

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

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Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Cem Ada
Student number	4163370
Telephone number	
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Studio		
Name / Theme	Cross Domain - City of the Future	
Main mentor	Roberto Cavallo	Architecture
Second mentor	Mauro Parravicini	BT
Argumentation of choice of the studio	We cannot ignore the vastly changing structures of the societies we live in and have to elaborate on transitions towards future scenario's. The theme of 'phygital' (physical + digital) public space seems to fit in the studio's perspectives smoothly.	



Graduation project	
Title of the graduation project	Schiekadeblok: a phygital public space approach for Rotterdam Central District (RCD)- East.
Goal	
Location:	Schiekadeblok - Rotterdam Central District East
The posed problem,	The time has long gone when public space could simply be considered as bounded material space that was openly and freely accessible to all. In the contemporary society, the public realm is now served and lived in virtual spaces like social media platforms, as much as they once were in streets, squares and parks. The contemporary urban public spatial realm is neither physical nor digital, but an intricate and relational combination of the two. Therefore, in light of this interconnection, there is a need for a (re)conceptualization of public space, both external (urban-level) and internal (building-level).
research questions and	How can the physical and digital public spaces of RCD-East be interrelated to one another in order to create a new urban type of 'phygital' public space, which is able to enhance the social engagement of the public realm in this area?

design assignment in which these result.

In the recent past the phenomenon of Pokemon Go has already illustrated a way in which the digital and physical spaces can be merged. The application, used on smartphones, triggered the users to explore public spaces that were marked as hotspots, in some cases equally in both worlds, physical and digital. The smartphone application even showed that it could be used to revive abandoned physical public spaces and make them attractive and inviting again through the digital. Regarding the architect's role, I would like to invert this argument and look for a way in which the physical design of a public space can invite and attract a digital layer or use, so that the physical and digital public spaces can evolve and develop along each other through time. To do so, I have to explore possible junctures in the physical spatial design, where the digital layer can be intersected or attached. In order to elaborate on a possible relationship between the physical and digital spaces, it is necessary to look for clues that both worlds have to deal with. It is generally acknowledged that the digital world has mainly offered global innovation in terms of connectivity, accessibility and adaptability. These three themes can also be investigated in architecture, particularly through their usage in the shaping of spaces. Therefore, based on these three themes, the investigation will be focusing on uncovering possibilities for a dialectical relationship between the physical and digital public places. The aim is to integrate connectivity, accessibility and adaptability through both the physical and virtual public environments in order to stimulate an integrated use that serves and contributes to the contemporary public realm.

The design-aim is to make the use of physical public space compatible with the use of virtual space, so that it is capable of evolving along with the technological developments in the near future, instead of losing its value due to the digitalization. Within this research, the virtual/digital public spaces are mainly referred to public spaces like social media that are accessible through smartphones, because smartphones enable us to be present in both the physical and virtual environments simultaneously, since the study focuses on the intersection of these environments. Also, the use of mobile phones and the accessibility to public spaces is mainly seen through the lens of the pedestrian. The term phygital stands for the synthesis of the terms physical and digital.

The design research will be approached through the lens of three themes, connectivity, accessibility and adaptability in the material/physical sense and how this can relate to or intersect in the virtual public space. As mentioned before, the public spaces, whether physical or digital, are meant to serve the public realm. For the definition of the public realm, I would like to refer to Richard Sennett who argues that the public realm is in its simplest way defined as a place where strangers meet with incomplete knowledge of one another, leading to anonymity and impersonality, which enables an environment for individual and communal development. Whether in a physical or digital space, Sennett emphasizes that the most important fact about the public realm is the activities that are taking place in it, which occur on the base of strangers meeting one another. In this research, I would like to emphasize on this statement and investigate possible ways in which social engaging(interaction/participation) of 'strangers' can take place in phygital public spaces, approached through the three themes of connectivity, accessibility and adaptability. When the public spaces are highly connected, highly accessible and adaptive, the place is more attractive to digital inputs and is therefore more likely to evolve in an integrated manner into the future when it comes to social engagement in the physical public spaces.

Method description

Since the aim of the design research is to propose a new future urban paradigm of public space which is situated in between the physical and digital space, the methodological research is roughly divided in three parts: part one aims to research the physical context and part two the digital context. With the findings of part one and two, part three will explore the possibilities for actually intersecting the physical and digital and putting forward a design-proposal. The overall research is mainly theory led and has an interdisciplinary foundation, because the physical and digital layers are both also much related to social human behavior within these environments. An emic position is almost unavoidable because I find myself in a generation that grew up simultaneously with the technological developments that led to digitalized environments like social media. I want to use this emic position when building up the narrative around the graduation theme and also to position myself within it. But it will be a move between the two positions of etic and emic. Especially while setting up the theoretical framework and approaching possible outcomes for phygital spaces, probably an etic position would suit better from a designer's point of view, trying to address multiple target groups instead of putting forward too much of personal preferences or experiences. Hereby a general overview of the already used, or to be used methods and techniques:

