

# **RESEARCH PLAN**

## **“A HYBRID BINCKHORST”**

TU Delft

Faculty of Architecture and the built environment

Public Building graduation studio

22-11-2021

Daphne Vlak

4673832

## Problem

The neighbourhood of Binckhorst is located close to the city centre of the Hague and currently has a mainly industrial function. Bigger cities in the Netherlands usually locate these industrial areas at the edge of the city to use the space in the heart for living, commerce and retail. Instead of relocating this function, the city grew around Binckhorst over the years. With the Hague continuing to grow in size the Binckhorst is not at the edge of the city anymore, and due to the strategic location of the area opportunities arise that can be utilized if the city wants to continue on growing. This explains the vision for the city of the Hague to densify the area and include more housing, to tackle the housing shortage and shortage of public buildings. This vision is agreed with for this research. In this process however, the municipality also wants to ensure that the current companies can stay in the Binckhorst, as they have been attached to the area for long and the municipality finds it unethical to move them out. This will result in an area with a multiplicity of functions, meaning that the area will combine different programs such as living, working, education, shopping and so on. Due to the densification in height this will also mean the production of hybrid buildings, different purposes carried out under the same roof. A hybrid can be understood as a building where the sum of the functions under the same roof is greater than the separate parts. This idea is explained more further on. The question arises what it means for urbanity and architecture to be a hybrid and how the future music marvel venue will respond to this context.

Research questions:

*How can the music marvel of the future serve the contemporary architecture, characterized by its hybrid character, that is coming to Binckhorst?*

1. What does it mean for architecture to be of a hybrid form?
2. How does this translate to the scale of a building plan and into user experience?
3. How will the music marvel, in this context, take a position towards the hybrid typology?

For the densification in question, heights of up to one hundred and twenty meters and numbers of up to five thousand houses have been mentioned in the urban planning of the municipality of The Hague.<sup>1</sup> This will have to mend with the current program in an area of 146 hectares (or 204 soccer fields). In 2020, there were only 2750 people living in the area of Binckhorst, giving it a density of 18.8.<sup>2</sup> To give this number some context, the city centre of The Hague had a density of 140 at that same time. The plans for Binckhorst will give it a future density of 87.3, so about 4.5 times what it is now. Simultaneous to this densification the municipality is trying to transform the area into a safe, green and car-mellow environment for people to come and live. Unifying these ambitions with the desire to keep the current companies poses significant challenges. Industrial and living functions could disturb each other, but they can complement each other on other fronts such as stimulating a local economy, reducing travelling distance or retaining the innovative character of a city.<sup>3</sup> Combining this multiplicity of function in a dense area results in a design where functions are stacked on top of each other, being parts private and parts public, creating hybrid blocks. Figures 1, 2 and 3 show examples of such blocks that are planned for Binckhorst.



Figure 1 <https://imbinck.nl/2020/09/15/denk-mee-over-de-toekomst-van-de-maanweg/>

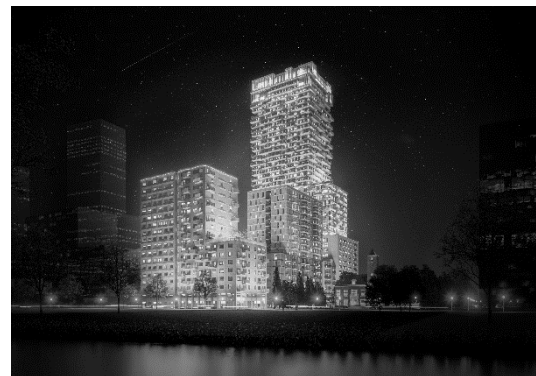


Figure 2  
<https://www.denhaagcentraal.net/nieuws/binck-city-park-woontorens-bij-kasteel-binckhorst-goed-voor-duizend-appartementen/>

<sup>1</sup> Municipality The Hague, retrieved from: <https://www.denhaag.nl/nl/in-de-stad/wonen-en-bouwen/ontwikkelingen-in-de-stad/ontwikkelingen-binckhorst/omgevingsplan-binckhorst.htm>

<sup>2</sup> <https://allecijfers.nl/wijk/wijk-39-binckhorst-den-haag/#:~:text=Het%20aantal%20inwoners%20in%20de,januari%20in%20het%20bevolkingsregister%20vastgel>egd.

