Appendix 1
Case study

Linnea Ringqvist
Chalmers University of Technology
Department of Architecture and Civil Engineering

Examiner: Ola Nylander
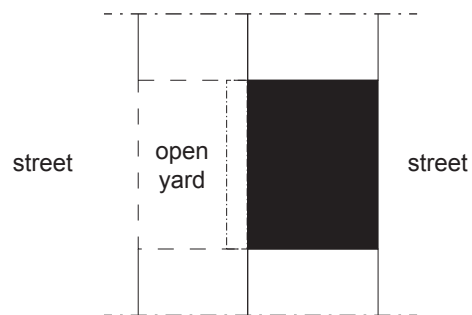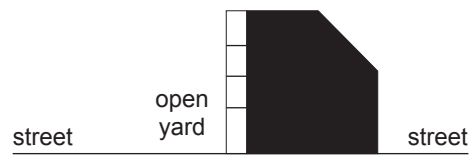Supervisor: Hilda Esping Nordblom

Scarwafa Cohousing

Figure 1. [Scarwafa Cohousing] (van der Kooy, n.d.)
Townhouse structure with somewhat individual expression and the external "superframe"

General information

Location:	Amsterdam, Netherlands	Units:	3
Year:	2016	Size:	647m²
Architects:	Krft	Shared area:	Outdoor

ILLUSTRATION (no scale)

open
yard

street   street

street   open
yard   street

SCHEMATIC ARRANGEMENT (no scale)

ILLUSTRATION (above)

 Building

 Outdoor space

SCHEMATIC ARRANGEMENT

 Private space - apartments

 Shared space - indoor

 Shared space outdoor (closed)

 Apartment size - amount of room(s)

 Shared space - rooftop/balcony

 Shared space outdoor (yard/park)
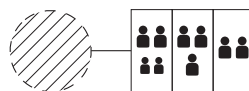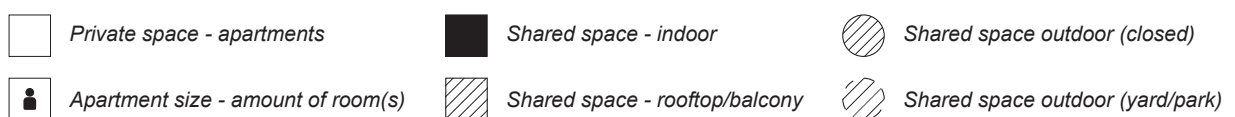
Urbana Villor

Figure 4. [Urbana Villor] (oskarnorelius.blogspot, n.d.)
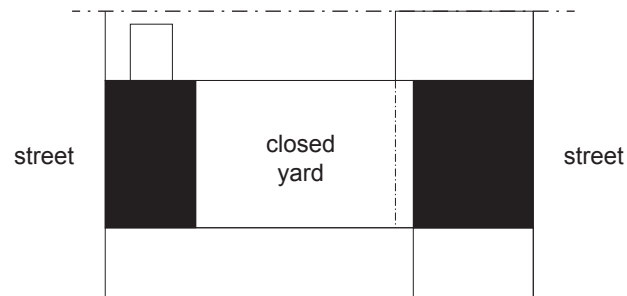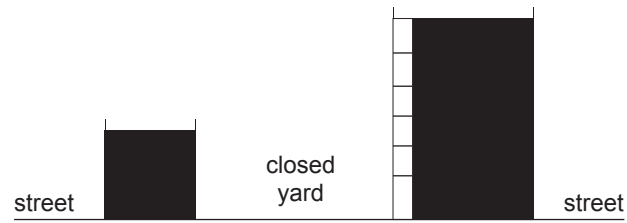*The balconies towards the yard with a 30 cm thick layer of soil works as gardening allotments and rainwater storage*

General information

Location:	Malmö, Sweden	Units:	7
Year:	2008	Size:	1200m²
Architects:	Cord Siegel & Pontus Åqvist	Shared area:	Outdoor/Indoor
			(only storage/greenhouse)

