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Humanities  
Design Academy Eindhoven  
spring 2021

# tiny room/ community garden



Mapping Domesticities

Designing Urban Life

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Mapping Domesticities  
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How does working in a seven square metre bedroom in a shared house transform the functionality of the spatial elements of a DAE first year student?

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research domain

seven square metre

bedroom in a shared house

The bedroom is placed in a student house for four in Woensel-Zuid. We're focusing on Morgan's room, a 20 year old first-year student from Belgium that recently moved to Eindhoven to study at the Design Academy.

We're looking into a bedroom, usually, the most private space in a house. But as a student you frequently have to *re-invent this space* as it can become more than just a sleeping area. Working, eating, storing all your belongings are new activities and questions you *need to adjust*.

Housing Crisis, pandemic, overconsumption are today raising new problematics on our *relationship* with small living spaces. Usually regarded as an obstacle, small spaces can also open new perspectives on how much we need to live and how we *interact with our space*.

We chose to focus on Morgan because *she is in the centre of these problematics* as a student. She depends on this socio-economic factors. Her art/design student status brings *specific activities* that can be very space consuming and not adapted to a traditional house. Moreover her creative nature will more likely come up with interesting transformations off the space.

*Morgan's student house*



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 main question (iterations)

How does living in a 7m<sup>2</sup> room in a shared house influence the (behaviours) of Morgan, a first year student at the DAE?

How does living in a 7m<sup>2</sup> room in a shared house emphasise/change/transform the function of the floor for Morgan, a first year student at the DAE?

How does living in a 7m<sup>2</sup> room in a shared house influence the way of working of Morgan, a first year student at the DAE?

How does living in a 7m<sup>2</sup> room in a shared house optimise the functions and organisation of a space ?

How does living in a 7m<sup>2</sup> room in a shared house make Morgan multifunction, a first year student at the DAE?

How does living in a 7m<sup>2</sup> room in a shared house make Morgan, a first year student at the DAE, do détournement in order to reach efficiency?

How does living in a 7m<sup>2</sup> room in a shared house change the spatial and organisational functionality?

How does Morgan, a first year student at the DAE, continue achieving her activities in her 7m<sup>2</sup> by changing functionality?

How does working in a 7m<sup>2</sup> bedroom in a shared house transform the functionality IN the space, of a DAE first year student?

How does working in a 7m<sup>2</sup> bedroom in a shared house transform the functionality of the space and everything in it, of a DAE first year student?

*How does working in a seven square metre bedroom in a shared house transform the functionality of the spatial elements of a DAE first year student?*



## sub-questions

1 *Physical/material aspect*

What is the role of or relationship with light (natural/artificial)?  
 Does the behaving/ moving pattern change, when a second person is in the space?  
 How are the different areas in a space being divided into different functions?  
 Are we in charge of our space, when the space shapes our routine?  
 How is behaviour affected by limiting free space?  
 How does a person create a fully functioning living space with limited resources?

2 *Wellbeing*

How does the scarcity of space influence the attitude towards being tidy?  
 How much time is being spent outside vs inside?  
 Does the size determine/ influence the need to spend more time outside?  
 Is confinement a sort of enforced restriction?  
 Is it possible to live a fulfilled lifestyle in a compact/ tiny space?  
 Can compact living determine our daily rituals, and self care?  
 Is the perception of time lost in a confined space?

3 *Socio-political aspect*

Are we the ones to determine our living conditions?  
 Is behaviour reflected from our living environment, or through it?

## accountability of research methods

- 1 Self-made video observation: her personal description/view of the space
- 2 One-shot video observation: our observation is focus on the activity of working for her school projects. This activity is space consuming, and we see it as a good example of transformation of function, specifically around the floor as a working space.
- 3 On-site video observation: our observation is focus on the general living conditions, e.g. living room (other spaces in the house), eating (other activities beside work), storage (surrounding objects), etc. that might influence her relation to her bedroom.

## operationalisation of concepts

*In a shared house*

Living together with 3 more [students, 4 in total]

*Transform the functionality*

Optimise, influence, change, emphasise, reinvent, create new function...

*Spatial elements*

Architectural elements as well as objects within the bedroom  
 Walls, floor, desk, storage, decoration, seats, chair, bed, window...

working

*GPo16o10.1 — conversation/working (XM)*

- Sitting on floor working
- Music in another room?
- Objects on bed
- Space between wardrobe and wall adapted for storage
- Roommate, providing feedback, comes in and also sits on floor
- Desk empty
- Overhead light only
- Roommate stands in door talking
- Leaving, roommate closes door then peeks back in
- Subject starts to reach for tools again
- Door latches, catching on adjacent power cable
- Cutting mat at angle on floor, maximizing arm room?
- Subject hunched over while doing detail work
- Subject sits up and leans back against bed to check phone, texting with both hands, when a chiller song starts playing



*GPo26o16.2 — school work in the evening (MZ)*

- Tools: big cutting mat, knife
- Surface of the room: the floor
- Usage of bed: not being used, just for storing the nice and finished work (light, bright, clean)
- Not very cosy lighting
- Background music for activity
- Not appropriate lighting for work (too dark for precision work, casting her shadow to the work)
- An organised person
- Overall navigates through the room efficiently, but with some small objects has trouble locating when they are misplaced
- But very soon finds them
- Is able to concentrate on work
- Roommate enters, holds a jacket, smiles at the camera
- Seems to be asking if she's cold, says something about closing the window.

*GOPR6o12 — working (TB)*

- Tools: pair of scissors, cutting planch, etc.
- Different function: bed as backrest, bed as armrest, bed as table (? objects on the bed), floor as table, floor as sitting area
- Working on the floor
- Use the bed as a backrest
- Feet touching a piece of paper laying on the floor → happen due to space compression?
- Desk almost fully clean (unused) still Morgan is working on the floor. Looking for a bigger surface? more comfort?
- Take a little break to drink from a bottle next to her → some actions stays unchanged

- All the space is being used : container (water?) right in the corner near the door, closet, seat (she choose to have one even though it takes some space)
- Works in her room and not in the living room she mentioned she has in her shared house. Why? Focus while working? Privacy?
- The compression of the space doesn't stop her from focusing
- Music while working
- Lay in front to access the cutting area that is on her left → seem like an uncomfortable position to have while working. Possible physical pain for working positions?
- Working on the floor to have space for the cutting area, but the work is actually quite small (working on small cutting, small (cardboard?) box). Reason that Morgan works on the floor seems to be more to have space for her body (laying legs straight) than space for the work itself.
- Bed as armrest

*GOPR6028 — having a video call on the computer (TB)*



- Different function: bed to lay top part of the body, floor to sit, bed as table, bed as armrest, closet as organiser (notebook was in)
- Having a video call
- Has to deal with the fact of being on the bed while having a serious video call.
- Seems a bit distracted, maybe because of the conditions?
- Seat is near the shelf/desk. Morgan chose not to use it.
- Bed isn't a hard surface. Does that make it more complicated to use as an armrest/table for the computer? You push with your arm and your weight and the mattress goes down and the computer also.
- When looking away from the screen, looking at the bedcover — distracting? Make the nighttime right next to worktime (computer when having a call)
- Takes a pen from the desk/shelf area and a notebook from the closet
- Writing on the notebook on the bed. Lack of hardness of the bed isn't a problem?

*GPo16012.1 — working on the floor (LG)*



- Use the floor in a diagonal way to gain more space. Not a lot of change, very static

*GPo26028.2 — working (LG)*

- Use of the bed as a support for her computer. Sit on the floor. Mimicking a common action to sit and face the computer on a same/higher eye level. Instead of chair and desk she uses floor and bed

*GPo16028.1 — online meeting with class (MJ)*

- Facing the window.
- Working on the left bedside with the bed as a surface for her laptop, arms and working materials while sitting on the floor with her feet tucked under the bed
- Getting up to turn on speakers
- Sitting on her knees leaning on the bed

*GPo26o12.2 — working on the floor (MJ)*

- Materials strewn on the floor. A few items on the bed.
- Transfers (in one turning motion) from the floor to the bedside with a few materials she was working with. To have a higher surface to work on so the items are closer to see and to rest her arms on
- Transfers back to the floor and reaches behind the cupboard for paper
- Leans with her back against the bed
- Transfers back to the bedside to focus on cutting paper
- Ceiling light causes a shadow when she's working on the floor, on the bed she creates no shadow

## eating

*GOPR6o15 — eating at the table**(not necessarily related to working or in relation to floor) (BSL)*

- The table derives from a shelf fixed to the wall. *Changing purpose of objects*
- This means that the table doesn't have the standard four legs, thus allowing for more space and flexibility on the floor. *Optimizing structures for space*
- The seat doesn't have a backrest, allowing again for more flexibility in space. *Optimizing structures for space.*
- The shelf-table gives her enough space for a computer, i.e. work or entertainment, for a couple of food plates, i.e. eating, and a plant, i.e. well-being, all together. *Multipurpose object/optimizing utility*
- In the video she is eating at the shelf-table while watching a basketball game in her room even though there is an eating room outside.
- An assumption is that she feels comfortable enough in her space while seeking for privacy. *Comfort is there, or she puts privacy over comfort.*
- For eating she positions herself in the backrest-less chair so that her legs are crossed and resting on the seat. An assumption is that due to the lack of a backrest she constantly has to keep an eye on her position in order to seat, i.e. not fully giving rest to the body or mind. *A question pops up: is she more aware of the interaction with her body within her small room?*

## cleaning

*GPo16o16.1 — cleaning the space**(not necessarily related to working, but in relation to floor) (BSL)*

- First: Organizing space, putting chair upside down on the bed, to create more space on the floor area. *Organisational thinking in space*
- Her bed serves as a temporary storage area to put extra things, i.e. laptop sleeve, books, while cleaning the floor. *Multipurpose object/optimizing utility*
- The frame of her bed and her bed itself also serves her as a stair to reach up to higher shelves and objects. *Multipurpose object/optimizing utility*
- While sitting on the floor the drawers of her closet are next to her at the same level so that they are a practical tool that reinforce the work on the floor. Her closet drawers become an active part in her making (opening, closing, taking from, putting in) *Optimizing usage and essential person-object relation*
- While cleaning even the vacuum can detach to a little vacuum for smaller areas like the

frame of her bed which is an extra surface. *Even the objects around her are suitable for the circumstances*

-Cleaning itself: she is very careful while vacuuming the floor and all surfaces such as table, bed frame and higher shelves. I assume cleaning is an important aspect in her room. *Relation to cleanliness*