<sup>3</sup> Madanipour, A., Knierbein, S., & Degros, A. (2013). *Public Space and the Challenges of Urban Transformation in Europe*. Taylor & Francis.



Figure 3 references future planning of Binckhorst (<http://www.urhahn.com/waardecreatie-binckhorst-noordwest-den-haag/>)

## Relevance

### A hybrid building

The research centres around the idea of what it is to be a hybrid. Rumoer quotes: *“Biologically, hybrids are formed by altering or hybridizing the DNA sequence of two organisms which leads to genetic variation. It is possible to apply this process in architecture and experiment if the architectural species will survive or not.”*<sup>4</sup> We can look at the built environment in the natural sense, it is something that is living and breathing, moving and growing or dying. A true hybrid is when the qualities of that offspring surpass the qualities of either parents. This process is called heterosis<sup>5</sup> It is possible to create a hybrid building organism with multiple uses intersected, a retrofitting system that can support weaker activities.<sup>6</sup> So when pondering on new creations in this sense, we also ask ourselves what it means for a building to be a hybrid from an architectural outlook and what makes it a success.

The personality of the hybrid is a celebration of complexity, diversity and variety of programmes. It is the crucible for a mixture of different interdependent activities.<sup>7</sup> The ideal hybrid feeds on the meeting of the private and public spheres. The permeability of the hybrid makes it accessible from the city and the private use of its services extends its timetable to 24 hours a day. This means that activity is constant and is not controlled by private or public rhythms.<sup>8</sup>

<sup>4</sup> Rumoer 73: Futurity | Bout | TU Delft

<sup>5</sup> <https://www.britannica.com/science/heterosis>

<sup>6</sup> Per, A. F., Mozas, J., Arpa, J., & a+t architecture publishers. (2011). *This is Hybrid*. a + t ediciones.

<sup>7</sup> Per, A. F., Mozas, J., Arpa, J., & a+t architecture publishers. (2011). *This is Hybrid*. a + t ediciones.

<sup>8</sup> Per, A. F., Mozas, J., Arpa, J., & a+t architecture publishers. (2011). *This is Hybrid*. a + t ediciones.

## Hybrid vs mixed-use vs social condenser

In the book *This is Hybrid* there are three typologies laid out to help gain a better understanding of the idea of a hybrid, the first of course being of a hybrid, second a mix-use building and the third a social condenser.

When researching this terminology, one can quickly conclude that there is no clear definition of the terms and is often substituted for the term 'mixed-use'. However, these two terms differ in their meaning. A mix-use building and a hybrid are the two ends of the same scale.<sup>9</sup> Mixed-use means that the building contains several functions under the same roof, but they are not mixed. Their spaces are simply back to back. Generally, the functions placed in the building have nothing in common with each other. On the contrary, hybrid buildings contain functions and spaces that are integrated with each other and interact. These functions may not always be complementary, but they might share the same target group. The sum of the parts of a hybrid building is always greater than the parts separated. This does not go for mixed-use buildings. The hybrid building will always fight against those segregationist morphologies that allow the escape from some use and looks to unite, inside their area of influence, all of the activities that can provide life to it.<sup>10</sup> Figure 5 shows an example of a hybrid building: John Hancock centre. Figure 6 shows an example of a mixed-use building: De Rotterdam. See appendix for larger images.

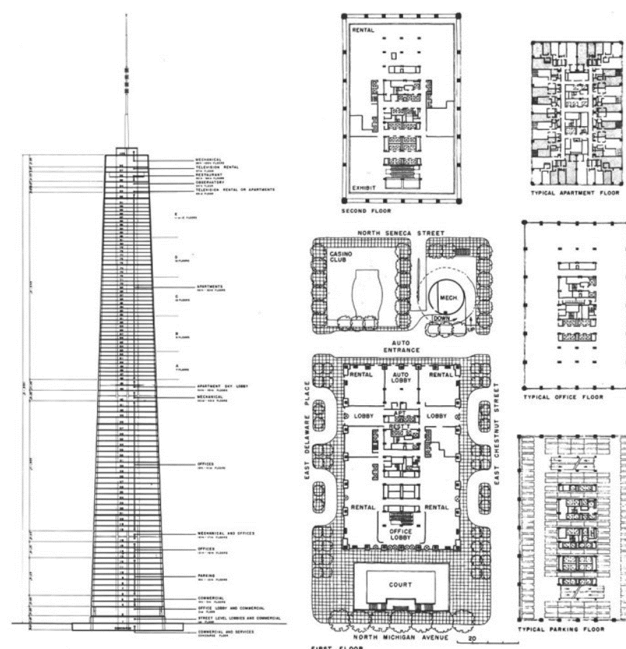


Figure 4: John Hancock center (<https://archeyes.com/john-hancock-center-at-skidmore-owings-and-merrill/>)