ILLUSTRATION (no scale)

street   closed
                        yard   street

street   closed
                        yard   street

SCHEMATIC ARRANGEMENT (no scale)

ILLUSTRATION (above)

Building   Outdoor space

SCHEMATIC ARRANGEMENT

Private space - apartments   Shared space - indoor   Shared space outdoor (closed)

Apartment size - amount of room(s)   Shared space - rooftop/balcony   Shared space outdoor (yard/park)
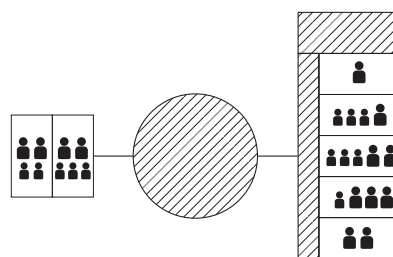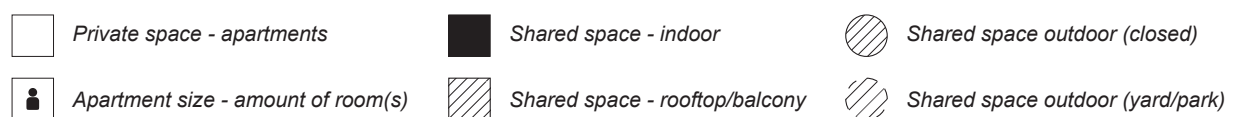
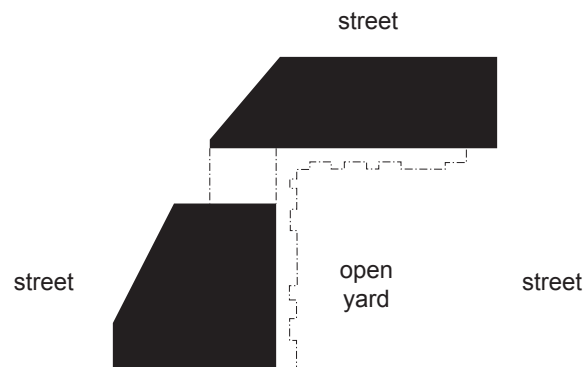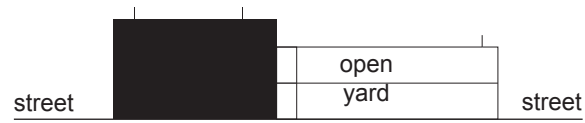# Byfællesskabet

Figure 3. [Byfællesskabet] (Byfællesskabet, n.d.)
The access balconies towards the yard and the rooftop creates generous spaces for neighbours to meet

General information

Location:	Odense, Denmark	Units:	9
Year:	2018	Size:	1290m²
Architects:	Praksis arkitekter	Shared area:	Outdoor/Indoor
			(12,5 m²/apartment = 112m²)

ILLUSTRATION (no scale)

street   open yard   street

street

street   open yard   street

SCHEMATIC ARRANGEMENT (no scale)

ILLUSTRATION (above)

■ Building

▨ Outdoor space

SCHEMATIC ARRANGEMENT

▨ Private space - apartments

■ Shared space - indoor

◉ Shared space outdoor (closed)

▨ Apartment size - amount of room(s)

▨ Shared space - rooftop/balcony

◎ Shared space outdoor (yard/park)
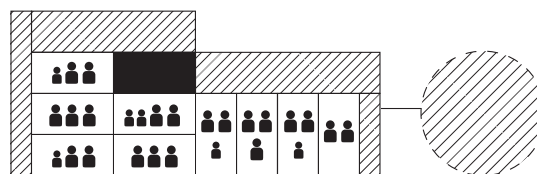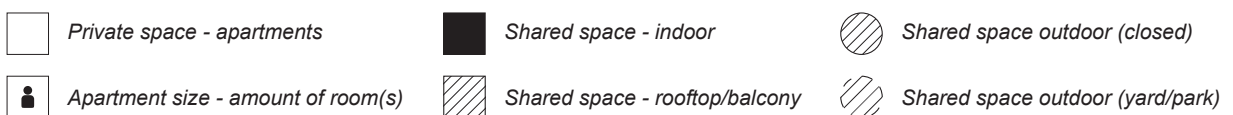
Nanterre Cohousing