*GOPR6016 — reaching/cleaning (XM)*

- Putting away clothes
- Sunlight
- Shoes in closet
- Clothes on bed, unfolded
- Water bottles on desk and in corner by door
- Relatively little on closet shelves
- Storage between top of closet and ceiling
- Backless chair used as intermediary storage surface
- Towel drying on hanger from shelf
- Antwerp pennants?
- Picking up garment, mask is knocked behind pillows
- Clearing items from desk into closet upper shelf
- Repeatedly opening and closing closet shelf doors; left closet door (hanging) stays open
- Bundling wired earbuds, putting in pocket in laptop bag with other cables
- Placing desk water bottle on floor with other bottle
- Water box on windowsill
- Leaning over bed with some difficulty to reach book on windowsill to straighten it out
- Standing on bed to access left side of upper shelf
- Taking water boxes off upper shelf and shelf beside wardrobe
- Brushing off pillow
- Using chair to access bag on top of wardrobe

*GOPR6010 — cleaning (MZ)*

- Tools: portable Hoover
- Usage of bed during activity: putting all the objects from the floor on it (can hold quite a bit)
- Vinyls but no vinyl player?
- Stand up on bed to reach the top shelves
- Can't find the right spot for mirror nr1
- Has big bottles of spear water by the entrance
- Clutter is taken away, surfaces kept clean
- Space above cupboard, "i'll put it here because i don't know where to put it"
- Decisions: should the plant or the stool be closer to the bed?
- Questions to self and the room: where does what belong/fit best?
- Nice bright daylight, big window
- "Where should I put the mirror?"
- Checking phone once in a while (sending messages)
- Talking while recording a voice message, going round and round in a small circle



- Everything, that is not used regularly, is tucked away someplace
- Remembers/decides to clean behind the bed (cleaning a smaller space is quicker and more efficient)
- Space saving — storage between cupboard and wall, narrow shelves  
Stacks of books and magazines
- Cleaning done, quite fast

*GP036016.3 — cleaning (LG)*

- Morgan is cleaning her room. She needs to move her bed to reach the window and clean. Even furniture becomes modular.
- Once she's done she puts it back against the wall. She pays attention to detail even reaching points that you don't see.
- Forced to walk on the bed to access this little space
- Records are put from the floor to the shelf. Storage is mostly shelves, Even small one are put next to the closet. Efficiency. The storage systems are multifunctional. Shelves used as table (Must be a choice of the landlord to turn a small space into a room with a "desk") Economical choice.

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Morgan's self-introduction to her space

*GOPR6027(1) (MJ)*

- Books on the windowsill
- Plants hanging from the ceiling or on the windowsill
- Photographs on the wall
- Stool/chair has been moved to create a different space and because she likes the design and wants to display it more clearly in her room
- Materials stashed between the cupboard and the wall
- Waterbottles on the ground
- Thin desk, she says its hard to work on so she works on the floor which is carpeted so she uses a large cutting mat
- Mirror is put behind the largest plant in order to reflect more green in her room
- Items stored on top of the cupboard
- But less stuff stored but rather displayed on the two plank shelves she has
- She tries to keep some items hidden while displaying others. It reflects what she values to show to others.
- She doesn't take large strides in her room, she mainly pivots from one place. Kneeling and sitting also happens often.
- She works mainly on the floor. She uses the left bedside as a table for her laptop while sitting on the floor with her feet tucked under the bed, facing the window. And also because she gets back pain, she switches position as often as she can. Sometimes she sits on the right bedside on the bed and tucks her feet between the bed and the radiator (extra warmth) and puts her laptop on the windowsill. In order to look out of the window to have a different view.

The object-space elicitation video was edited together from an interview with two group members onsite at the house of the participant, Morgan, looking at her room and the shared downstairs of the house.



Morgan discusses reading and looking at books and magazines.



This chair from Antwerp is moved around the room to serve a variety of purposes, including aesthetic appeal.



Sitting on the bed with access to the radiator and windowsill.



The desk in the room is small and requires constant rearrangement for different uses including working and eating.



The cutting mat, usually stored away, is used to adapt the floor into a work surface.



The room needs to be tidied frequently to keep the space useable.



Morgan talks about surrounding herself with inspirational things.




Morgan ultimately prefers a smaller room for its comfortable and knowable qualities.



	Brenda Salirrosas-López	Lucie Gholam	Luna Wirtz-Ortvald	Maija Zēģele	Michelle Jonker
0:00–0:21	<p>0:01 Plain field in front of house but without space dynamic, i.e. not so inviting/cozy to hang out there</p> <p>0:10 First comment: carpet is the dirty element so 'freedom' on using it as you want, cause it gets dirty anyways</p>	0:15 Pictures on the door, showing outside the room, first presence, for her and the room-mates. Presence of her in the house and presentation of her "inspirations" which are important for her.	0:12 Carpet is already dirty, so she doesn't care if it is made more dirty, as she has to clean often anyways	0:09 "Carpet always gets super dirty" — Movement around floor is constant	0:13 Photos on the wall
0:21–0:37 <i>reading at desk</i>	0:25 It's not reading but rather looking what she prefers doing, which matches with the fact of organizing/replacing the objects in the room in a visual pleasant way	0:37 Height of the shelves can be changed. For now one is used as a desk but the others are still used as a medium to display more "inspirations"	<p>0:24 Morgan doesn't read, but rather looks in/at the magazines</p> <p>0:30 Chair is not comfortable, she gets a lot of back pain. She often moves the chair to other side of the space to look at it. She sees an aesthetic value in it, since she also brought it from Antwerp</p> <p>0:35 Using narrow shelf surface which was found on the attic as a desk</p>	<p>0:24 "I don't read, I rather look" — Aesthetics are important, visual pleasure</p> <p>0:30 Back pain from sitting on the chair, while at the desk — Strain on back from wrong distances</p> <p>0:35 There's not too much space on the desk, so its not enjoyable or convenient to work — More like a shelf than a desk, to have more space on bed and floor</p>	



	BSL	LG	LWO	MZ	MJ
0:37-0:57 <i>chair</i>	0:55 Chair in its usual function gives her backpain so she rather changes the position of it (because she just likes it) to have it in a different context - her relation with objects go further than pure functionality - maybe chair acts as 'companion'? Even though it gives her pain in its natural form		0:56 Morgan moves a lot around in the space, rather than moving objects, as there are not so many possibilities.	0:56 "I like to change objects around" — Fluidity in a room where you can't change much of the furniture, objects do the moving for them	0:40 Stool/chair has been moved to create a different space and because she likes the design and wants to display it more clearly in her room
					

0:57-1:16 <i>sitting on bed</i>	1:09 Bed as the chair - cause of light or maybe even more comfortable? Bed as space to work - maybe because carpeted floor offers this option too?	1:08 Bed appears like an obstacle to the window but walking on the bed becomes a natural way to access the window. She's reaching for light.  1:12 Even placed on the side against the window, the bed has become the main object/place. Her way of moving, cleaning, working is organized around this element.	0:58 Window sill is used as a desk  1:05 Sitting on bed and using it as a working surface  1:12 Kneeling on the floor and using the bed as a working surface	1:00 Sitting by the window on the bed, has nice sunlight coming in — Taking advantage of the room's qualities, good daylight!  1:12 The bed as the main sitting area (from all sides & heights) — sleep/eat/rest/work	0:49 Books on the windowsill  1:00 Sometimes she sits on the right bedside on the bed and tucks her feet between the bed and the radiator (extra warmth) and puts her laptop on the windowsill. In order to look out of the window to have a different view.
					





	BSL	LG	LWO	MZ	MJ
1:16–1:33 <i>desk</i>			1:33 Shelves are kept quite empty, not used for storage (as one would maybe expect).	1:18 Desk/shelf found in the storage of the house (easy to take off)  1:29 Fine not having desk/shelf but it was horrible to do school work — Too narrow	1:20 Thin desk, she says its hard to work on so she works on the floor which is carpeted so she uses a large cutting mat
					
1:33–1:45 <i>cutting mat</i>		1:34 Despite of bed as space to work, still a harder surface as her little 'table' was needed or the green surface as a help tool for the floor	1:36 Big cutting mat is almost as big as her floor space — floor becomes the desk	1:37 Recent purchase- big cutting mat, an extension of desk space on to the floor — “just put it on the ground, and it's your working space” — Extending the functions of the floor by a tool	
1:45–2:12 <i>eating</i>		2:12 Windowsill as a surface to eat too - maybe because of light and view?	2:04 Her narrow desk is unhandy. Can only place things horizontally next to each other	1:58 “I eat downstairs, but i also like to just be in my room, put it on my desk and watch a movie”. a bit inconvenient though.  2:12 “Sometimes I eat on the windowsill”	
					




	BSL	LG	LWO	MZ	MJ
2:12–3:09 <i>cleaning, transitions, rearranging</i>	2:45 Beed to separate activities: from work to sleep- so really clean and reorganize before going to bed	2:47 Change of setting. The organization of the room punctuates the day and activities. It's like a change a scenery to communicate a different need/ intention  2:55 changes are important and involve mess	2:37 She's spending a lot of time cleaning  2:44 She wants to keep the work/ non-work activities separate from sleep. Wants to be able to shift mindset.	2:42 "I do like to clean, because I don't want to be reminded of the activities I do here when I go to sleep" — Clearing the mind to rest better, need to be in charge of the space  2:49 Even to most activities happen around and within the bed, she wants to keep it her sleeping area. Boundaries within the room. Changing things, moving them around, that happens quite often — fluidity  3:06 It takes a lot of time to clear up the floor space, when it has been used as working space	
3:09–3:59 <i>decoration and meaning</i>	3:21 Boxing gloves  3:25 She keeps with her things that reminds her of inspiration or home e.g. record covers, pics, magazines	3:50 Presentation is very important. Room is a frame where she can place elements to share about herself and also visualise for herself.	3:18 Vacuum cleaner is dedicated a whole shelf, so it is easily reachable at all times  3:30 Many personal belongings/ decoration is brought from her other room to make her room more comfortable and her own	3:09 "I'm too clean" — Having charge of surrounding  3:21 Giving a lot of space for objects to be displayed, not prioritising space efficiency, — they serve her as inspiration sources from her other room (room in family house - Antwerp) — The	