<sup>9</sup> Angie, P. *Mixed Use vs Hybrid*. Retrieved from: <https://www.scribd.com/document/384498297/Mixed-Use-vs-Hybrid>

<sup>10</sup> Per, A. F., Mozas, J., Arpa, J., & a+t architecture publishers. (2011). *This is Hybrid*. a + t ediciones.



Figure 5: De Rotterdam, OMA (Source: Per, A. F., Mozas, J., Arpa, J., & a+t architecture publishers. (2011). *This is Hybrid*. a + t ediciones.)

The third type mentioned is the social condenser. The social condenser stems from a soviet constructivist theory during the late 1920's that architecture has the ability to influence social behaviour. The intention of this idea was to influence the design of public spaces by breaking down social hierarchies and create socially equitable spaces.<sup>11</sup> The alienation and privation of bourgeois or peasant life would be overcome and communities of equality and empathy would arise.<sup>12</sup> The built form of this idea would lead to public plinths and mixed circulation to encourage encounters. This typology can be viewed as the basis for the hybrid building. The main difference is that there is still a clear division between the public and the private, whereas with the hybrid this border is dissolved. Figure 6 shows two examples of social condensers. Public space is marked in blue.

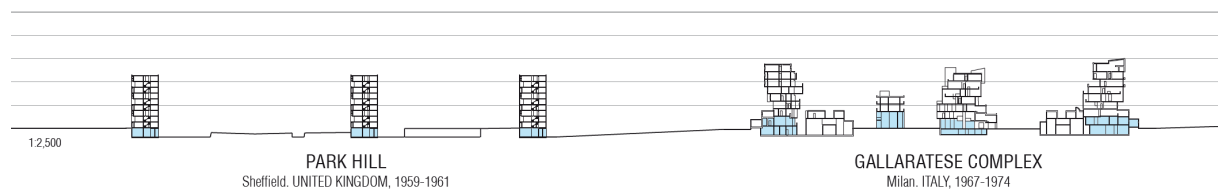


Figure 6: (Source: Per, A. F., Mozas, J., Arpa, J., & a+t architecture publishers. (2011). *This is Hybrid*. a + t ediciones.)

<sup>11</sup> McGetrick, Brendan; Koolhaas, Rem, Ed. (2004). "Content", pp. 73. Taschen, 2004. ISBN 3-8228-3070-4.

<sup>12</sup> Stelka magazine, retrieved from: <https://strelkamag.com/en/article/architecture-revolution-social-condenser>

## **Aim & method**

The aim is thus to conduct a research about the pros and cons of hybrid architecture and how they can be implemented in the Binckhorst area. In this research it is wished to look at the rise of the hybrid as a typology and see if this could be a strategy that will help solve the posed problems for the densification of Binckhorst in a way that satisfies a certain set criteria and could possibly be taken into account when coming up with the design for a new music venue that is to be placed somewhere in the area of Binckhorst. The said criteria centre around the themes of accessibility, density, private/public, space, greenery and general aesthetic. These themes will have a different weight to them when assessing the designs. To look into this idea of hybrid architecture, two possible methods can be used consecutively; the first being a case study analysis. Here it is possible to use the music venues, already analysed by fellow students, presented at the P1 presentations from the public building studio, as well as looking into new venues and/or other typologies. The reason for looking at other typologies is that, even though they might not contain an musical programme, they may combine several other functions that are desired in the final design for the music venue at Binckhorst. After this, the results of the analysis can be used in an experimental research, meaning that different solutions will be tried and tested on the site location and scored according to the set of requirements. Experimental research works with two sets of variables, where the first one acts as a constant. The set requirements will act as constant and the case studies are variables by which the constant compares, measuring the differences.

