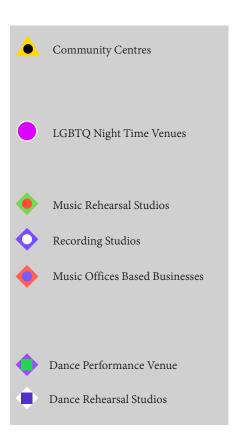


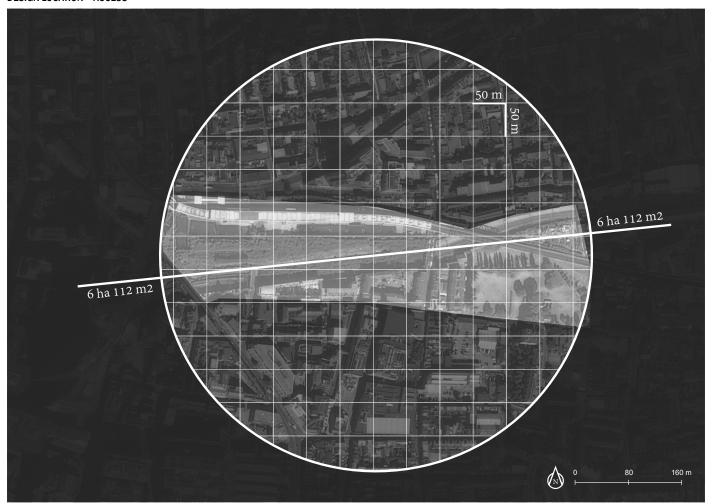
#### ACTORS IN DIRECT SURROUNDINGS OF DESIGN LOCATION COMBINED

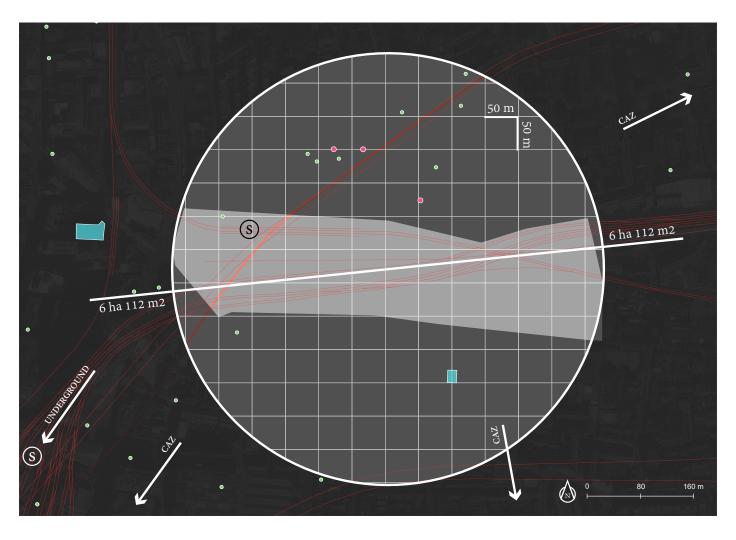


# SOCIAL ACTORS IN DIRECT SURROUNDINGS OF DESIGN LOCATION









# Location pictures and screencaptures

























































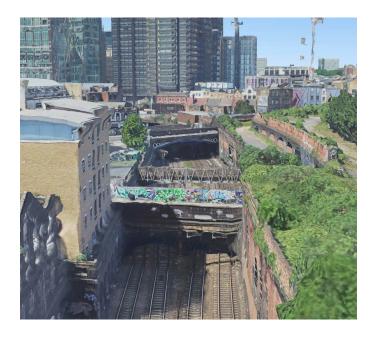


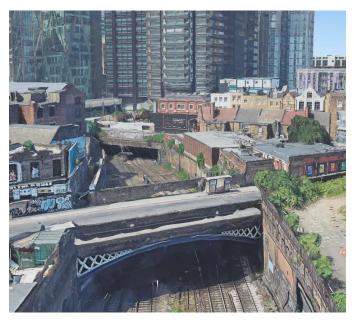






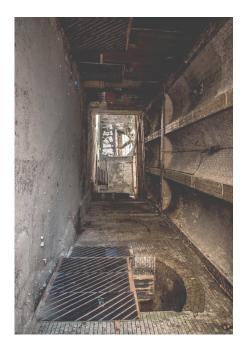














































all pictures of exiting structure: https://filming.networkrail. co.uk/filming-locations/bgy/