		BSL	LG	LWO	MZ	MJ
					room as an extension of herself	
					3:35 "I like to be reminded of home" — comfort	
3:59-4:45 preference for a small room	4:00 Preference to keep a few valuable things than many and messy, e.g. her shelf			3:59 She wants to keep the shelves clear for bigger visual space	4:00 Some people say: "oh its such a small room" and some people don't have this opinion at all — size doesn't matter, what matters is how we use it	3:50 She prefers to display items that inspire her instead of using the space for storage
				4:23 The small room allows her to have an overview of the space, which makes her rest better	4:13 She points out, its actually more comfortable than her bigger room — "I sleep a lot better here"; "I really like the coziness"	4:20 A small room offers coziness and less input that a larger one would which makes her more comfortable
					4:23 You have an overview of everything, everything is in your reach. — (gives her peace of being in control) — Accessibility and convenience	
					4:36 She realised she spends more time in her room than she expected — Less space to worry about to maintain	
					4:44 It's not a problem to live in a small room for her	

	BSL	LG	LWO	MZ	MJ
4:45-5:26 <i>wardrobe</i>	<p>4:55 Idea of ‘messy’ is relative</p> <p>5:03 Things for school and personal clothes (pants, underwear) are kept close in the same space, almost like merging work and private things</p>		<p>4:53 Modest amount of clothes. She has an understanding for what she really needs</p> <p>4:57 Each shelf in the closet is dedicated to one category of use (bathroom stuff, clothes, working materials)</p> <p>5:08 Books are put in the drawer — not often used?</p> <p>5:10 Lowest shelf: messy, things that cannot be categorized easily</p>	<p>5:17 She considers it messy right now (in comparison to common human, not messy at all)</p>	<p>5:00 She uses the closed wardrobe to hide the objects she doesnt want to display</p>
5:26-5:45 <i>immobile furniture</i>	<p>5:40 If she could she would move even the bigger objects like bed and closet, but this is not possible, she has then sort of adapt to that</p>	<p>5:40 Room organized around big static elements</p>	<p>5:41 Big objects are impossible to move, she only moves smaller objects and herself</p>	<p>5:40 She has no saying, in how the big furniture is placed. She can only move things around them. — Either too big to fit anywhere else or too old and stuck in place. Working with what you have</p>	



	BSL	LG	LWO	MZ	MJ
5:45–6:03 <i>plants, nature</i>	6:03 Plants are important to her, she will even get a bigger one that surrounds her room...			5:52 Closest space priorities are for materials and household necessities — (not clothes) “I don’t want all the materials around me” — Cleared and stored away  6:00 “I would definitely get more plants” -likes the feeling of being surrounded by nature (hugged in) — Filling the space with living things	
					
6:03–6:46 <i>downstairs — ownership of space and things</i>	6:20 Living room not her space because nothing is from her- for her to feel closer to space she needs to surround herself with her beloved objects  6:29 Even though she has the bigger eating table to work on, she prefers to use the little table from the living room and lay on the ground- does this come from her room habit?	6:10 Need her presence to evolve in a space. She need to see elements she can recognize, even represent her to feel comfortable	6:16 No personal attachment to objects in the living room, no connection  6:25 Morgan is used to working on the ground, so she would also work on the ground in the livingroom	6:11 Common living space- doesn’t really feel like my space, from having unfamiliar — and distant objects from her preference/comfort zone — Has no control over the state of common space  6:43 Only poses- sion in the common space is her food, everything else has been left from people before, or people still living here — Hesitation in settling in, not fully trusting the big space	6:20 She prefers to sit on the ground

	BSL	LG	LWO	MZ	MJ
6:46-7:19 relationship with roommates	7:00 Apparently there's not a close relationship with roomies so she feels better in her room- social interaction influences her perception and relationship with own small room	6:58 Importance of roommates to feel comfortable in their own house. Does she feel home yet?	7:19 Even though non of the object are hers in the living room, she still spends more time in that space than the room-mates that own the objects.	6:53 Different roommates would, make it more comfortable to live in the house — “we would do changes around here, make it our own” — Dissatisfaction in current state, urge to move things around	6:50 Some discomfort with the other roommates





Aloys Borghers is an Associate Professor of urban planning at TU/E. He is interested in how people behave in urban environments. His main research theme is modeling individuals' preferences and behavior in urban contexts in order to predict or simulate how people react to changes in the urban environment or how they respond to new societal and technological trends (such as ICT, smart cities).

He is mainly interested in how these trends and developments influence residential preferences, shopping behavior (especially in downtown shopping areas), and pedestrian behavior. Aloys is involved in various courses and projects related to these fields.

We contacted him because he supervised the 2019 master's thesis 'Living tiny: a discrete choice experiment on the preferences of young one- and two-person households towards sustainable tiny houses', by A.M.E. Peters.

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#### interview structure

- |          |   |
|----------|---|
| Brenda   | <i>Introduction based on the link we made between the paper he supervised and our research</i><br>Is there an economic or cultural stigma around living in a small space?<br>How do trends (minimalism, nomadic way of living) towards intentionally tiny living spaces respond to this?<br>Over a longer term, has consciousness about sustainability diminished or reversed this perception?<br>What defines a tiny space according to you? What is the criteria? |
| Maija    | <i>Morgan's video</i><br>How does the space we looked at (Morgan's room) relate to that definition?<br>Note that tiny space questions are not necessarily related to the video  |
| Théa     | <i>Functions and space flexibility (optimization)</i><br>How much does the space limitation influences a person's behaviour...<br>... in general?<br>... in relation to their objects and the use they make of it?<br>How does the user of a tiny space optimize the space for their needs?<br>Do you think we should favor multifunctional objects or one function/one object (even though it might imply less objects/human nature)?                              |
| Michelle | <i>Micro-needs</i><br>How does a tiny space impact your mobility...<br>...in general?<br>...while performing a specific activity/ transitioning between activities (reading but also working)?  |
| Maija    | <i>Curation of objects (functional and emotional layer)</i><br>How do people relate to their objects in a tiny space?<br>How does this 'prioritizing' of objects take place? Can you give examples?<br>What are the usual priorities people choose to have when space is limited?   |

Luna *Verticality in space*

How is vertical use of a space influenced by its size?

Lucie *Private/Shared - Inside/Outside relationship (of the room or of the house)*

How does living in a tiny space influence your relation to the outside (shared spaces such as the living room, but also outside of the house)?

(If social life is not mentioned) Does space play a role in determining the social life of individuals?)

In a pandemic situation how do you think our perception of living space has changed?

interview transcript

Aloys Borgers

Maybe first I should tell a little bit about my background. I am an, what is called, Associate Professor at the Faculty of Built Environment.

And I am in the unit of urban systems and real estate. And within that group, actually, I am kind of a planner. And I'm also interested in urban mobility, and urban transportation. And I am a very research minded, I am not really design minded, so that might be different than you expected. I'm not a designer, but what we do is mainly research and what people want, what people prefer, that kind of things.

And based on that, on our research, we try to recommend what designers should do and what they should design. So that's a little bit about the background of me. I am in the field of mobility and housing, but also developing urban areas. So what do we need there? What are preferences about people regarding these areas.

So, then this tiny housing projects. So, just like you, our students also have to do a graduation project at the end of the study. And at our department that takes about three quarters of a year. And students can, in cooperation with their supervisors decide about their subject. So we had two students who were interested in tiny housing. And they both did a kind of research into the preferences of people potentially living or going to live in the future in these tiny houses. And that is what they did. So it was a kind of research, found some results, and that's it. So that's my background. That is what we did.

So, now I think it's time for some questions from your side, but I have a look at the agenda and I don't know whether I can answer all your questions. I don't think so, but let's give it a try.

Brenda Salirrosas López *Thank you very much Aloys. And you're right now in Eindhoven?*

AB No, I'm not in Eindhoven, I'm in the south of Limburg.

BSL *And your work has been mainly done for the Netherlands or also for other countries?*

AB Well, maybe in the Netherlands, but in our department, there are also quite some international colleagues, and also a lot of international PhD students. So, and their research is quite often abroad. So, I am somehow involved in international research but that is

mainly about transportation. So it's not about tiny housing.

BSL *Now, going to the question of tiny spaces, is there a definition of tiny space according to you? What defines a tiny space?*

AB I do remember that these two students I supervise. They came up with a definition of a tiny house. So that is not necessarily the same as a tiny space. But they came up with the definition of a tiny house, which is mainly based on the surface of the house. And with it its size, the width and the length of the house. I can try to find these definitions but maybe it's better if I sent the reports to you and you can find out yourself how they define tiny houses.

BSL *I also saw or read that part, I think. But maybe what we can do is, we can show you just a bit about our research. We filmed Morgan, this is this student. And maybe we can just show it to you, just to give you an idea of where we are right now, what we're working on.*

*observation video is shown*

*So we filmed Morgan doing different activities. And this is for example, her, working, and because she doesn't really have a big table to work on, she works on the floor. As you can see here.*

AB That is not really what we think should be the level of comfort in any space you have to live in, I guess.

BSL *There she's eating for example. And she has a very tiny space there. She's tidying up, or I don't remember. So she uses for example, the bed there as a space to put her things and here she's cleaning.*

AB Well, I think that it is nice that you don't have to clean a lot.

BSL *Yeah, right. She cleans; she's very thorough cleaning. She's very... she cleans a lot, I think she gives importance to that.*

Théa Brochard *I think also in general, the whole thing that we observed was quite often related to how she reacts to her object and plays with the function because like, she has to move everything all the time and that gets really linked with optimization and how she optimised her objects in that space.*

*So maybe we can ask you a question about that. Because, like, just as we can see, you also mentioned that this is not how we want to work in that space. So maybe, how do you see that space limitation can influence a person's behaviour in general? Like, do you have an opinion a bit about this?*

AB I think this is very extreme. There are even more extreme cases, I don't know, maybe you are familiar with in Japan, especially people who have not a lot of money, they can, some of them, they just have only some space more or less to sleep, maybe they can just sit in that space and that's it, they can even not stand in this space. So the idea is that they can sleep during the night, during the day they are just outside. Yeah, I think that if that is your living situation, I think for most people, that would be unacceptable. And

yeah, how does it affect your mood? I think? Yeah, I don't know, we did not investigate that kind of things.

But what I noticed from people living in the tiny houses we have in the Netherlands, but also abroad, is that it is a kind of way of living; a social kind of attitude you have to get used to. And those people also have a kind of, at least most of them, they try to be as sustainable as possible. They don't want to own a lot of things. Because if you own a lot of things, then your foot becomes bigger.