Figure 4. [Nanterre Cohousing] (Schelstraete, n.d.)
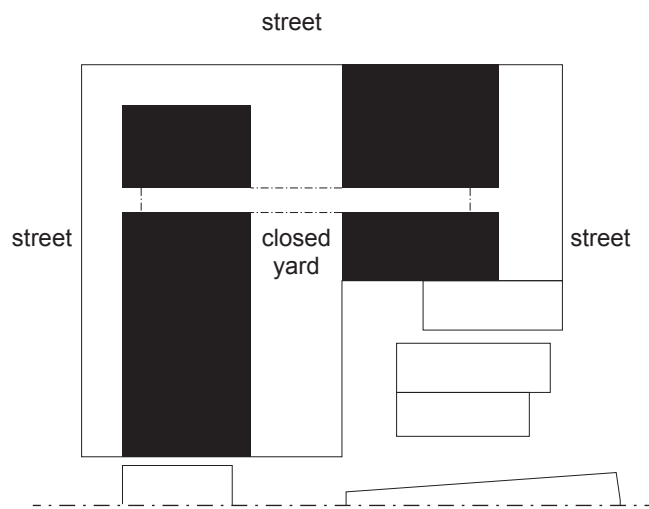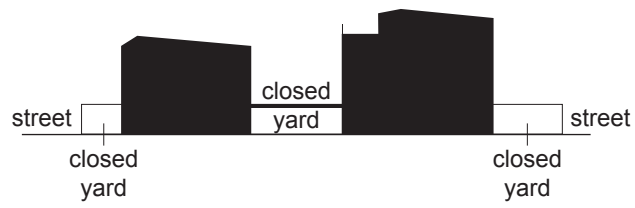*The access balconies and footbridge connects the two volumes and works as a space for neighbours to meet*

General information

Location:	Nanterre, France	Units:	15
Year:	2015	Size:	1620m²
Architects:	MaO architectes, Tectône	Shared area:	Outdoor/Indoor (60 m²)

ILLUSTRATION (no scale)

street   closed yard   street

closed yard   closed yard

street

street   closed yard   street

SCHEMATIC ARRANGEMENT (no scale)

ILLUSTRATION (above)

Building   Outdoor space

SCHEMATIC ARRANGEMENT

Private space - apartments   *Shared space - indoor*   *Shared space outdoor (closed)*

Apartment size - amount of room(s)   *Shared space - rooftop/balcony*   *Shared space outdoor (yard/park)*
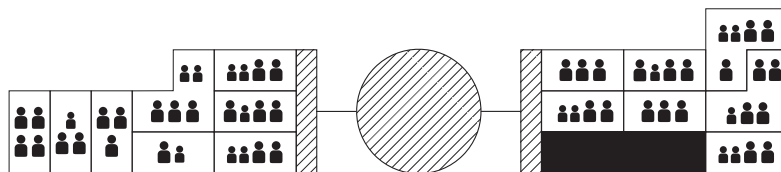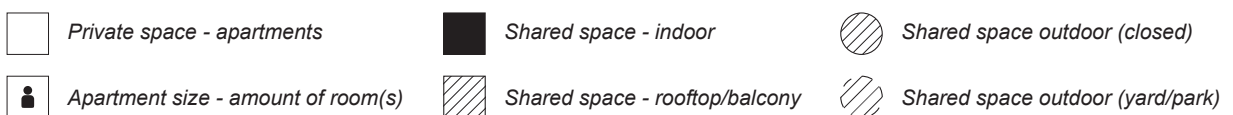
R50-Cohousing

Figure 7. [R50-Cohousing] (Alberts, n.d.)
The all-around balconies connect both the neighbours and all the rooms within each apartment

