# Library of Echoes

A Physical Representation of the Dark Side of the Internet





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# Student background

Chalmers University of Technology, Gothenburg | Sept 2017 -

MSc in Architecture in studios Material & Detail and Material Turn

Delft University of Technology, Delft | Aug 2016 - July 2017

Erasmus exchange year at the TU Delft in studios Architectural Engineering and Beyond Oil.

Architectural Trainee, Herzog & de Meuron, Basel | Sept 2015 - Aug 2016

Architectural Trainee involved during schematic and design development phases in project 445 - Roche Bau 2.

Architectural Intern, SOM, London | June - Aug 2015

Architectural Trainee involved during concept phases of Skipton House and Polestar Tower.

Designer at PLP Architecture / Tyréns AB, London | June 2014

Conceptual high-rise project, Skypod. Collaboration between PLP Architecture and Tyréns AB.

### Chalmers University of Technology, Gothenburg | Aug 2012 - June 2015

BSc in Architecture and Engineering. The courses included the theories, methods and tools of both architecture and engineering.

## Abstract

Ever since its public breakthrough, the internet has fundamentally changed the way we connect and communicate with each other. Though at the beginning, it was perceived as a utopian tool that democratised knowledge and facilitated cultural exchanges, it has not come without negative consequences. Alongside the widespread establishment of the internet as the number one communication platform, our political and social landscape have become further polarised and we have been made captives of our own limited attention spans. What separates these issues from many others is that they exist solely in the context of a virtual space.

Building upon two main themes - filter bubbles and attention economics - this thesis will give form to the virtual realm by translating it into a physical one. What are filter bubbles and attention economics and why are they problematic? Through a shift in platform and perception, this thesis aims to make apparent the consequences of filter bubbles which pertain to the phenomenon of being exposed only to views, facts and opinions that align with our own ideologies; and attention economics which describe the manner in which companies are caught in a zero-sum race for our finite attention. As such, this project is an interpretation of the internet as well as an exercise in translating abstract concepts into physical realities.

Manifesting itself through the form of a library, the building programme recalls its traditional predecessor. Gathering knowledge into a collectively accessible database was traditionally the function of libraries. With the sole purpose of storing and distributing information, the internet, as it is today forms many parallels, making it the ideal programme. However, the project takes on the library not only from a programmatic perspective but also in its design methodology. All elements making up this design stems from the same database - the Internet.





How does one translate abstract concepts existing only in virtual spaces into physical realities?

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Through this shift in platform and perception, can one make apparent the consequences of filter bubbles and attention economics?

# **Introduction & Background**

#### The change of the Internet

The Internet has been accessible to households ever since the mid nineties and historically the Internet has been described as a utopian tool - something that would democratise knowledge and facilitate cultural exchange. In the past couple of years this statement has been challenged as the Internet has undergone a drastic change in nature - it has become a platform which accelerates polarising tendencies in our society.

The awareness of the huge impact the Internet has had on our society is constantly increasing as it is assuming over more and more tasks influencing more and more aspects of our daily lifes. We have now witnessed how the Internet can influence large state apparatuses such as the elections of countries such as the United States, France and Britain. The way the Internet can affect such large groups of people with minimum effort and therefore dictate whole movements and control debate has been described by the term clickocracy - rule by the clicks. A related issue, which have had a large impact on the political landscape is the use of 'fake news'. Fake news has always been existing but the frequency with which they are apread and seen have exploded with the use of social media. These are both unintentional and aimed propaganda at certain groups of the society.

The problems we now associate with the Internet is not isolated nor few - another problem, commonly

occurring due to the use of social media, is called attention economics. Attention economics is basically how large companies treats human attention as a scarce commodity. Our attention is finite and is not an infinite resource therefor it can be harvested and sold just as any other resource. All information extracted by the Internet's users, us, are used for reasons such as personalized ads, accelerating AI-engines and optimizing performance of platforms. Just the sheer information uploaded each day is a problem. According to a survey by IBM 90 % of all data on the Internet has been uploaded since 2016. And that survey was written last year. The masses of information we are exposed to on a daily basis has several terms; data smog, information overload, infobesity, infoxication or information glut. How do we focus while constantly being bombarded with information from one of our most commonly used platform for communication - the virtual space we know as Internet.

What sparked the idea to design a building within this topic was reading an article in the newspaper Dagens Nyheter, titled 'Time to Pronounce the Idea of a Utopian Internet Dead'. Reading this had me wondering wether it would be possible to physically manifest these as architectural spaces? Could one translate abstract concepts solely existing in virtual space into analogue architectural spaces?