That's often nice: if you don't have a lot of things, then it is easier to manage everything. So it is a kind of lifestyle. And also those people involved in living in tiny houses, at least in the Netherlands, there's a kind of organisation of people living in tiny houses. And... how can I say that in a nice way... it is a special group of people. It's specific aims. And they just want to find a way to live. For them, at least, it should be comfortable, but they do feel comfortable in a tiny space. And also because they don't have a lot of things. And then they are happy with that. And I think as long as you're happy with your living environment, then it's ok.

TB *And was multifunction something that was coming up quite often in this situation? Or like the idea of seeing function not as single function for each object but playing a bit around with that. Was something like this happening?*

AB That was not really one of the things that my students investigated. Maybe I should explain what they were mainly interested in.

One of them was mainly interested in rather the time houses could be a way, especially for the status on the housing market, to find a solution that is not that expensive, because, I don't know, maybe you're familiar with the Dutch housing markets, but it's, especially for starters, it's pretty difficult to find a house, especially if you want to buy the house. So he was interested if this tiny house could be a kind of temporary solution for these startups, to start living on their own.

And he also wanted to find out rather these startups were interested in having a more or less self sufficient house. So not connected to the electricity grid, for example. Do you want to leave in such a situation? And the other student was also interested in, actually also in these ecological things, but she was more she investigated things regarding reusing your water by filtration, that kind of things. What kind of toilet you have? Is it just toilets which is connected to sewage? Or do you have other systems, composting systems, that kind of things.

Also, one of these students was interested in the use of common space that maybe touches a little bit on multi-use of spaces. As she was, at least she expected that if you have a tiny house, then those people might also be interested in having together some common space, for example, and the living room or room where you can put also a common washing machine, that kind of thing. And yeah, we were quite surprised that there was a big no process for this kind of government facilities.

So people don't want that. For some reason. I didn't expect that because I thought, okay, these people, they want to know, footprint. So that... it's also okay to have this going facilities. But no, that's not what they wanted. Yeah, of course, in terms of multi-use, if you have a tiny house, then you have to use the space in different ways. So these tiny houses are also designed to be used as such. So you can showcase you can quite easily move the furniture around to make space for things or do other things.

Michelle Jonker *I have a different question about how one moves within such a tiny space. Like in the video, you can see that Morgan has to climb and turn and say sit in different positions. Would you know anything about how a small space affects your mobility or your choreography within a small room?*

AB Well, we did not look at that kind of things. But yeah, of course, I think it there's not much space to move, so I think you should at least if you live in a tiny house, you should make sure that every day you go outside and make sure that you do your exercises, at least walk or bike or whatever. Otherwise, that will be enough, I guess.

But it's also something that, that reminds me that one of the students also investigated, people would like to have a part in the common facility. They also would like to have their own, let's say tiny garden, near the tiny house, rather than preferring a larger common park. And then again, most of the people preferred a tiny garden over the common park.

But still, even if you have a tiny house and a tiny garden, of course, you still can go outside and exercise as much as you want. I think it is up to the to the inhabitants of these tiny houses, whether they move around, has enough exercise. Yeah, but that's okay. If you don't feel the need to go outside, it won't be very healthy for for your body, if you live in a tiny house.

MJ *Yeah. Do you maybe say something about how, as we see certain objects, like her bed, have multiple functions, and how she has to transition. For example, if she wants to sleep, but she's been working on her bed, she needs to take everything away, or if she's working on the floor, and she wants to just have her floor back, she needs to change and transition everything before she can perform another activity?*

AB Yeah, indeed you have to do a lot of these kinds of things. I think if you have a bit more space, so more like the general tiny houses, because again, the situation you showed is quite extreme. If you had a bit more space, then at least you do have a table, you do have a chair, you do have a place where you can prepare food where you can sleep. So then, of course, the urge is not ,not that there is not that much to tidy up everything, every moment. So yeah, that might be a bit more relaxed.

But as I said, there's people living in these houses, they also have the kind of mindset that they don't want too much stuff around. And, of course, it depends a bit on your activity. Most of the activities we do nowadays, especially for working quite often, just a laptop is okay. So that is not taking in a lot of space. But yeah, if you are in a design academy, I don't know. But if you want to make these drawings, and that kind of things that I think it can be quite a problem to, when you live in such a tiny space.

Again, I think for many people it is, especially if you have one of these standard jobs, like working in an office or something like that. If your hobbies are also not that extreme, you can do a lot within a tiny space.

BSL *And do you know if if they, your students or maybe you know, find out if this, this mindset comes from something is there like a core, shared conditions that make these people have this mindset of owning less like, like how, how is that cost or how?*



AB Well, that's a bit harder to describe and also to define I guess. But at least in the Netherlands, at least that is what these two students found.

They called it a kind of tiny house movement. So there is a type of attitude which may be growing over time. People think that this kind of way of living — and again, the ecology, being sustainable, that kind of thing is quite important in general. So they want to make sure that they do not contribute too much in terms of consumption, that kind of thing.

For some people, that is the main driver. But there are also some people who are just interested because the [inaudible] of living in a tiny house are lower than in a normal house.

Lucie Gholam *I have a question about that, the difference between living in a tiny house by choice and, for example, here in the case of Morgan, she's also maybe forced to live in this tiny space because of money issues, or because she's a student.*

*How can we influence your mindset also in architecture? I guess there are measurements or rules about how much space someone should have to evolve and so — maybe the fact that you're forced to live here is different from the tiny house movement where you choose to be more sustainable.*

AB I think indeed that if you prefer to live there, that's quite different from when you have to live there. And if you have the aim to be sustainable, then you will be fine with that. You will feel okay. That is what you want, that is what you are, maybe. So you want to live there and you want to accept the disadvantages of living there, maybe even you don't think they are disadvantages because you can always think in a way that it is positive.

If you are forced to because you cannot afford living somewhere else, or there are no opportunities, I think that might be very depressing. You can become very unhappy if you have to live in such a situation.

Again, I think that depends on what kind of person you are and if you do things on your own free decision of course you will perceive that quite differently from when it's not your own decision. People can feel happy in a tiny house or they can feel very unhappy and that might be related to many things, but it of course is also related to your personality. People are different in that respect.

LG *I was asking that because in architecture, I guess you have a limited amount of space for someone, in square metres. We found some estimation, seven square metres per person. If you live under square metres, in architecture, then it becomes maybe unliveable. Maybe there are rules that influence this comfort.*

AB I'm not an architect but at least in the Netherlands we do have some rules regarding housing. Some of these rules are just related to insulation, that kind of thing, but also at least until a couple years ago, in some municipalities it was not possible to live in a tiny house because it was considered as a house. It was not possible to live there. So it was not possible to build a tiny house, because it was not considered a house, because it was too small.

Now, I think most of the municipalities in the meantime switched and they do allow this kind of tiny house. I don't know whether they have defined specific rules,

but still I think seven square metres is quite a small space. Most of these tiny houses are bigger — twenty-five square metres for example is no exception I think — so that's quite a difference, If you have only seven square metres or twenty-five or even thirty square metres.

BSL *We're very into details — how people relate to their objects, space, movements. Maybe you know, from this research, something about how people then relate to their objects. How is their relationship to them? I don't know if the topic of curating objects was touched on in this research.*

AB It was not. It was more about a number of characteristics of these tiny houses, but it was more the urban planning background. So where would you like to have your tiny house positioned? Do you prefer to have your tiny house in the centre of the city, or in the suburbs? Do you want this connection to the electricity grid, to the sewage, drinking water facilities. That kind of thing is what we investigated.

So actually it's at another level of scale I think, so you are more interested in the inside of the tiny house, how people live in it, and what we investigated is more related to — is it acceptable to live in a tiny house in a certain environmental setting? And also taking into account the price of living there?

So yeah, I actually don't know how these people feel when they live there. Except that from the literature these two students did. They concluded that there's this kind of mindset, and if you want to live there, then you're also happy to live there. But it was not really about your relationship with objects, and that kind of thing. So I have to disappoint you regarding that.

Luna Wirtz-Ortvald *No, but I think it's also interesting when you say it's more, we can relate things to our research as well. Yeah, I don't know. We also had a question about the verticality in the space. How is this, because we are very much interested in really the behaviour of the people inside these houses. So I'm not sure if that's something more so that now with what you have said, you could also know I mean, we were like, as you could see us in the video. I'm Morgan, she works a lot. Because of the reduced space, she arranged things and she works a lot, from bottom to top. So in this vertical position, vertical movements, might you know something about this.*

AB Yeah, well, if you look at the designs of these tiny houses, most of them have a kind of second floor, just under the roof. That's often the place to sleep. So in terms of vertical movement, I think that might be pretty limited. But of course, you have to make sure that you are very efficient with all the space you have.

So that means that you will use the walls and that kind of thing much more frequently than usually, in the usual houses. So and that, of course, that means that yeah, if you need things, they are close to you. So you don't have to move out too much, if you know where everything is.

Yeah, that's it, I don't know, actually how people behave in these tiny houses. But of course, you can try to think about how these tiny houses are designed. And of course, the design of the house also influences how you will behave in the house. I think those are interrelated to each other.

TB *We also had a part about private and public space, how they interact together now that some people live in such small spaces. And you mentioned also how people maybe want to share*

*common space, because they have very small, tiny houses.*

*And I was wondering, imagining that the tiny house movement is a huge thing, everyone's living in a very small house, how do you think urban space would change then? Would there be more nature or parks for people to go to because they don't have a garden? Or more shared. At least as I would say, if there was a neighbourhood of tiny houses. Then at least you should make sure that there is also quite a lot of urban green in the area.*

AB Actually, it is a bit the same as when you when you design as when you develop areas with a lot of different buildings, or the apartment buildings. So even then, if you look at this, you understand that with apartment buildings, what you do is you put a lot of people together on a pretty small surface.

On the other hand, to make sure that there's quite some urban green around to make sure that these people can move out and then at least can experience this nice green. So I think it would be quite stupid or wrong if you would design an environment with a lot of tiny houses and a very high density and then you don't have enough green around.

People feel that they have their own tiny space and if there's not a lot of green or other space available now that we know would be a good thing. So yeah, from an urban planning perspective, I think I don't know whether these tiny houses will be really a solution to some of the high demand for housing. Maybe that's a temporary base, that could be an option.

