

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Personal information	
Name	Sjoerd Arjen Rijpkema
Student number	4376854

Studio		
Name / Theme	Dutch Housing	
Main mentor	T.W. Kupers Ir. P.S. van der Putt	Architecture and Dwelling Architecture and Dwelling
Second mentor	Ir. F. Adema	Architectural Engineering and Technology
Argumentation of choice of the studio	The Netherlands is faced with a massive task of creating a million new homes before 2030. This makes researching and experimenting to develop the Dutch Dwelling of the future essential and a useful tool for my future.	

Graduation project	
Title of the graduation project	A new standard for Urban Family Living
Goal	
Location:	Minervahaven, Amsterdam
The posed problem,	<p>The Netherlands is, according to Dutch minister Kajsa Ollongren, faced with a massive task of creating a million new homes before 2030. As the housing stock is increasing, as well is the call to densify the city in order to maintain surrounding green. This is also the case for Amsterdam. The Minervahaven is an old harbour within the ring of Amsterdam which is appointed by the municipality to be transformed into an highly urbanized area. When looked upon the composition of the inhabitant types of Amsterdam, we can recognize a trend. Young families are leaving the city, moving to outskirts and surrounding municipalities. There seems to be a mismatch, in an increasing amount families cannot find a dwelling or think that living in the city is not suitable for children. This is an undesirable trend, as children determine to a large extent the support of many facilities, make cities alive and maintain the cities culture.</p> <p>The one million new homes, to be built to a large extend in the bigger cities in high density, need amongst other things to accommodate these urban families and mitigate the exodus.</p>
research questions and	<p>Main question: In what suitable way can we house urban families in high density?</p> <p>Sub questions: What is a suitable family dwelling?</p>

	How can the transition be softened from dwelling to public street? Wat is a suitable neighbourhood for a family?
design assignment in which these result.	Create a suitable family dwelling complex incorporating amongst other things a smooth transition from private to public and different supportive facilities for families.

Process

Method description

The research is done by literature research and case studies. Based on these findings a project brief is created, this brief is the starting point of the design.

Literature and general practical preference

Angrist, S. (1974). Dimensions of well-being in public housing families. *Environment and Behaviour*, 495-516.

Ardalan, N., Candilis, G., Doshi, B. V., Safdie, M., & Sert, J. L. (1976). *Habitat Bill of Rights*. Tehran: Hamdani Foundation.

Bharat, D., & Ahmed, A. (2012). Effects of High Rise Building Complex on the Wind Flow Patterns on Surrounding Urban Pockets. *International Journal of Engineering Research and Development*, 21-26.

Booi, H., & Karsten, L. (2019). *Gezinnen in Amsterdam - Gaan ze weg of blijven ze?* Amsterdam: Onderzoek, Informatie en Statistiek (OIS) - Gemeente Amsterdam.

Boterman, W. (2012). *Residential practices of middle classes in the field of parenthood*. Amsterdam: UvA (proefschrift).

Boterman, W., Karsten, L., & Musterd, S. (2010). Gentrifiers Settling Down? Patterns and Trends of Residential Location of Middle-Class Families in Amsterdam. *Housing Studies*, 693-714.

Bourdieu, P. (1984). *Distinction - Critique sociale du jugement*. Paris: Les Éditions de Minuit.

Broyer, G. (2002). *The appropriateness of buildings over 20 storeys high for middle-class residents*. Haifa, Israël: Technion, the Israeli Institute of Technology.

BZK. (2011). *Woonvisie*. Den Haag: Ministerie van BZK.

BZK, CBS. (2018). *Ruimte voor Wonen - De resultaten van het WoonOnderzoek Nederland 2018*. Den Haag: Het ministerie van Binnenlandse Zaken en Koninkrijksrelaties.

Cappon, D. (1972). Mental health in the hi-rise. *Ekistics*, 192-196.

Centraal Bureau voor de Statistiek. (2019a). *PBL/CBS Regionale bevolkings- en huishoudensprognose 2019-2050*. Den Haag: Centraal Bureau voor de Statistiek.