#### Clickocracy

The massive impact of the internet on political campaigns, in spreading news, in generating enthusiasm, and in gaining financial donations.

#### Attention economics

Attention economics is an approach to the management of information that treats human attention as a scarce commodity.

Data smog, Information overload, Infobesity, Infoxication Information glut Data smog refers to an overwhelming amount of data and information - often obtained through an Internet search whose volume serves more to confuse the user than illuminate a topic.

## Fake news

Fake news is a type journalism that consists of deliberate misinformation is mainly distributed via social media.

## Filter bubble, Echo chamber

A filter bubble is the intellectual isolation that can occur when websites make use of algorithms to selectively assume the information a user would want to see depending on former click behavior, browsing history, and location.

# **Theory & Delimitation**

#### Why a library?

In 1941 the novel 'Library of Babel' was published, written by Argentine author Jorge Luis Borges. This novel has often been used as a way to describe and problematise the future of the Internet. This has occurred, despite the fact that it was written well before the Internet even existed. The novel describes a fictional maze-like library containing all possible books ever written. It does this simply by containing each possible combinations of letters and by sheer probability, even though almost every book is rather incomprehensible 'gibberish', it will contain all books ever written. The book asks how valuable information really is if you have no way to find what is useful and what is not. This aspect of the Internet has become a particularly contested topic in recent years with the introduction of 'fake news' on a global level. This is something which, so far, has affected political elections and votes in countries such as the United States, France and Britain.



ABOVE. Illustration by Erik Desmazieres for the novel Library of Babylon (1997)

### Delimitation of translations

As I am working with translating abstract concepts existing only in virtual space into physical realities key is to limit myself in regards to what to translate. The process of choosing themes to translate has been continuisly been adressed as the design has propelled forward.

In the following three pages I adress shortly the chosen themes and how they are intended to be translated in the design. Below a concise list of the chosen themes:

- Filter bubbles
- Attention economics
- Data smog





### FILTER BUBBLES

PROBLEM: Filter bubbles are intellectual isolation bubbles which occur when algorithms de ne what we are exposed to in our news feeds in social media. e algorithms want to maximize the engagement and the amount of clicks generated - this it does by only exposing us to views, facts and opinions that align with our own ideologies. is, as a side e ect, create a polarized society and parallell description of our reality. PROPOSED TRANSLATION: By splitting the program into three seperate parts and effectively isolating the three parts from each other - rendering large parts of the building out of reach depending on your chosen point of entry.

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#### ATTENTION ECONOMICS

PROBLEM: The digital attention crisis is caused by technology companies designing mobile devices and social media features in order to capture as much attention as possible. There are several ways that tech companies try to maximize the time we spend using their products: reward systems, causing people to fear missing something important, increasing the desire for social approval, creating a personalised news feed engineered to make you stay or interrupting people's day by alerting them of a notification. PROPOSED TRANSLATION: The proposed strategy to translate this is by forcefully elongating the time people spend within the spaces. It is achieved by having a convoluted plan which functions in a similar manner to that of a IKEA store - where the circulation works like a loop, forcing everyone - regardless of intention - to walk through the entire store, spending more time. The resulting plan should essentially look like a labyrinth.

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#### DATA SMOG

PROBLEM: Another problem is the constant flow of information we are exposed to on a daily basis. Targeted advertisments, promoted content, related articles and other sources of information are constantly calling for your attention creating an information overload. PROPOSED TRANSLATION: The proposed strategy to illustrate the excess of information is simply by adding an abundance of elements calling for your attention, adding object on top of object creating a large amount of focal points of the design - making it hard to focus and on one subject matter.

#### **Objet Trouve**

As a way to mimic, or rather make use of, the foundation of the project - the Internet the method of design is similar to the one found within the art movement called Objet Trouve, Found object.

Objet Trouve describes art created from undisguised, but often modified objects - the main difference being that the found object in this case is found on the Internet. The objects found on the Internt. The objects downloaded are managed as a catalogue of building blocks used to design with. The elements are restricted to 2-dimensional CADobjects of architectural nature. This is to make sure of a coherent language. The objects, much like within the Found objects-movement, are manipulated in different ways. To the right a prime example of a piece which could be described as Objet Trouve by Louise Nevelson (1899-1988). The piece showcases several eclectically sized boxes stacked in a grid with found wooden object placed as on display in the boxes painted in a monochrome black.

This informed the method of design as the same process was adopted: downloading objects (finding objects), geometrically manipulating the objects (painting the objects) and finally collaged into a 3-dimensional grid (placed in boxes).