Because you also have quite often to deal with spaces that are not used in an environment for a number of years, because they are waiting for tenants. And, of course, you can quite easily put all kinds of tiny houses, because you can move them around so that that's okay. So you can use this space to at least temporarily facilitate people looking for homes. I think it might also be okay to have at least a number of tiny houses around in cities. But I do not think it will be a solution. To have many people living in these houses, I think that cannot be as successful.

LG *So then do you think the urban space is filling up the function that these tiny houses cannot provide? That makes them also maybe, not liveable long term?*

AB Well I think, for some people, they would live there for a long time, but if you look at these different phases in life, you finish your studies, you go look for a job, and if you find a job, you have to settle there somehow, at that moment a tiny house might be a very nice solution, later on over time you start thinking about living together, at that moment a tiny house might already become less comfortable.

So over time, people would move out of these tiny houses, at least most of them. And then there might be a tendency, that when people grow older, and older and at a certain age maybe they would be ready to move back into the tiny houses. But for most people it will be a number of years that they can't live in a tiny house.

LG *I am also thinking about the nomadic values of these tiny houses, now a city. Where there are these buildings, that are built and they stay a long time. There has been talk amongst a lot of people that, at the origin of humans, they were a nomadic group that traveled from one place to another. Maybe tiny houses would work if they moved, instead of just staying in some neighbourhood in the city, maybe they would become more interesting?*

- AB I think that is quite interesting, but you should realise that most of these tiny houses are not that easy, when you look at the current designs of these tiny houses, in general if you want to move it you need a big truck and a big ramp to get it to one place to another, so it is not like a mobile home, I think for this nomadic way of living, the mobile homes would be more facilitated, would be better. But still, it is possible, but I think it is not really the main reason why people go for a tiny house.
- LG *Yes because actually, it is quite expensive as well, it's a bit limited. You want something sustainable, accessible, but for a short term living, and then you buy this very expensive house, that maybe you are not very comfortable in.*
- AB Yes but the prices are on a very large scale. Depends on the design of course, and the facilities that are there. Depending on that they can become quite expensive, cheaper than a normal house. Yes but again if you have to pay quite a lot it's not worth it.
- LG *I feel, since you can't answer about the objects and the curation in the room, it would be interesting to know your opinion as a urban planner, because we talked before about how people interact with the inside, also for example, this time of pandemic when we are stuck in our house, looking how we evolve in this public space, because for everyone who is living in a certain square metre, that is not enough, you feel confined in it. Also maybe how it has changed or will change, because of new experience in the inside of our homes.*
- AB First of all I think, at least from what I hear from our students, that for some of them the current situation with the corona pandemic is doing pretty well I think. And indeed they stay most of the time in their tiny room, in general those are quite tiny spaces. So for most of them it seems not to be a big deal.
- The minority, yes. There are some students who really suffer from this situation. Almost drives them crazy. So from that perspective I think things should change as soon as possible. People at least should get more room to move around, but if that is going to change urban systems, our environments, well actually I don't think so. I think that when everything turns back to normal, people will start behaving in their usual way, and everything will go on as before.
- So I don't expect there will be new ways of designing urban environments or that kind of things. At least not regarding living environments, but I think there will be some changes in terms of the office buildings and that kind of things. People now got used to work at home, and also I think, quite a lot are quite happy with that.
- So that means that all these office buildings and the owners of these office buildings should think about what will happen with these buildings in the future! Maybe you can transfer them into apartment buildings or something like that, at least student housing maybe, I don't know?
- I think there will change something — the city centres will also change, but that is not really because of the pandemic, but I think that is more because of the digitalisation and the online movement. If you look at shops, many of them have a very hard time to survive. The number of vacancies in shopping centres and city centres is increasing over time. The number of people walking around in city centres is decreasing over time, that started already 10-15 years ago. So it's really decreasing, making city centres much less vital and liveable and interesting.

So I think that for me, is something we really should worry about, because if these city centres are not fun to go to anymore, then these city centres will more or less die. Then you have these typical American cities which, yeah — I don't know, maybe some of you are from America — but those are not — at least in my opinion, those are not the really nice cities where you go for a short holiday or something like that, which is I think some of the interesting things of the European cities, is that you can have a good time just walking around, looking around in these city centres, which at the same time is the heart of a city.

But yeah, if people decide not to go there as often as they used to do, and if you also have the problem of people less often working in these office buildings, which are also quite often close to the city centres, so that again means there will be less people in the city centres. Yeah I think that might be a kind of problem. But that is not totally related to tiny housing...

LG *I don't know, I feel like it's now relating to tiny housing, because it seems like yeah, the city is, if for example if you live in a tiny house or in a tiny space, then the city becomes the social space where you can socialise with others.*

AB Yeah exactly, yeah yeah!

LG *So it's interesting also if this centre, like city centre dies, then we have this feeling also of now we can't socialise anymore anywhere.*

AB Yeah!

LG *And I think that's also what people felt, stuck in their house and with shops closed, that they couldn't socialise anymore.*

AB Yeah, I agree with that, yeah.. But on the other hand I — talking about socialising — I was, I already said so, but I was quite surprised that people did not prefer to have these common spaces because, it is not just a common space to store your common washing machine or whatever, or to store your bike, or I don't know.

But it would also be a place to meet people. Apparently they were not really interested in that. So that yeah, and I think in that sense it's not different from people living in normal houses.

LG *Yeah that's maybe also part of the tiny house movement. You want something individual, where you live alone, don't connect to others maybe.*

AB Yeah, that was a bit counter intuitive at least for me.

BSL *Thank you Aloys very very much for sharing what you have shared with us today! I think there are interesting things that I at least didn't think about.*

The bedroom is placed in a student house for four in Woensel-Zuid. We're focusing on Morgan's room, a 20 year old first-year student from Belgium that recently moved to Eindhoven to study at the Design Academy.

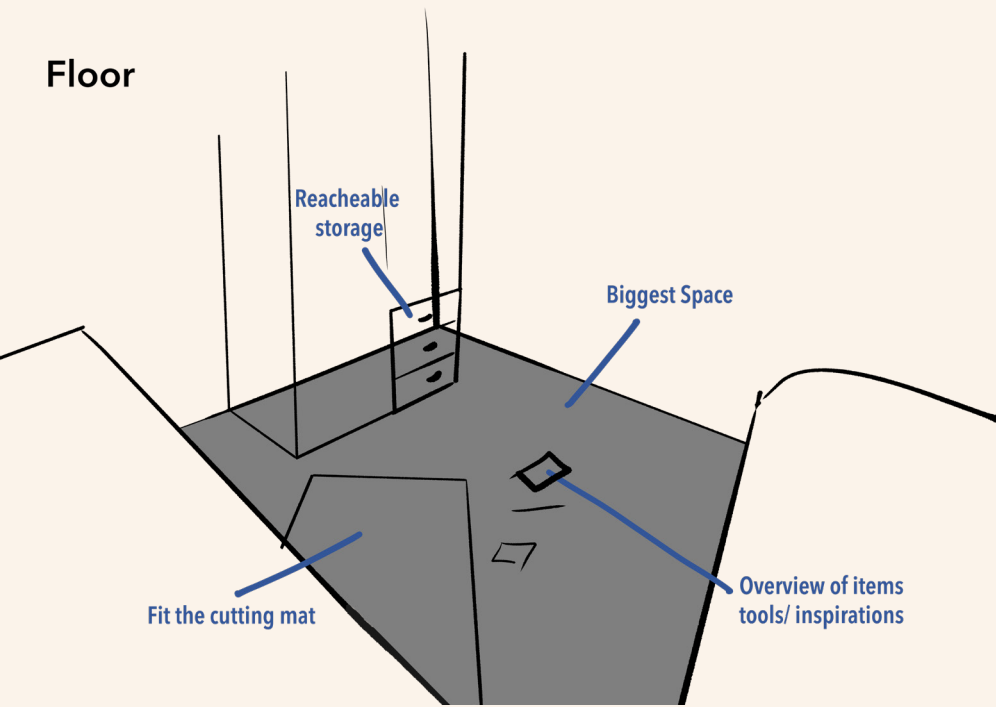
We're looking into a bedroom, usually, the most private space in a house. But as a student you frequently have to *re-invent this space* as it can become more than just a sleeping area. Working, eating, storing all your belongings are new activities and questions you *need to adjust*.

Housing Crisis, pandemic, overconsumption are today raising new problematics on our *relationship* with small living spaces. Usually regarded as an obstacle, small spaces can also open new perspectives on how much we need to live and how we *interact with our space*.

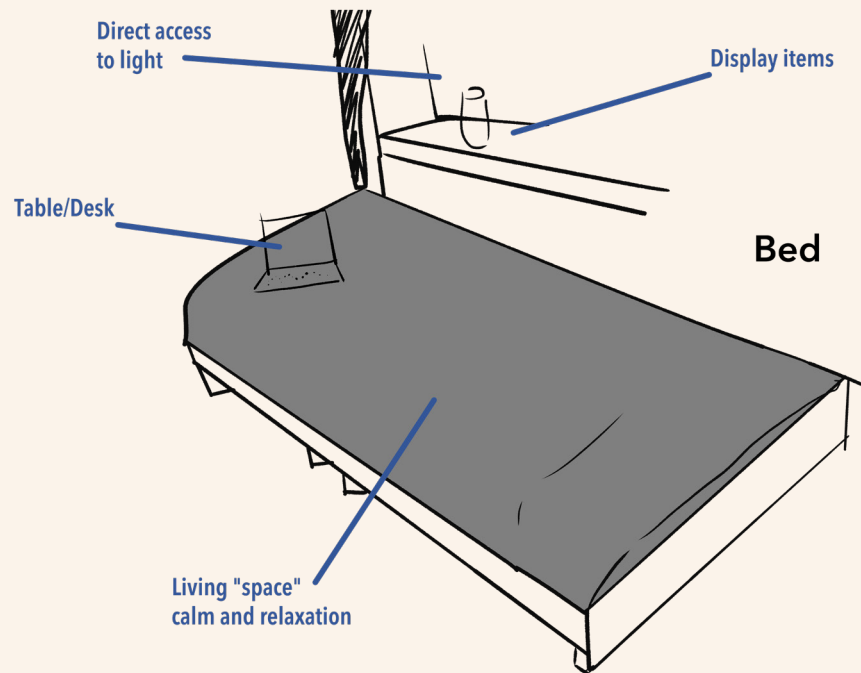
We chose to focus on Morgan because *she is in the centre of these problematics* as a student. She depends on this socio-economic factors. Her art/design student status brings *specific activities* that can be very space consuming and not adapted to a traditional house. Moreover her creative nature will more likely come up with interesting transformations off the space.