General information

Location:	Berlin, Germany	Units:	19
Year:	2013	Size:	2037m²
Architects:	Heide & von Beckerath, ifau und Jesko Fezer	Shared area:	Outdoor/Indoor (100 m²)
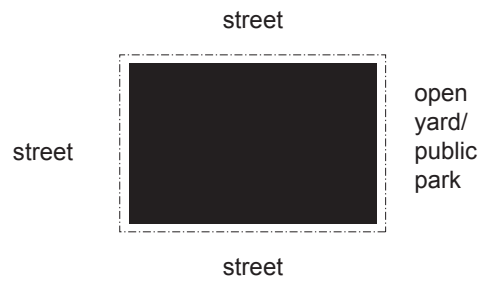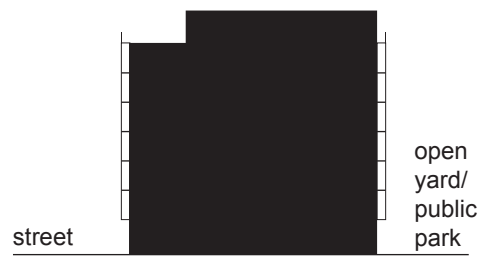
open
yard/
public
park

street

street

open
yard/
public
park

street

street

SCHEMATIC ARRANGEMENT (no scale)

ILLUSTRATION (above)

Building

Outdoor space

SCHEMATIC ARRANGEMENT

Private space - apartments

Shared space - indoor

Shared space outdoor (closed)

Apartment size - amount of room(s)

Shared space - rooftop/balcony

Shared space outdoor (yard/park)
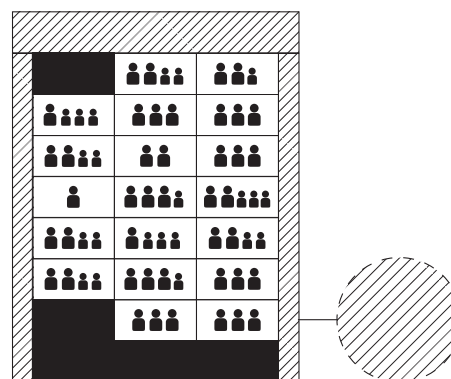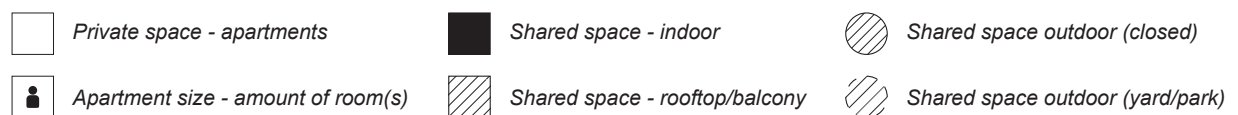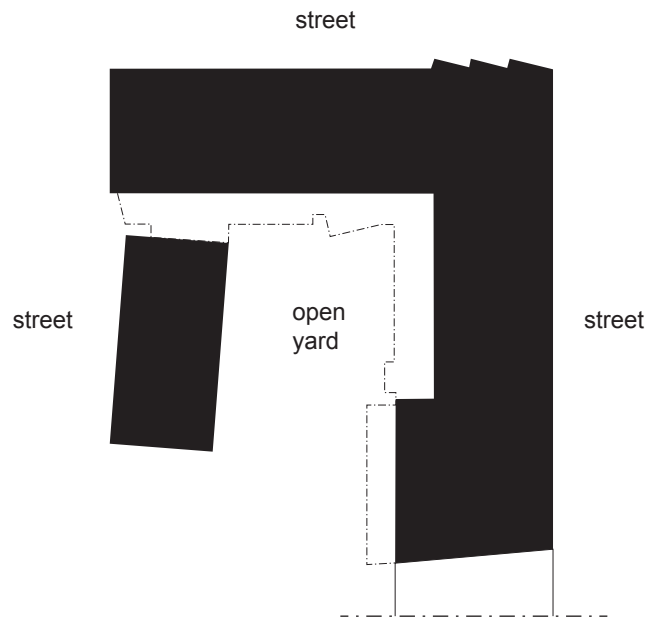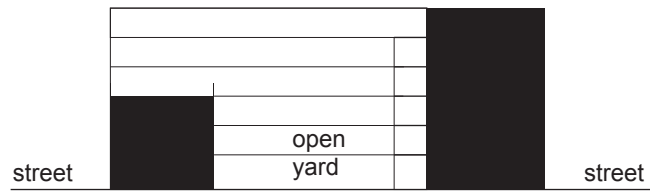
Sofielunds Kollektivhus