ABOVE: Black Wall by Louise Nevelson (1959)

### The etchings of Piranesi

As another inspiration designwise the etchings of Giovanni Battista Piranesi was used. His etchings are known for their gloomy depiction of neo-classical Rome as well as his series of Imaginary Prisons which feature impossible spaces and claustrophobical web of architectural elements interconnected - almost like a collage.

The etching *Via Appia and Via Ardeatina* feature a road in ancient Rome with each edge of the road full of artefacts such as statues, columns and bysts. This, all-in-all, create a landscape of disparate sculptural elements, almost as walking through a museum of city-like proportions and with no overall hierarchy.

The series 'Imaginary Prisons' feature intricate architectural elements. Somespaces are not even theorethically possible to build due to its optical abilities. The atmosphere of the claustrophobic yet large spaces, featuring countless objects and focus points were later going to be referenced in the design proposal.



ABOVE. Giovanni Battista Piranesi, Via Appia and Via Ardeatina, from Le Antichita Romane, 1756



ABOVE. Giovanni Battista Piranesi, Carceri Series, Plate XIV

# Method

The method used to design is novel and un-orthodox. The design is based off of an abundance of volumes with intricate geometries intersecting and overlapping each other. The fragmented design was dealt with in the same way one would make a 3-dimensional collage - collecting objects, potentially modifying the objects and then assembled into a larger structure. This process is similar to the one in the art movement Found object, Objet Trouve, which describes art created from undisguised, but often modified objects. Objet Trouve as an art movement consist of a wide range of pieces spanning the urinal put on display by Marcel Duschamp to the intricate collagelike work in wood by Louise Nevelson. The latter artist has especially given inspiration to the way pieces are assembled together. The main difference in this instance, comparing Objet Trouve and this thesis is that the found object is found within the foundations of this thesis topic - the Internet.

Each of found elements are CAD-shapes downloaded from sources on the Internet. I limited myself to the sole use of architectural shapes such as detail drawings of cornices, capitals and friezes. These were gathered into a large catalogue of elements which were used as a library of building blocks which then were used in the design.

To the right the linear design process is explained. First sources of data are found and elements downloaded. A process of digital cleaning and curating is needed to isolate desired objects and make sure the geometries are valid and not bad. The processed shapes are put in an element library. The next step involves the geometrical manipulation - the designing of volumes and spaces.

The program is split in three seperate and architecturally different parts. The different architectural languages are based on certain rules - each realm has its own set of rules dictating which geometric tools are used. The first part, Stamp, features as its main tool the command 'extrude'. The extruded elements are placed orthogonally in relation to each other creating a landscape defined by Mannerist ideas of insertion, intersection and interaction of spaces in plan. In this part of the building the rooms are perceived individually. There is a distinct border between spaces. Furthermore, the scale of the objects not only differs from the original downloaded elements, but also among the elements within a part. These at times bizarrely scaled objects create a Piranesian atmosphere with neo-classical elements such as the intricate profile of a cornice being enlarged into a floor-toceiling sized column.

The second part, Array, makes use of tools such as offsetting surfaces and arraying objects in a repetitive order. The spaces are characterised mainly through tall vertical elements which are repeated in a strict grid. The elements are slim and spaced further apart from each other than in the other two parts of this building. This results in transparent spaces with sight lines over large distances within the rooms. This part also functions as the larger structural framework in which the two others nestle.

Lastly, the third part, Carve, is of a volumetric nature. It is, in a way, opposite to the first one. Instead of progressing through a landscape of extruded objects one walks in the void left by the object if it being subtracted from a larger volume. As the positive shapes - the objects - are overlapping, they create continuous spaces. Rooms progressively transform from one to another with no clear boundaries between rooms. Instead, there are countless niches and corners created by the overlaid geometries. The small ones provide the opportunity to be used as study spaces whereas the larger niches created can be used as meeting rooms or even lecture spaces.



1. Source of downloadable objects



#### Cornice detail in Biblioteca Marciana

A Renessaince library in Venice, Italy, designed by Jacopo Sansovino and built between 1537 and 1553



#### Portal in Palazzo della Cancelleria

A Renaissance palace in Rome, Italy, designed by Donato Bramante and built between 1489 and 1513

2. Digital preparation



#### Cornice detail in Palazzo Medici Riccardi

A palace in Florence, Italy, designed by Michelozzo di Bartolomeo and built between 1444 and 1484



3. Element library



Stamp KEY PERATIONS: Scale, Rotate3D (increments of 90°), Extrude, Trim, Move



**Array** KEY OPERATIONS: Scale, Rotate3D (increments of 90°), OffsetSrf, Array, Move



**Carve** KEY OPERATIONS: Scale, Rotate3D, Extrude, Move, BooleanDifference

4. Geometric manipulation









Array



Carve



Design proposal





LEFT. Site plan. Note the proximity to the two buildings with most political importance in Sweden.