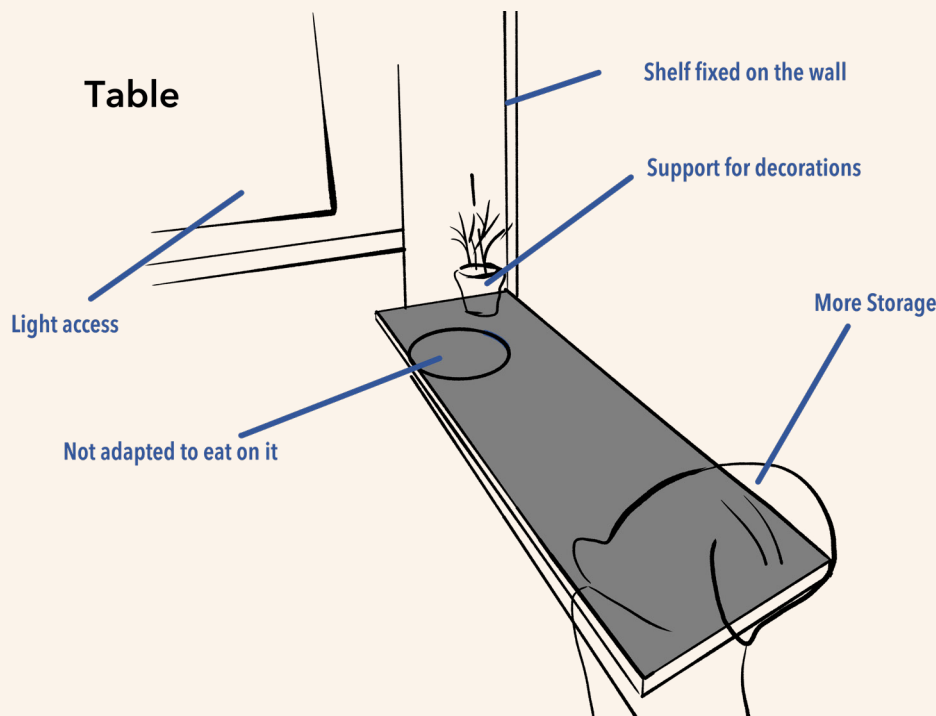
statement	The limited space causes Morgan to change her approach towards the function of objects.
explanation	Morgan to change the function of certain objects or spatial elements. Because Morgan has a limited amount of space, she has to rethink her way of performing her everyday tasks and needs. One space now covers a multitude of actions that require specific elements or space. Limitation has pushed her to optimize her room to allow more possibilities within her small space.
evidence	Morgan's room is organized around fixed elements that give her a frame. Her actions will evolve around these items, and they'll become the central points for changes of functions. These elements are: the floor, the bed, table. They're all fixed and placed thoroughly to maximise their functionalities and welcome new usages.



The floor is used for many activities. It's the largest "item" that gives more space for Morgan to work. The floor is like a big table where she can both sit and work while she spreads out her tools. She uses a cutting mat to protect this one and we can see her evolve in this bubble. She spends a lot of time directly sitting on her floor, and we can see how the functions of storage or working on her computer have adapted to her needs. The floor remains the main frame for Morgan to experience her space. This one remains always clean and accessible even behind her bed while she needs to access or organize her room.



This leads us to the second item, the bed. While sitting on the floor Morgan can access her bed and use it as a “table” to put her computer or other items. Originally the bed is a very cherished and almost sacred piece of furniture in a house. The room being the most intimate space of a house, the bed encapsulates all the codes and rules of our society, while also being a good translation of someone’s lifestyle. The bed is also where someone is being themselves without being seen and can also be the place where rules are broken. That’s also why regarding Morgan’s way of living, the amount of activities she’s able to perform with this item is quite interesting from a functional and social point of view. The best is the place where you sleep, where you start and end the day. But for Morgan it’s also a place to work, to relax, to eat, to store. She can also slightly move it to access her windowsill and get closer to the outside, the light, where she puts her plants that she cherishes. It’s a translation of all her needs brought to one central point and exploiting all the material qualities of the bed; a plain, smooth, comfortable, rectangular shape.



The last item from a material point of view resembles the bed, is her desk. Looking at it you see also that inflexible furniture can create versatility. The table is originally a shelf that Morgan added herself. This idea is really characteristic of Morgan room's organization, the idea of surface. We can see that the main item she uses are plain surfaces, mostly hard so she can lean on it. She uses it as a canvas for her to evolve, place her belongings, and visualise her needs. The desk has its limits, it's too small, she can barely eat on it, but instead she uses it to display her "inspirations" which take a big part in her everyday life.

## conclusion

In conclusion tiny spaces of living are always regarded negatively because of the constraints they generate. But in Morgan's case we can see that optimization is the normal response to these limits. In that frame she finds ways to improve her comfort while still performing the same tasks. The idea of surface is very important as it's the generator of ideas and allows a multitude of functions.

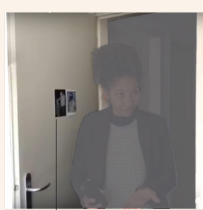
statement	Even though we might assume that people living in small spaces prioritize function over emotional connection, Morgan prioritizes objects, both to storage and to display, guided strongly by her emotional bond to them.
explanation	<p>Due to her limited space condition, Morgan is confronted with limits of space to store and to display her personal belongings. Therefore, she has to make choices and prioritize certain objects over others.</p> <p>We expected that this would force her to choose only those objects that are essential in function, but we were surprised that this is not necessarily her case. Even though she considers the object's functionality and frequency of usage, her curation of objects is primarily guided by her emotional bond to them.</p>
evidence from videos	<p>a magazines, books:          'I don't read, I rather look because I am not so good at reading'          - a preference for visual pleasure          'I really love it, it makes me happy to just look at them or have my music around'          - strong emotional bond, even though they occupy some space in proportion to the room</p> <p>b albums, plants, visuals:          'I just like to be reminded of my inspiration sources or my home. It's all stuff I brought from my other room'          - things displayed around and occupying some space have more emotional meaning          'I would definitely get more (plants)', 'and I want a big one that kind of surrounds my room', 'I just like this feeling of a bit of nature in here'          - a bond with nature, importance for well-being</p> <p>c chair:          'I would sit here, but here I get a lot of back pain because the chair is not the best'          - functionality of chair is not optimal, it even causes her pain          'I don't know why I just really like it' (moving it around to look at it)          - but still preference for it for visual pleasure</p> <p>d upper shelf objects:          'Sometimes it gets messy up there, but often I remove it because I want to keep it clean'          - visual pleasure is important, and for her this means keeping few things and more empty space</p> <p>regular table/shelf:          e 'there is not too much space' 'it's unhandy'          - not optimal in function          'but you can very easily take it off'          - still practical          'I liked that I had more space without it but it was horrible to do stuff for school'          - functionality is priority</p>

- f cutting mat:  
‘it’s helping so much, I can put it on the ground and then it serves as working space’  
- functionality as priority
- g drawers from wardrobe:  
‘it’s super messy right now’  
- she does have messy spaces and she is ok with that but only when these are hidden, still the quantity of objects hidden in these spaces is quite small in relation to space.

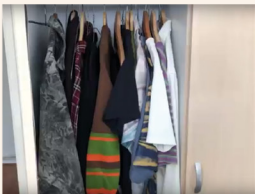
side 1

fix or non-owned objects

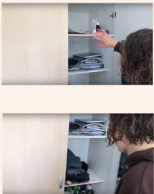
entrance door                      wardrobe                      side shelves




object: visuals  
curation: emotional bond  
remark: reduced size




object: clothes  
curation: functional  
remark: precise quantity




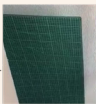
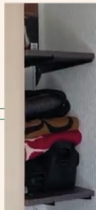
object: school stuff, clothes  
curation: functional  
remark: not overloaded



object: cutting mat  
curation: functional  
remark: bespoke storage



object: random  
curation: not defined  
remark: overloaded, hidden



side 2

fix or non-owned objects

wardrobe (side#1)



object: visuals  
curation: emotional bond  
remark: very selected



object: plants, mirror and magazines  
curation: emotional bond  
remark: they occupy quite some space on the floor but that is ok for her



object: plants  
curation: emotional bond  
remark: she mentioned 'she wants to be surrounded by a big plant'

bed

## Curation of objects: setting priorities

Brenda Salirrosas López

side 3

fix or non-owned objects



side 4

fix or non-owned objects



general points

- a 'I just like changing objects but there is not much options to change' 'I like moving things around' 'I change quite often'  
- movement plays a role in her relation to objects
- b '(fixed objects; bed, wardrobe) I would like to move them but maybe the landlord won't like it'  
- again movement



- c 'it gets messy really quick'  
- she perceives and reacts to messiness, which means having a lot of things around, so this also plays a role in her relation to objects
- d '(objects inside storage) I don't want to have my school stuff always around me'  
- working or functional objects are not to be displayed, besides they add more quantity, i.e. messiness which she doesn't like
- e 'I like the cozyness of the small space, and you can see everything, it's just all there.'  
- the feeling of being aware of all things that she possesses is enjoyable for her. In Morgan's relation to objects, which influences the curation of her belongings, there exist different layers.

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## conclusion

First of all, in general we notice that she often mentions that she likes to keep things 'clean' or that it gets very 'messy' very fast. With cleanliness or messiness, she does not only literally mean clean or dirty, but she also refers to having few things and more empty space for clean and the opposite for dirty. One remark to make is that even though she emphasizes that she likes to keep things clean, i.e. few objects, she also allows for messiness as seen within her wardrobe and drawers. This clean-messy aspect plays an important role in her relationship to objects because it primarily defines the amount of objects that she will keep and interact with in her room in general, which are anyways few, and also within the different spatial areas, in display or in storage.

Secondly, in general she does not keep a big amount of objects but it is noticeable that those objects that are in display are well curated and occupy more space, incl. empty space, than expected, like her plants or albums. In comparison, those objects that are hidden or in storage tend to occupy the exact amount of space designated for them, like her clothes hanging, or tend to be overloaded in the drawers. In this way, she clearly makes a difference between the objects she will keep outside in display or inside in storage. This spatial division and distribution is an important aspect because she will, at least visually, interact more with those objects that are outside or on display where she also does all of her activities.