Centraal Bureau voor de Statistiek. (2019b, June 26). *Ruim 1 op 10 jonge gezinnen verliet Amsterdam in 2018*. Retrieved from CBS: <https://www.cbs.nl/nl-nl/nieuws/2019/26/ruim-1-op-10-jonge-gezinnen-verliet-amsterdam-in-2018>

Christensen, P., & O'Brien, M. (2003). *Children in the city*. London: RoutledgeFalmer.

Conway, J., & Adams, B. (1977). The social effects of living off the ground. *Habitat International*, 595-614.

CROW. (2004). *Aanbevelingen voor verkeersvoorzieningen binnen de bebouwde kom*. . Ede: CROW.

de Ruiter, J., Weston, G., & Lyon, S. (2011). Dunbar's Number: Group Size and Brain Physiology in Humans Reexamined. *American Anthropologist*, 557-568.

de Winter, M. (2015). *Verbeter de wereld, begin bij de opvoeding*. Amsterdam: SWP publishers.

Dunbar, R. (1993). Coevolution of neocortical size, group size and language in humans. *Behavioral and Brain Sciences*, 681-735.

- Dunbar, R., & Spoor, M. (1995). Social Networks, Support Cliques, and Kinship. *Human Nature*, 273-290.
- Dunbar, R., Arnaboldi, V., Conti, M., & Passarella, A. (2015). The structure of online social networks mirrors those in the offline world. *Social Networks*, 39-47.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston: Row, Peterson.
- Gehl, J. (2011). *Life Between Buildings*. Washington: Island Press.
- Gemeente Amsterdam. (2011a). *Ontwikkelstrategie Haven-Stad Amsterdam*. Amsterdam: Gemeente Amsterdam, Ruimte en Duurzaamheid.
- Gemeente Amsterdam. (2011b). *Structuurvisie Amsterdam 2040*. Amsterdam: Gemeente Amsterdam.
- Gifford, R. (2007). The Consequences of Living in High-Rise Buildings. *Architectural Science Review*, 1-16.
- Helleman, G., & Wassenberg, F. (2004). The renewal of what was tomorrow's idealistic city. Amsterdam's Bijlmermeer high-rise. *Cities*, 3-17.
- Jacobs, J. (1961). *The Life and Death of Great American Cities*. New York: Random House.
- Janssen, J., & Boumans, M. (2017). Naar een eengezinsappartement / Analyse van de inzendingen. *Eengezinsappartement*, 60-87.
- Jephcott, P. (1971). *Homes in high flats: Some of the human problems involved in multi-storey housing*. Edinburgh: Oliver and Boyd.
- Kantar Public. (2019). *Buitenspelen Onderzoeken 2019*. Utrecht: Jantje Beton.
- Karsten, L. (2007). Housing as a Way of Life. Towards an Understanding of Middle-Class Parents - Preferences for an Inner City Residential Location. *Housing Studies*, 83-98.
- Karsten, L. (2015). *Gezinnen en kinderen in verstedelijkte- en plattelandsregio's*. Haarlem: Provincie Noord-Holland.
- Karsten, L. (2017). Het stedelijk gezinsappartement: over de veranderende weging van site en situation door gezinnen. *Eengezinsappartement*, 34-41.
- Karsten, L., & Felder, N. (2016). *De Nieuwe Generatie Stadskinderen*. Rotterdam: nai010 uitgevers.
- Kearns, A., Whitley, E., Mason, P., & Bond, L. (2012). 'Living the High Life'? Residential, Social and Psychosocial Outcomes for High-Rise Occupants in a Deprived Context. *Housing Studies*, 97-126.
- Keesom, J. (2013). *Nestelen in de Stad*. Amsterdam: BNA Onderzoek.
- Koolhaas, R. (1978). *Delirious New York*. New York: Oxford University Press.
- KpVV, SOAB Adviseurs voor Woning en Leefomgeving. (2008). *Inspiratie voor kindvriendelijke wijken*. Rotterdam: Kennisplatform Verkeer en Vervoer.
- Laarman, K., & van Dam, F. (2018). Waar willen jonge gezinnen wonen? *demos*, 4-7.
- Laurens Boodt Architect, AM, Bartels. (2016). *SO Ontwerp Babel*. Rotterdam: Laurens Boodt Architect.
- Lucas, R. (2016). *Research Methods for Architecture*. London: Laurence King Publishing Ltd.
- Lupi, T., de Stigter, M., Karsten, C., Musterd, S., & Deben, P. (2007). *Leven in de buurt. Territoriale binding in drie Vinex-wijken*. Amsterdam: Aksant.