ABOVE. Entrance plan.

NEXT THREE SPREADS: Plans.




0 5 10 20







0 5 10 20







LEFT: Southeast perspective elevation.

 $NEXT\,SPREAD:\,Northeast\,perspective\,elevation.$ 

IN TWO SPREADS: Axometric sectional drawing. The colors illustrate the seperate parts of the building - completely isolated from each other and designed with different tools.











 ${\tt ABOVE:}\ Individual\ a xometric\ section\ drawing\ of\ the\ Stamp-bubble.$ 



ABOVE: Individual axometric section drawing of the Array-bubble.



 ${\tt ABOVE:}\ Individual\ a xometric\ section\ drawing\ of\ the\ Carve-bubble.$ 



RIGHT: Exploded axometric drawing showcasing the seperate parts and its placement within the whole.

















































## Design development

In terms of design progress there have been three majorly important design milestones. The first design iteration included an approach more focused on data, and the interaction between software and hardware - architecture imitating hardware. This was the first design iteration, it worked in some ways and achieved architecturally interesting results but was lacking in terms of a strong conceptual narrative.

The second major milepost was the mid crit design this was the design outcome which would lead to the final design proposal. It suggested to use Internet as a design database which could be used to collect elements which would be used as building blocks Simultaniously as it was using the Internet as a plan it also translated three abstract concepts from virtual space to physical space - attention economics, data smog and filter bubbles. The final design is foremost updated in terms of how the downloaded elements are dealt with and how this method fits in within the narrative.

To the right a design developments scheme with the major design milestones; pre mid crit, mid crit and final seminar.



 ${\it ABOVE.}\ Design\ evolution\ scheme\ with\ major\ design\ mile\ stones.$ 



ABOVE. Traced circuit card in a Internet modem. (Interim 1)



ABOVE. The circuit card was traced, split, extruded and stacked to achieve the above conceptual design proposal. (Interim 1)

NEXT SPREAD: Plans of the same design proposal. (Interim 1)



































ABOVE: Interior perspectives. (Interim 1)







ABOVE: Interior perspectives. (Interim 1)



ABOVE: Model, 1:20. Elevation view. (Interim 1)

RIGHT: Model, 1:20. Perspective. (Interim 1)




## ABOVE: Section perspective. (Mid crit)

RIGHT: Element library. The first design ouput which showcased the intent of utilising the Internet as a database of downloadable building blocks. (Mid crit)

NEXT SPREAD: Exploded axometric drawing of the three parts (filter bubbles) making up the building. A commentwhich arised during the mid crit was the homogenity of the three parts. Why are they not reflecting the nature of filter buubles - that they are innate different by definition. (Mid crit)

IN TWO SPREADS: A close up of one of the parts (filter bubbles). (Mid crit)













ABOVE: Axometric section from a slight angle. (Mid crit)

RIGHT: Close up axometric drawing. (Mid crit)



## Discussion

This thesis - titled 'Library of Echoes' - is a speculative project which tries to physically represent abstract concepts which commonly only exist in virtual space - the Internet. The project, a library in Stockholm, has been undertaken with the intent to translate two selected concepts which are associated with the Internet; filter bubbles and attention economics.

The Internet has been accessible to households ever since the mid nineties and historically the Internet has been described as a utopian tool - something that would democratise knowledge and facilitate cultural exchange. The past couple of years this statement has been challenged as the Internet has undergone a drastic change of nature - it has become a platform which accelerates polarising tendencies in our society. An article in newspaper Dagens Nyheter, titled 'Time to Prounounce the Idea of a Utopian Internet Dead', - which pointed this out - was the initial spark which had me wondering, the problematic issues we are faced with online, can those be physically manifested as architectural spaces? Can one translate abstract concepts solely existing in virtual space into analogue architectural spaces?

Internet is essentially a platform with the sole purpose of storing and distributing information. Traditionally this function has been carried out by libraries. As the Internet and the library share the same core function - gathering knowledge into a collectively accessible database - the library has been chosen as the program.