Thirdly, the curation of objects to have on display is mainly guided by her emotional bond like her chair from Antwerp which causes her pain and occupies quite some space but still offers her visual pleasure. All of her albums, books, magazines, visuals and plants remind her either of home, nature or inspiration sources. These emotional bonds and the willingness to have them present and visible in her small room can be related to her value for well-being. This is why she also might be tolerable in them occupying more space than expected. On the other hand, those objects that she curates more for their functionality are mainly kept in storage like school material, clothes, etc. This doesn't mean that she will physically interact less with these objects, but at least she won't have as much visual interaction as with those on display.

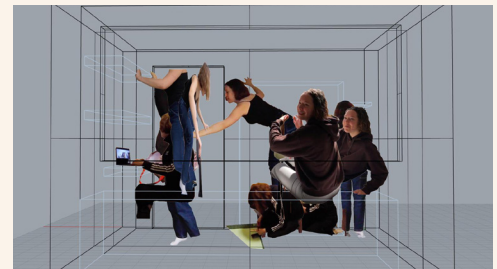
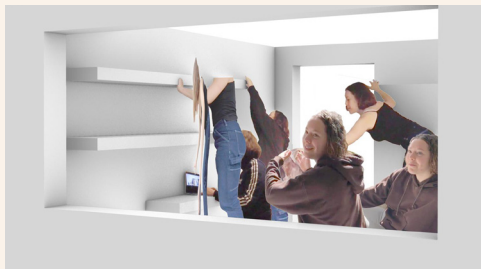
Finally, she mentions that she likes to 'move things around' or that she 'changes things quite often' and with this she means the objects that are on display. This implies that there is a constant dynamic in her relation to space and objects when carrying out activities.

The spatial elements referred to in our main question include physical movable objects, those that are on display as well as those that may be taken from storage.

If we want to understand how much the limited space transforms the functionality of the spatial elements, we also have to look at the curation of her movable objects. As we can see, these elements like the chair, magazines or albums displayed in certain spatial areas like shelves or floor are not necessarily chosen only for their functional but also for their emotional value. They play a role for her in creating certain spaces to carry out certain activities because visual pleasure is important for her too. If she wants to read something comfortably, the chair probably won't be the best option but her bed. Still she will use the chair not in its intended function but as visual pleasure so she will move the chair to a position where she can look at it from her bed. She cannot and doesn't want to own so many objects so the limited space forced her in a way to curate them well while finding different values on them, functional and emotional.

statement	The size limitations of Morgan's room cause her to execute different activities and arrangements on multiple vertical levels.
explanation	<p>Both in our observation and object space elicitation, It becomes clear that Morgan has developed a specific way of moving around in her space. The static and fixed furniture in her room force her to navigate vertically in her room, rather than moving around only horizontally.</p> <p>Through our observations we can determine that her bed and carpeted floor both serve the functions as a workspace, as a sitting area but also as a standing platform to reach higher shelves.</p> <p>Looking more precisely at her use of the surfaces of the spatial elements, we observe that Morgan appropriates surfaces on four vertical levels, to serve as work surfaces or as an alternative desk.</p> <p>Starting on the ground, Morgan mainly uses her carpeted floor as a desk. She is kneeling on the floor and working on hands-on assignments while using her big cutting mat. From time to time she reaches over to the bottom drawers of her closet to grab some tools and materials.</p> <p>Secondly, she adapts her body to different needs and therefore sometimes shifts her position. When working on her computer, Morgan either remains seated on the floor, using her bed as a desk or vertically moves further upwards, to sit on her bed while using the surface of the bed as a desk.</p> <p>The third vertical level originates in the fact that Morgan enjoys the view and daylight from her window. Alternatively, she transforms her window sill into a desk, while sitting on her bed. Sitting in front of the window expands her visual impression of space.</p> <p>The fourth vertical work surface level consists of her narrow shelf, which is attached to the wall and is being used as a desk. She mainly uses the desk for computer work or occasionally to have meals.</p> <p>Besides work surfaces, Morgan uses her two shelves and closet as display and storage units. In order to reach these surfaces, Morgan makes use of her chair and bed to climb and stand higher.</p> <p>Standing on her bed, gives her the possibility to reach the two top shelves on her wall.</p> <p>On the opposite side of her room, Morgan has a big closet with various shelves to store clothes and working materials. The top of her closet is used to store larger bags or items, which she can only access by standing on her valued wooden chair. The narrow space even allows her to balance on her non-fixed, movable chair in order to reach for a bag on the small desk, to then place it on top of her closet.</p> <p>In our object-space elicitation Morgan says she would even move the coffee table to work on the floor in the living room. It is interesting that she has become so used to a specific way of working in her room, that she even projects the same behaviour into other, larger spaces.</p>

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 evidence



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 conclusion

The size limitations of her room force Morgan to find alternative solutions in the way of using the space. She uses the space to its full potential by executing all her activities on these various vertical levels. Morgan is unconsciously re-thinking the use of the fixed spatial elements. By having a specific need, but missing the appropriate furniture and space, she co-opts the existing furniture and thereby adapts them, and herself, to her needs.

Had her room been bigger, then she would probably have a larger desk, which would perhaps keep her work-related activities bound to that specific table, instead of shifting around on multiple levels. Each object would probably be used with its intended function, and thereby the vertical movement in space would not be as prominent as the horizontal moving pattern.

statement	While transitioning from one activity to another, Morgan's micro-needs force her body to evolve differently in her limited space.
explanation	<p>Morgan has to adapt her body to the different activities she performs in her room according to the small, personal needs that surround that activity (micro-needs). This affects her choreography within the small room and also the objects that aid those needs. She has to meet these needs to perform a certain activity all in a location that has more functions.</p> <p>To perform a different activity, Morgan has to transform her position and her surroundings to accommodate the activity and the micro-needs that accompany it. she more often turns/pivots than walks inside her room.</p>

evidence



For example, from a video Morgan puts her feet between the bed and radiator in order to be warm while she's studying on the windowsill. For this she will also have to clear her bed, and windowsill.



While working on the floor, she will turn her body around to reach the material in her wardrobe, or to turn for more light.



When cleaning, she will stand on her bed to reach higher shelves.



Morgan shifts objects on her floor in order to have space or display them.

Conclusion

The limited space in Morgans room causes her to perform most activities within a central motion range. She mostly turns, kneels, stands on things or reaches out for objects.



statement	The lack of emotional bond with outside spaces force Morgan to adapt her own room, and objects inside, to various activities.
explanation	Ownership and participation in a room determines the emotional bond, physical usage, and duration of engagement in it. How we use and locate our body within that space. Morgan resulted to find comfort within her tiny room rather than the whole house. Doing her main daily activities as sleeping, working, eating, resting, lounging, cleaning, because she chose to stay in her familiar and explored 7m <sup>2</sup> room. She lacked the emotional connection and responsibility within the rest of the house. We drew this conclusion from the observation that she only owned food in the kitchen, rest of the possessions were owned or placed by the other tenants of the house. This limits as well as holds back the person that owns less, leading to feeling restricted. From the efficiency in doing an activity or the practicality of using the familiar objects. Holding back to not find a place for themselves to express how they envision their living space. The scale ranges from the bedroom- the most intimate/private space and spreading out to the rest of the common spaces where the boundaries are shared and privacy is more fluid. For one to feel connected, they need a personal relation to leave behind or form from scratch, in order to have the sense of belonging. Comfort and safety is also extracts from this, as having a designated spot or object to be known to others and of course, the self acknowledges the physical outside the body aspect of living in a space. The leftover trace of the owner, or the things that hold “my spot” and keep it warm until we return back. When we physically can't be present, at least our traces of us can do the job until then.
evidence	Morgan owns only food items in the common living space. She also has decided to move out, in order to find a better fitting house, and more compatible roommates. Not having the emotional and physical connection to a space, made Morgan feel like “this is not my space”, so she made the choice to move on with her search.
conclusion	This shows the importance of ownership and participation in the space, not so much the dimensions of a space. Feeling like you are home, feeling safe and comfortable is the main function of a domestic space and household. Knowing that your opinion is considered and matters in the shared group. Giving comes back in the form of sharing and receiving comes back in the form of sharing as well, to continue the cycle and keep it alive and moving.



Morgan is a great example of how living in a tiny space impacts the complete experience you can have in that space. This extreme situation has an influence on different types of activities, ways of connecting and using the space, on the scale level, and more.

As a matter of functionality, this context brings a strong need of optimization while keeping comfort as one of the priorities. But because of the amount of space, Morgan also has to set certain priorities in the objects she has. Certain people would opt for the most useful objects in terms of function, but Morgan chose to display objects she considers beautiful. Therefore, she prioritizes emotional connection to the objects, their visual aesthetic, eventually as a way of getting inspired.

As much as the inside space is important, the outside world is too, especially in the context of Morgan's room. By listening to Morgan's experience with the outside, it seems that the notion of ownership or lack thereof is important, considering that it impacts how you behave with and in that space.

Most importantly, tiny spaces impose characteristic patterns of movement. Because of the strong need to optimize the limited area, Morgan uses the space on a wide range of vertical levels, with extensive use of the floor as a working area and high shelves as frequently accessed storage.

Mobility and movement in a bigger space is more passive because of the need to designate the space in areas, and the overwhelming feeling to fill it up with action. In a small space, since there are no specific designated areas, body movement is more stimulated, through the multi usage/functionality that is all in reach. We assume since a bigger space has more room to move, we would do so, but as we observed, that is not the case, we move more where we are familiar with the space, where we are in charge.

The necessity of size is an assumption, that movement equals space to move. With many different activities to do, sometimes daily, Morgan goes from one activity to another quite often. These recurrent transitions create other smaller needs. One of them is for example the body movement, changing from one position to another to extract multiple functionalities out of a limited set of objects and furniture. That choreography and its unusual demands on the body can eventually create certain needs, such as stretching, resting, or massaging.

## Designing Urban Life

Jacqueline Cove

How can urban community gardens serve as an instrument to reconnect individuals with their local community and natural environment?