## **Contribution**

In the academic field, the aim is always to explore interests and learn more, so we can share a better understanding of the world we live in. The contribution to society of this specific research will be that the study can point out the advantages of hybrid architecture as well as the challenges, so that future designers can learn from past designs, as is ever the case with architectural design. It is a way of capturing the built environment at this moment in time and being a reason for certain actions regarding the final design for the music venue. It is very likely that in the future, with a growing population and densification of cities, that buildings are no longer built for single purposes, but as a combination of them. Even in smaller cities it is a concept often thought about and used, because of the awareness of land use and the impact it has on the environment. Most citizens care for their local nature and do not wish to see it all become urbanized, but rather see underused land being reused and buildings being repurposed if that is an available option. It is also a way of thinking about changing lifestyles, which have especially been stirred up since the beginning of the pandemic. People live less in a black and white situation of living and working like they did fifty years ago and grow to a more flexible

schedule, something where a hybrid building will come of use. Think about office and residential spaces combined or sports and food. This is already happening now, but likely to be more of a standard in the future, thus a reason to explore this topic further.

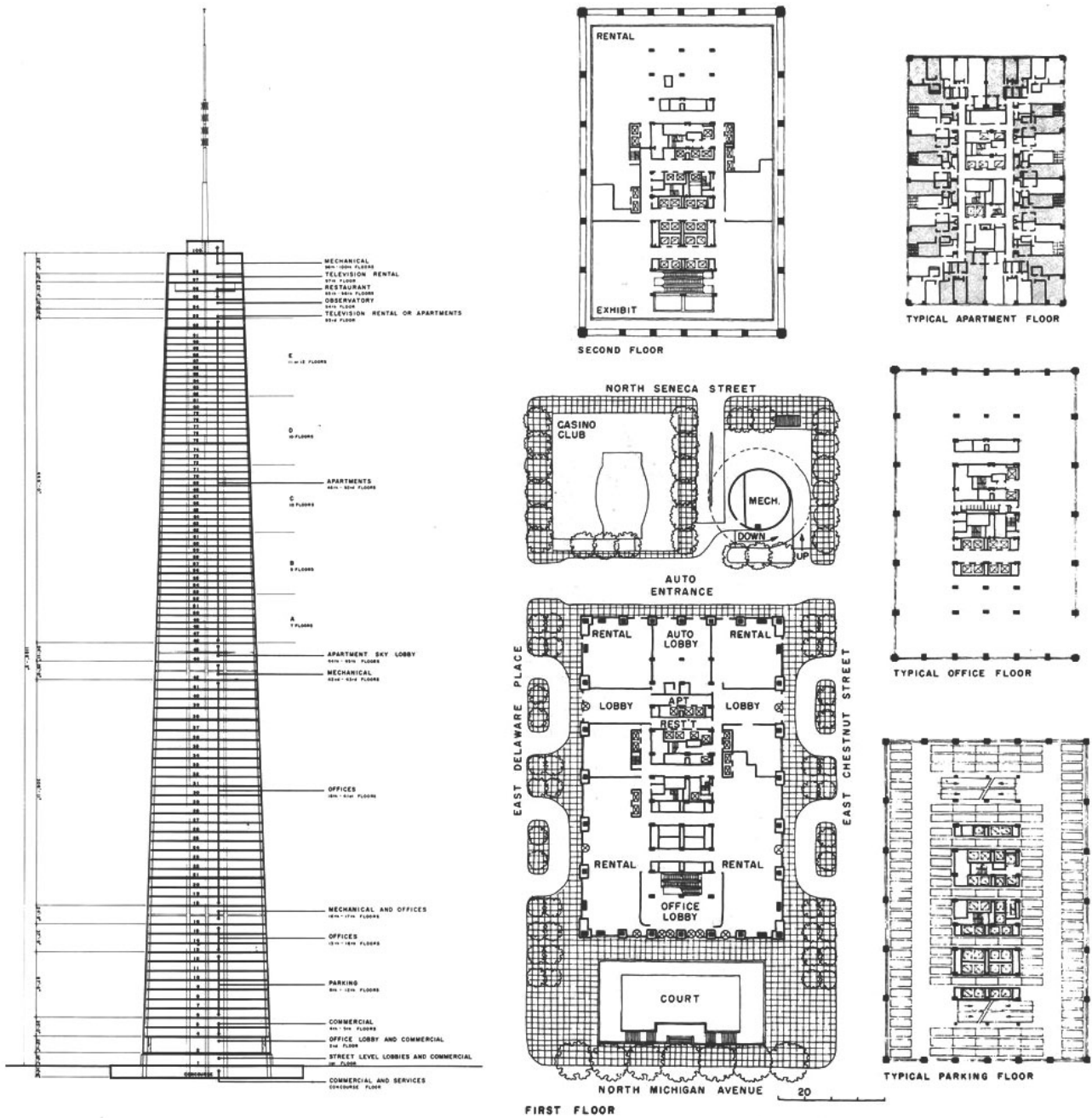