- Manting, D., & Ter Veer, M. (2012). Bevolkingsgroei in de grote steden. *demos*, 1-4.
- Matthews, H., Limb, M., & Taylor, M. (2000). The street as "Thirdspace". *Children's Geographies. Playing, Living, Learning*, 63-79.
- Nabielek, K., Boschman, S., Harbers, A., Piek, M., & Vlonk, A. (2012). *Stedelijke verdichting: een ruimtelijke verkenning van binnenstedelijk wonen en werken*. Den Haag: Uitgeverij PBL.
- Newman, O. (1972). *Defensible Space*. New York: Macmillan Publishing.
- Nio, I. (2009). Mythen van het woonerf - Opkomst, neergang en dynamiek. In A. van der Leun, N. Jutten, & W. Lofvers, *Studie Woonerven* (pp. 4-8). Rotterdam: Stimuleringsfondsvoor Architectuur.
- Pamuk, O. (2005). *Istanbul; Herinneringen en de stad*. Amsterdam: de Arbeiderspers.
- Power, A. (2007). *City Survivors. Bringing Up Children in Disadvantaged Neighbourhoods*. Bristol: The Policy Press.
- Projectteam Babel. (2019). *Babel - Resultaat van workshops*. Rotterdam: AM.
- Putnam, R. (2015). *Our Kids. The American Dream in Crisis*. New York: Simon & Schuster.
- Rotterdam Woont. (2017). *Projectblad Justus van Effenstraat*. Rotterdam: Rotterdam Woont.
- Sennett, R. (2018). *Building and Dwelling - Ethics for the City*. New York: Farrar, Straus and Giroux.
- SOAB Adviseurs voor Woning en Leefomgeving. (2008). *Inspiratie voor kindvriendelijke wijken*. Rotterdam: Kennisplatform Verkeer en Vervoer.
- Stewart, G. (2012). *Robin Hood Gardens - Blackwall Reach*. London: Wild Research.
- Uytenhaak, R. (2009). *Steden vol Ruimte - Kwaliteiten van Dichtheid*. Rotterdam: Uitgeverij 010.
- Van Bergen Kolpa Architecten. (2019a). *VO ontwerp Family Scaper de Maasbode*. Rotterdam: Van Bergen Kolpa Architecten.
- van Bergen Kolpa Architecten. (2019b, 11 3). *Family Scaper de Maasbode*. Retrieved from van Bergen Kolpa Architecten: https://www.vanbergenkolpa.nl/nl/16_family_scaper_de_maasbode.html
- van der Velde, R. (2012). *Oxymoron: introduction urban landscape*. Delft: TU Delft.
- van der Wouden, R. (2016). Succes of falen? Een halve eeuw verstedelijkingsbeleid in Nederland. *Ruimte & Maatschappij*, 6-26.
- van Ulden, E., Heussen, D., van der Ham, S., van Eijk, G., & Galema, W. (2015). *De Stoep - Ontmoetingen tussen huis en straat*. Rotterdam: nai010 uitgevers.
- Volker, B., & Verhoeff, R. (1999). *Buren en Buurten*. Amsterdam: SISWO.
- VROM. (1983). *Structuurschets stedelijke gebieden, deel d: regeringsbeslissing*. Den Haag: Ministerie van VROM.
- VROM. (1988). *Vierde nota over de ruimtelijke ordening*. Den Haag: Staatsuitgeverij.
- Whitzman, C. (2010). Can Tall Buildings be Child-Friendly? The Vertical Living Kids Research Project. *CTBUH Journal*, 18-23.
- Yeh, S., & Tan, S. (1975). *Public housing in Singapore: A multi-disciplinary study*. Singapore: Singapore University Press.

Reflection

The graduation topic fits well within the studio topic: between standard and ideals – Havenstad Amsterdam. The focus lies upon the one million homes that needs to be created before 2030. For family dwellings, a new standard needs to be developed in order to maintain this group for the city, this graduation project tries to answer this. In a larger scientific framework it can be said that this topic combines research of densifying cities and research about high-rise to families, especially urban families.