- Qualitative and dialectical literature review. Theoretical framework about the traditional meaning of the public realm and public space is now grounded. For the 'digital' part of the story, quite a lot of literature has been found and will be used to inspire or initiate design motives and tools. Key words within this literature research are phygital space, digital space, augmented space, virtual space/reality etc.
- Location visit and intuitively photographing to look for initial particularities and to get a hold of the location.
- Analytical drawings of the site-location to understand the current situation of connectivity and accessibility to the Schiekadeblock and also to determine what neighboring areas are important to connect to.
- Diagrammatic sketching along the way of reading literature, to filter possible design concepts and to visualize my own interpretations.
- More literature research, especially on the 'digital' aspect of public space in order to get inspired and built a literature framework on the 'phygital'. Conclusions of this research might provide me with new insights and inputs for the design research, especially with regards to the three domains (connectivity, accessibility, adaptability) and how these can interrelate in the physical and digital.
- Photographic reportage. By visiting the site and making photographs of the location and its surroundings, collecting them in a reportage document and analyzing them, two main questions will be answered: what is the current situation with regards to the domains of connectivity and accessibility of the area? And what current 'signs of digitalization' are there already in the area?
- Sketching to initiate the design process. A way to project findings from the literature review on the location, which can lead to design tools and have to be tested and explored.
- Mass-modeling study by means of both 3D modeling and physical model making, in order to project my findings from the design research on the location and to get in line with the municipality's ambition plans for the area with regards to for example high-rise buildings.
- Interviewing private entrepreneurs in the Schiekadeblock and question them about how the use of mobile phones influences the behavior of their visitors, the connectivity and accessibility to the Schiekadeblock and how in their opinion the use of digital services might improve on these aspects.
- Case-studies. Although up until now I could not find a lot of tangible projects regarding phygital public space, there are a few examples already, especially in the retail-branch (phygital stores).

Literature and general practical preference

The general (traditional) framework about the public realm and public space:

- Arendt, H. (1959). *The human condition* ([1st] Anchor books ed.). Garden City, New York: Doubleday Anchor Books.
- Habermas, J. (1978). *Knowledge and human interests* (2nd [English] ed., An h-e-b paperback). London: Heinemann Educational.
- Low, S. (2009). *Towards an anthropological theory of space and place*. *Semiotica*, 2009(175), pp. 21-37. Retrieved 18 Dec. 2019, from doi:10.1515/semi.2009.041
- Sennett, R. (1996). *The fall of public man*. New York: W.W. Norton.
- Sennett, R. (2019?). *Quant*. Available from: <http://www.richardsennett.com/site/senn/templates/general2.aspx?pageid=16&cc=gb>

The main sources for the 'digital' framework about the public realm and public space:

- Aurigi, A. (2005). *Making the Digital City*. London: Routledge, <https://doi.org/10.4324/9781315249964>
- Aurigi, Alessandro and Fiorella De Cindio. 2008. *Augmented Urban Spaces : Articulating the Physical and Electronic City*. Aldershot, Hampshire, England: Ashgate.
- Beckmann, John. *The Virtual Dimension: Architecture, Representation, and Crash Culture*. New York: Princeton Architectural Press, 1998.
- Alex de Freitas, C. (2010), *Changing Spaces: Locating Public Space at the Intersection of the Physical and Digital*. *Geography Compass*, 4: 630-643. doi:10.1111/j.1749-8198.2009.00312.x

Reflection

Cross Domain - City of the Future. Regarding the relation between the graduation studio and my graduation topic, in a very literal sense it can be said that my theme is also a case of *cross domain*, namely the domains of the physical and digital public space. Theories about themes like 'augmented or virtual urban spaces' already emerged since the birth of ICT's (Information Communication Technologies) during the nineties and now to a lesser extent theories about phygital spaces started developing in more recent times. Yet, I could not find (much) tangible projects so far of urban types that are representing these phygital theories and therefore, doing so through my graduation project fits well within theme of 'the city of the future'. As a result of this graduation research, a (design) suggestion will be made from my interpretation of future public space, related to the term phygital, which hints on the intersection of physical and digital space. The relevance of this theme is touching upon more aspects in society than just spatial design, since the digitalization and virtual publicness like social media platforms are heavily influencing our social behavior within both the society and the urban fabric. Since the introduction of ICT's a lot has changed in how we live nowadays, affecting almost every discipline and the way they contribute to the society. New developments come and go in shorter time-spans and so newly created structures have to be able to adapt even faster in order to grow along with these developments. Therefore the theme is very topical and the ever-growing technological developments makes thinking about such future-scenarios not only inevitable, but also necessary.

From a larger perspective, it can be said that the project is trying to undermine the negative influences of digitalization: an increasing anonymous, impersonal and individual society. The very wide-spread opportunities that digitalization offered us and the large innovations on the grounds of connectivity, accessibility and adaptability/flexibility through digital services might have blurred the quality of being, engaging and meeting in physical places. But we must not forget that, despite the many possibilities of the digital world, in the end we will always need physical spaces. Although the virtual world seems to be very conducive to social engagement, on the contrary it can also be said that social engagement in physical form is declining. As a result of such extensive and active participation in society on social media platforms, there seems to be less and less social contact taking place in physical form, because people are becoming isolated by the use of mobile phones. Also, on one side of the argument social media is very much dominated by profiling and positioning yourself within society, but on the other side it creates an enormous amount of impersonality and anonymity when the publicness is lived from behind the screens.

In the end the discussion is not about whether the public space should be in physical or digital spaces, but it is about considering a new urban paradigm of public space that serves the public realm in both ways. Therefore intersecting the physical and digital public spaces by elaborating on the qualities and advantages of both worlds, a more balanced out interrelation will arise in order to serve the public realm at its best.