Figure 8. [Sofielunds Kollektivhus] (Lukac, n.d.)
The facade towards the yard with access balconies and shared outdoor space

General information

Location:	Malmö, Sweden	Units:	45
Year:	2014	Size:	No information
Architects:	Kanozi Arkitekter	Shared area:	Outdoor/Indoor (300 m²)

ILLUSTRATION (no scale)

open
yard

street   street

street

street   open
yard   street

SCHEMATIC ARRANGEMENT (no scale)

ILLUSTRATION (above)

Building   Outdoor space

SCHEMATIC ARRANGEMENT

Private space - apartments   Shared space - indoor   Shared space outdoor (closed)

Apartment size - amount of room(s)   Shared space - rooftop/balcony   Shared space outdoor (yard/park)
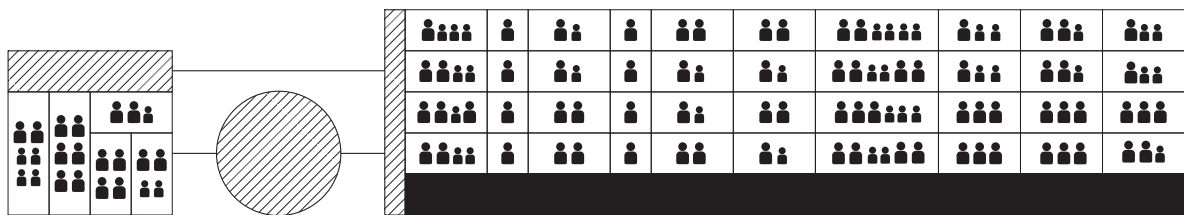
SUMMARY CASE STUDY

Information

	Scarwafa Cohousing	Urbana Villor	Byfællesskabet	Nanterre Cohousing	R50-Cohousing	Sofielunds Kollektivhus
Units	3	7	9	15	19	45
Size	647m²	1200m²	1290m²	1620m²	2037m²	No information
Shared area	Outdoor	Outdoor/Indoor	Outdoor/Indoor 112m²	Outdoor/Indoor 60m²	Outdoor/Indoor 100m²	Outdoor/Indoor 300m²
Residents/ target group	Mixed age	Mixed age	Mixed age	Mixed age	Mixed age	Mixed age
Year	2016	2008	2018	2015	2013	2014
Location	Amsterdam, Netherlands	Malmö, Sweden	Odense, Denmark	Nanterre, France	Berlin, Germany	Malmö, Sweden
Distance from central station	~ 3km	~ 3km	~ 2km	~ 0,5km	~ 3,5km	~ 3km
Architect(s)	Krft	Cord Siegel & Pontus Åqvist	Praksis arkitekter	MaO architectes, Tectône	Heide & von Beckerath, ifau und Jesko Fezer	Kanozi Arkitekter
Building identity	Townhouse structure where each facade has an individual expression and an additional, common, "superframe"	So-called *villa qualities* with big balconies on each floor and an external common staircase for neighbours to meet	Access balconies towards the yard, with big space for neighbours to meet. A more closed facade towards the street	Access balconies and footbridge for neighbours to meet. The footbridge connects the two volumes	All-around balconies connect both the neighbours and all the rooms within each apartment	Access balconies towards the yard for neighbours to meet. A more closed facade towards the street