The comparison between the Internet and the library is not new. In 1941 the novel 'Library of Babel' was published, written by Argentine author Jorge Luis Borges. This novel has often been used as a way to describe and problematise the future of the Internet - this despite the fact that it was written well before the Internet existed. The novel describes a fictional maze-like library containing all possible books ever written. It does this simply by containing each possible combinations of letters and by sheer probability, even though almost exclusively every book is gibberish, it will contain all books ever written. The book asks how valuable information really is if you have no way to find what is useful and what is not. This aspect of the Internet has become particularly a hot topic recent years with the introduction of 'fake news' on a global level, something which, so far, have affected political elections and votes in countries such as the United States, France and Britain.

The design is fragmented into distinct pieces and can be described as a 3-dimensional collage. The rooms can be read from the exterior and are perceived as individual objects, together making up a whole. Each of these volumes are based off of 2-dimensional CAD-shapes downloaded from the Internet. I limited myself to the sole use of architectural shapes such as detail drawings of cornices, capitals and frieze. These were gathered into a large catalogue of elements which were used as a library of building blocks. This is approach to design is similar to the one that can be found in the art movement Objet Trouve, Found Object, which describes art created from undisguised, but often modified objects - the main difference being that the found object in this case is found on the Internet.

One of the most notable issues on the Internet is what is referred to as a 'filter bubble' or 'echoe chamber', this is a state of intellectual isolation which occur due to algorithms selectively guessing what information a user would like to see based on information such as location, past click-behaviour and search history. This has rendered large groups of people effectively isolated from each other. As this issue exists only in virtual space, on a platform which have existed for less than a percent of a percent of humankinds lifespan it is difficult to comprehend as to why it is a problem that groups are isolated from each other. But, if we imagine this would not be occuring in virtual space, but physical, it is a pretty dark image painted - a space which, depending on your previous decisions, have you surrounded only by like-minded people and isolate you from the rest. This sounds really dangerous, right? Why is it less so when on the Internet?

In this design, this is reflected by splitting the program in three isolated parts, there is no interaction between A, B and C - not even visually as apertures are tried to be minimally used - to further exaggerate the isolation. Depending on the point of entry you chose when you entered the building you are forced to 'stay in your lane'. Furthermore, as this is a library, depending on the choice you made when you entered the building, you are limited to the information located within your part, much alike as in a filter bubble. The three parts are distinctly different, they each have their own architectural language which influences both the exterior appearence and the interior spaces. The different languages are based on certain rules - each realm has its own set of rules dictating which geometric tools are used for which part. They initial shapes do not vary from part to part - they are exclusively selected from the collective element library.

Together, these three realms create a labyrinthlike plan and section - it makes one having to walk in convoluted ways to reach your desired destination. This is a purposefull means of design as this is a reference to another issue we can see thriving on the Internet today - attention economics. Attention economics is a term coined to describe the phenomena where companies use our attention as a commodity as any other resource - gold, iron or energy. Something that can be harvested and sold for profit. As any other resource it is not endless, we only have so much attention, this has led to a zero sum race to capture our finite attention. This has led to social media adding features deliberately trying to take as much of your time as possible. -This they do by, for example, creating incentives for daily updates, autoplay-functions and creating a personalized news feed engineered to make you stay. All-in-all, these platforms are not made for its user but for its owners, using them as an oil platform but harvesting your attention instead of oil. The intricate plan forces you to stay longer and not being able to find your way intuitively, essentially purposefully force you to spend time inside it time you did not intend to spend there.

The volume is not easy to perceive as they contain many details and they extend and overlap onto each other. The expression of a shattered volume I believe correctly reflects the interior spaces. Another aspect of interest is its placement within the historical centre of Stockholm. As the building is a 3-dimensional collage of found architectural objects, the same language that can be found in the proposed design can be seen and mirrored in its architectural surroundings - if one disregard scale as a factor.

This thesis paints a dystopic picture of the Internet and the way it is being used today, this is because I have limited myself to focus on the more problematic side of the Internet. Obviusly there are countless positive aspects of the Internet as well. I believe the conclusion of this project would be a call for awareness about how virtual spaces work. One need to know the neccessity to question sources of information, to be aware that you are comfortly being fed news aligning with your already exisiting ideology.

## References

Borges, J. L. (1941). The Library of Babel. Editorial Sur.
Eco, U. (1980). Il nome della rosa. Brombergs förlag.
Harari, Y. N. (2011). A Brief History of Humankind. Harper.
Kellerman, A. (2016). Geographic Interpretations of the Internet. Springer.
Wu, T. (2016). The Attention Merchant The Epic Scramble to Get Inside Our Heads. Deckle Edge.

Thente, J. (2017). Dags att dödförklara utopin om Internet. *Dagens Nyheter*. Available at: https://www.dn.se/kultur-noje/jonas-thente-dags-att-dodforklara-utopin-om-internet/ [171117].