## Literature

1. *Hybrid Urbanism | Hybrid Space Lab.* (z.d.). Hybridspacelab. Geraadpleegd op 17 november 2021, van <https://hybridspacelab.net/project/hybrid-urbanism/>
2. Howells, J. Openshaw, G. Why mixing residential and light industrial is good for our cities <https://aecom.com/without-limits/article/why-mixing-residential-and-light-industrial-is-good-for-our-cities/>
3. Krasilnikova, E. E., & Klimov, D. V. (2016). The Main Design Principles of Hybrid Spaces in Terms of the Urban Planning Regeneration. *RUDN Journal of Agronomy and Animal Industries*, 4, 63–74. <https://doi.org/10.22363/2312-797x-2016-4-63-74>
4. Madanipour, A., Knierbein, S., & Degros, A. (2013). *Public Space and the Challenges of Urban Transformation in Europe*. Taylor & Francis.
5. Marling, G., Jensen, O. B., & Kiib, H. (2009). The Experience City: Planning of Hybrid Cultural Projects. *European Planning Studies*, 17(6), 863–885. <https://doi.org/10.1080/09654310902794018>
6. McGetrick, Brendan; Koolhaas, Rem, Ed. (2004). "Content", pp. 73. Taschen, 2004. ISBN 3-8228-3070-4.
7. Nissen, S. (2008). Urban Transformation: From Public and Private Space to Spaces of Hybrid Character. *Czech Sociological Review*, 44(6), 1129–1150. <https://doi.org/10.13060/00380288.2008.44.6.04>
8. Per, A. F., Mozas, J., Arpa, J., & a+t architecture publishers. (2011). *This is Hybrid*. a + t ediciones.

# Appendix

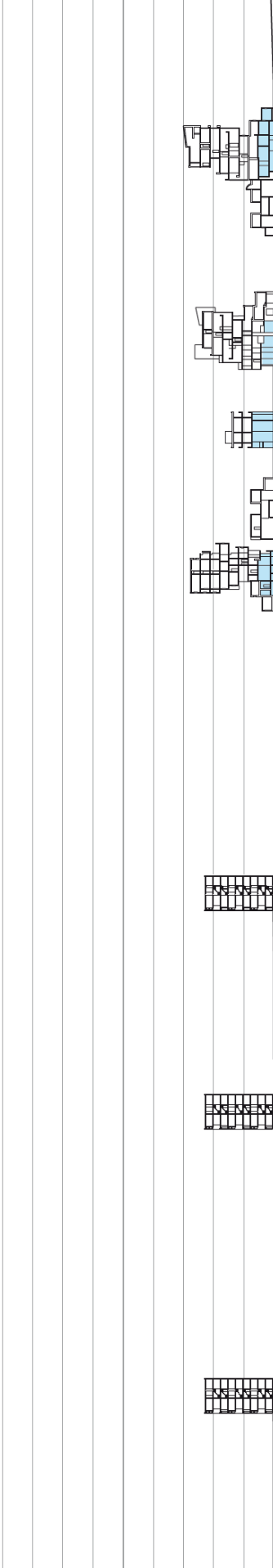
John Hancock centre, Chicago, USA



## De Rotterdam, Rotterdam, Netherlands



USES CAR PARK LIVING LIVE/WORK UNIT OFFICES SHOPPING HOTEL CULTURE CIVIC EDUCATION SPORT OTHER USES



1:2,500

GALLARATESE COMPLEX  
Milan. ITALY, 1967-1974

PARK HILL  
Sheffield. UNITED KINGDOM, 1959-1961