Apartments

	Scarwafa Cohousing	Urbana Villor	Byfællesskabet	Nanterre Cohousing	R50-Cohousing	Sofielunds Kollektivhus
Ownership	Private owning	Private owning	Private owning	Private owning	Private owning	Cooperative renting
Apartment Sizes	3-5 rok	1-5 rok (90-141 m²)	2-4 rok (75-120 m²)	3-5 rok		1-6 rok (36-131 m²)
Reduced size or function	None	No indoor staricase	Overall apartment size	No information	No information	Overall apartment size ~ 10% reduced
Apartment shape and location	Narrow shape with light from two directions. Duplex apartments in 3 levels	Squared shape with light from two directions.	Various shapes with light from two or three directions. Mix of one level and duplex apartments	Various shapes with light from two or three directions. Mix of one level and duplex apartments	Three apartments on each floor, with light from two or three directions.	Various shapes with light from two or three directions.
Relation to community	Through front yard	Outdoor staricase as link between apartments	Entrancé from common balcony	Entrancé from common balcony	All round balcony as link between apartments	Entrancé from common balcony
Private outdoor space	Balcony (all units)	Balcony (all units) With integrated plant boxes	Balcony (access balconies with more or less private space) With integrated plant boxes	Balcony (some units)	Balcony (all units) Accessible from all rooms, open towards neighbours)	Balcony (semiprivate access balconies)
Individual adaptations	Individually tailored apartments	Individually tailored apartments	Individually tailored apartments	Participatory process and somewhat individually tailored apartments sizes	Individually tailored apartments	Participatory process and somewhat individually tailored apartments sizes

SUMMARY CASE STUDY

Building community

	Scarwafa Cohousing	Urbana Villor	Byfællesskabet	Nanterre Cohousing	R50-Cohousing	Sofielunds Kollektivhus
Shared spaces (indoor) (social)	None	Greenhouse	Multipurpose room Party room Workshops	Multipurpose room Kitchen DIY workshop	Community space (multipurpose room/ meeting room which can be used by the school and others in the area) Store Atelier Business premises Workshop Winter garden	Kitchen Dining room Living room Children's play room Teenage room Exercise room Gym Library Music room Movie room Dance/yoga room Sauna w showers Workshop Ateliér Office Winter garden
Shared spaces (outdoor)	Front Yard	Rooftop terrace Yard	Rooftop terrace Yard	Landings Common terrace Vegetable Garden Yard	Rooftop terrace (with summer kitchen) Vegetable Garden	Landings Rooftop terrace Yard Vegetable Garden
Shared resources/ facilities	None	Bike storage Storage	Drying room Guest apartment Storage	Bike Storage Laundry Storage	Guest apartment Laundry	Guest apartment Loom room Storage (shared stuff) Laundry Toilets
Community activities	No information	No information	Dining 1-3 times/ week	No information	No information	Dining 3 times/week

Sustainability

	Scarwafa Cohousing	Urbana Villor	Byfællesskabet	Nanterre Cohousing	R50-Cohousing	Sofielunds Kollektivhus
Social focus	Joint building venture/ Participatory process Shared outdoor space for social interaction	Joint building venture/ Participatory process Urban gardening and shared outdoor space for social interaction	Joint building venture/ Participatory process Common activities Urban gardening and shared outdoor space for social interaction	Social housing/ Participatory process Shared outdoor space for social interaction	Joint building venture/ Participatory process Urban gardening, shared outdoor space and non commercial spaces for social interaction with each other and existing neighbourhood	Participatory process Teambuilding and common activities Urban gardening and shared outdoor space for social interaction
Ecological focus	Facade system with balconies for shading and greenery (named superframe)	Lifecycle perspective, selective and non-toxic materials Urban gardening and compost of organic waste Energy-efficient means of transport are encouraged (bicycles)	Green roof (sedum) Urban gardening Energy-efficient means of transport are encouraged (bicycles)	Improve building performance with natural ventilation	Energy consumption 30% lower than conventional properties Urban gardening	Focus on ecological/ biological cycle and reduced energy consumption Green roof (sedum) and solar panels "Green" procurement and life cycle analysis Urban gardening and greenery
Economical focus	Reduced construction cost through joint building venture (compared to single households)	Reduced cost through minimized internal communication areas Long-term investment	Reduced cost through joint building venture (compared to regular market price)	Social housing (Offering homes for first time buyers by providing land at reduced cost)	Affordable housing (Reduce construction cost with raw space)	Invest in long-term choices & solutions Shared spaces and housework reduces recurring expenses

List of References

Allabrf.se (2021). *BRF Urbana Villor Malmö*. Retrieved from https://www.allabrf.se/vimpelgatan-9 (2021-01-18)

ArchDaily. (2015). *Nanterre Co-Housing / MaO architectes + Tectône.* Retrieved from https://www.archdaily.com/779035/nanterre-co-housing-mao-architectes-plus-tectone

ArchDaily (2015). *R50 – Cohousing / ifau und Jesko Fezer + Heide & von Beckerath*. Retrieved from https://www.archdaily.com/593154/r50-nil-cohousing-ifau-und-jesko-fezer-heide-and-von-beckerath (2021-01-18)

ArchDaily. (2020). *Scarwafa Co-Housing / Krft.* Retrieved from https://www.archdaily.com/914900/scarwafa-co-housing-krft (2021-01-18)

Bofællesskab.dk (2021). *Oplysninger om bofællesskabet.* Retrieved from https://bofaellesskab.dk/bofaellesskaber/se-bofaellesskaber/byfaellesskabet (2021-01-18)

Broms Wessel, O., & Hedström, H. (2016). *Byggemenskaper: handbok om att bygga tillsammans.*Arkitektur förlag.

Byfællesskabet (2021). *Byggeriet, processen og tegninger.* Retrieved from http://byfaellesskabet.dk/Galleri/processen.html (2021-01-18)

Byfællesskabet (2021). *Byfællesskabet Thomas B.* Retrieved from http://byfaellesskabet.dk/index.html (2021-01-18)

Cohousing Berlin (2015). *R 50 - Ritterstraße 50.* Retrieved from https://www.cohousing-berlin.de/en/projects/r-50-ritterstrasse-50 (2021-01-18)

EU Mies Award (2011). *UrbanaVillor.* Retrieved from https://miesarch.com/work/1587 (2021-01-18)
krft. (2017). *Scarwafa Cohousing.* Retrieved from http://www.krft.nl/project-items/monnikskapstraat (2021-01-18)

Hauschild-siegel (2008). *Urbana Villor - SE.* Retrieved from https://www.hauschild-siegel.com/se-1/uv-se/ (2021-01-18)

Heide & von Beckerath (2015). *R50 – cohousing.* Retrieved from https://heidevonbeckerath.com/single/r50-cohousing (2021-01-18)

Kanozi Arkitekter (2014). *Kv Trevnaden.* Retrieved from https://www.kanozi.se/projekt/kvtrevnaden/ (2021-01-18)

Kollektivhus i Malmö (2014). *Hur KiM skapade SoKo.* Retrieved from https://kollektivhus.wordpress.com/sofielunds-kollektivhus/ (2021-01-18)

Mobile architectural office (2015). *15 Logements Participatifs, Nanterre.* Retrieved from http://www.m-a-o.fr/references/Mao_04-NANTERRE.pdf (2021-01-18)

Open Studio (2009). *UrbanaVillor.* Retrieved from http://www.openstudio.se/projekt/urbanavillor/index.html (2021-01-18)

Praksis (2015). *Boliger, Thomas B. Thriges Gade.* Retrieved from http://www.praksisarkitekter.dk/boliger-thomas-b-thriges-gade (2021-01-18)

Sofielunds kollektivhus (2014). *Om huset.* Retrieved from http://www.sofielundskollektivhus.se/ (2021-01-18)

Sollien, S. (2020). *Byggefællesskaber Grundlag for udvikling af en dansk model.* Retrieved from https://vandkunsten.com/content//2020/06/Vandkunsten-Byggefaellesskaber-Arbejdspapir-spreads.pdf

Westholm, H. (2020). *De byggde gemenskap: Erfarenheter från tio bygg- och bogemenskaper i Sverige.* Gothenburg: Chalmers university press.

List of Figures