1	<b>Introduction, definition of a community garden</b> text by Xander Maclaren, letter by Michelle Jonker
2	<b>Meaning of reconnection with the community</b> text and letter by Lucie Gholam Creating a bond between locals Reclaiming public space
3–4	<b>Meaning of reconnection with the natural environment</b> text and letter by Brenda Salirrosas López Conceptual framework for human-nature connection Immediate and fundamental causes of disconnection
5–6	<b>Role of community gardens in reconnecting with growth cycles</b> text by Théa Brochard and Luna Wirtz-Ortvald, letter by Luna Wirtz-Ortvald Access to knowledge of natural growth processes Gardening's effect on subjective experience of time
7–8	<b>Community gardens and awareness of agri-food world</b> text by Théa Brochard and Michelle Jonker, letter by Théa Brochard The agri-food process and its issues Issues reconnecting us with nature on a lower scale
9	<b>Extension of living space, blurring boundaries, growing bonds</b> text and letter by Maija Zēģele

## Introduction

text by Xander Maclaren

letter by Michelle Jonker

In which light do you prefer  
to see the leaves hang  
on the tree that rests in our soil?

Perhaps in the late pink cloud light.  
Drink the water of the grapes  
we grabbed out of the vines

A supernatural  
gift as such would be tragic  
to waste, if we haven't already.

Run with me to the shed we  
shoved into the ground.  
Hiding our sharp objects from  
fragile rain that will inevitably  
dissolve their art.

Although the lake is far,  
the underground tap is near  
and has all the ease of near  
invisibility.  
We will hardly have to move.

Two chairs planted firmly  
next to the roses is ideal for  
our pleasure.

### Definition of a community garden

A successful urban community garden works on both material and social levels to decentralize and localize aspects of the food system while acting as a space for outreach and gathering. Often conceived in conventional cities as in-between measures both temporally and spatially, the best results come when garden organizers can secure a plot of land for the long-term while remaining responsive to the needs of a likely evolving local population.

The community garden as it exists today originates in both grassroots and government initiatives throughout the twentieth century. Scarcity and unemployment in cities pointed to community gardens as both a supplement to the food supply and a productive activity for available workers. In the first world war, as shortages became more acute and widespread, government agencies provided guidance to local communities on agricultural best practices. The more countercultural aspects of local food production came about in the 1970s as a part of the back-to-the-land movement, making use of vacant plots in cities.

Community gardens differ from allotments or individually owned plots in that both the labour and product is coordinated and distributed rather than handled in a piecemeal or competitive fashion. Although a garden may be constructed out of necessity on the grounds of an institutional partner such as a school or hospital, it is often set up on vacant land in an otherwise residential neighbourhood. While this potentially compromises long-term control over the land, a centrally accessible location surrounded by the homes of volunteers facilitates regular maintenance and cements the garden as a natural centre for the local community.

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### Creating a bond between locals

but why do we create communities?  
 For Lucie 16 years old, it's a place in the middle of the city called "Les Grands Voisins", an old hospital rehabilitated by an organization and designer to support people in need while providing space for local craftsmen and inhabitants. Lucie has never seen that. She's in the middle of Paris but suddenly the continual hubbub of the city has stopped. People are gathered together like a bunch of hippies all smiling and talking to each other.

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### Reclaiming public space

How do you do that, community gardens?

For Lucie 21 years old, it could be on her balcony, in the middle of the street, in her room or at school. However Lucie is suddenly stuck in her apartment, no soil, no trees, stuck between four walls. "Maybe it's too much hiding" she's thinking. "Maybe I should get outside? do something? Take care of someone..."

As today's cities grow more and more dense leaving almost no place for Nature, so communities have taken the initiative to create their own gardening space. Historically gardens have always been a place of reconnection and exchange between people. And more specifically during darker times like the industrial revolution, world war two or during economical instability periods. It always has been a tool to put effort in collectively to grow and care for a common interest.

Community gardens are places of cultural and historical exchange. The community garden of Little Haiti in Miami is one of the examples of this educational purpose that gardening holds. Created in this neighborhood touched by gentrification and struggling with their own identity as haithian voices are being repressed, the creation of a shared garden has been positively influential on people's daily lives. Inhabitants who used to garden in Haiti now can experience again they're past hobbies, as well as exchange during educational programs.

In the same idea, Earth Activist Training (EAT) is a community based on the principles of permaculture, earth-based spirituality, and regenerative activism. Blending theoretical lectures and hands-on opportunities. The community provided people from more unprivileged neighborhoods a way to share a common space as well as improving their daily lives with better quality foods.

But not only a learning tool, gardening can bring people to make a statement, reclaim their voices and their power as citizens. In the city of Todmorden, people have come together to better their city the way they wanted. Starting by guerilla gardening they gradually gain more participants and the approval of the city to plant everywhere. Based on values like being active or positive they grew a large community that now escaped the limit of one municipality but became a model of power as a group.

As we've seen earlier community gardens are a big motor for people to take action and grow closer to each other. But one aspect is the fact that all these actions take place in the city. We can't ignore the political statement that it is today to bring nature back in dense, overgrown metropolises. Promoting a reflexion on urban space and new model of social relation (horizontal instead of hierarchical) they have been great inspiration for people

Jane Jacobs talked about cities as Ecosystem. This means that cities would be organized around people and the way they interact with static elements constituting a city like buildings or sidewalks. They would be based on how nature itself works and mimic the structure of it. This takes part of a larger idea, Placemaking. Developed by J. Jacobs inspires people to collectively reimagine and reinvent public spaces as the heart of every community. Both an overarching idea and a hands-on approach for improving a neighborhood, city, or region.

Placemaking is based on the physical, social, ecological, cultural, and even spiritual qualities of a place that are intimately intertwined. Urban space surely is not a new concept, but they fall within today concerns of inclusivity, human connections and equal chances for everyone. Nowadays community gardens are not only providing a food alternative, but they give fairer chances and kinder collectivity. They improve empathy and group work as we feel more and more lonely today, especially during the Pandemic. They also are power statements as the reflection around urban planning is much needed today to improve our way of living that is degrading more and more due to the lack of space, pollution and inequalities between classes.

Conceptual framework for  
human-nature connection

Multiple terms trying to explain the connection between human and nature are available, e.g. biophilia hypothesis, nature deficit disorder, extinction of experience, reconnecting to the biosphere, teleconnections, telecoupling, recoupling social and ecological systems or distance from nature.

Ives et al. (2017) integrates all of this research on human-nature connectedness and proposes five categories of nature connections. These categories might help clarify why and how to reconnect people with nature.



Connection	Description	Analytical scale
Material	Consumption of goods/materials from nature (e.g. food, fibre)	Can be analysed for individuals or societies. Often connected to system characteristics. Needs to be spatially explicit (e.g. material flows within or between focal landscapes)
Experiential	Direct interaction with natural environment (e.g. parks, forests). Note that qualities of connections may vary substantially	Normally measured for individuals, but can be aggregated to the societal scale
Cognitive	Knowledge or awareness of the environment and attitudes/values towards nature	Individual
Emotional	Feelings of attachment or empathy towards nature	Individual
Philosophical	Perspective or world view on what nature is, why it matters, and how humans ought to interact with it (e.g. master, participant, steward)	Relevant to individuals, as well as to dominant views at the societal scale

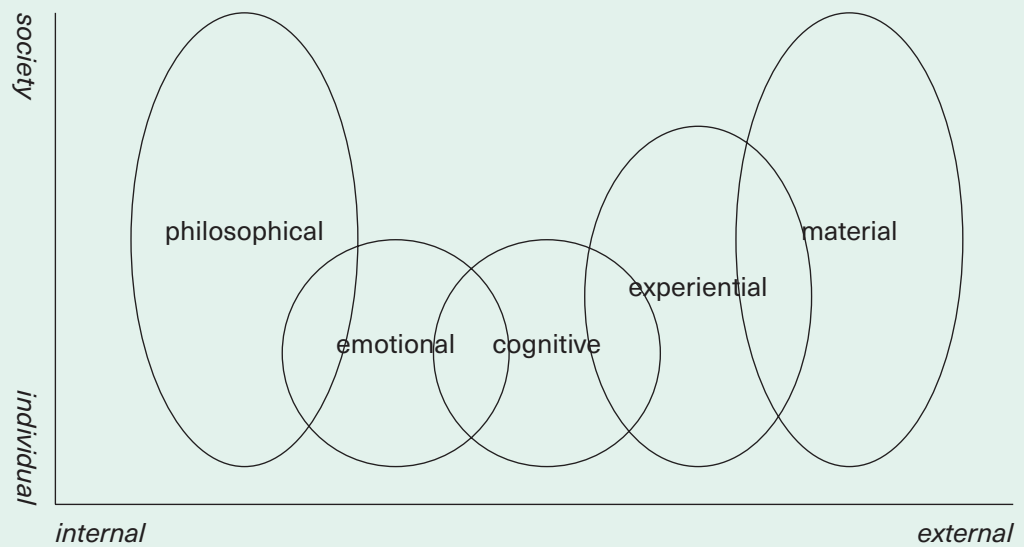
My happiest memories from childhood take place in great part with my sister at the seaside or in the farms situated in the suburbs of Lima. At that time I took it for granted but it was this wilderness and adventurous spirit that nature

tends to evoke that deeply nurtured my childish soul. I now miss camping in the hills or making fire in the farms. Living in the city means always walking and biking on hard pavement and trying to keep things neat and clean and especially, served on a golden

plate. This means, I really don't know anymore how it is to touch earth, know flora or fauna, get involved with it, observe it, appreciate it, take care of it.



Conceptualization of different types of human-nature connections, along a spectrum from peoples' inner to outer worlds (x-axis), and their relevance at different scales of social aggregation (y-axis). While presented as independent categories here in this figure, in reality, each type of human-nature connection may interact with the others.



Immediate and fundamental causes of disconnection

A fundamental cause that has strong evidence is based on the notion of 'reconnecting to the biosphere' proposed by Folke et al. (2011) which implies a historical separation of people from nature, specifically a cognitive disconnection between the people's understanding of the impacts of their activities and biophysical reality. This cognitive disconnection can be traced to the increased complexity of global resource systems.

More immediate causes of nature disconnection include:  
 urbanisation (Cumming et al., 2014)  
 reduced access to green spaces (Lin et al. 2014)  
 changing social norms and perceptions (Valentine and McKendrick 1997)  
 the rise of electronic media (Pergams and Zaradic 2006)



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Access to knowledge of  
natural growth processes

Being able to observe and witness the process of growth was valuable in the sense of gaining an understanding for the effort it takes. Starting with preparing the right plot, planting the seeds, giving optimal conditions, watering according to need and generally supporting the growth but also accepting failures, helped me understand from an early age onwards, that food doesn't fall from the sky.

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Gardening's effect on subjective  
experience of time

Reflecting on these past memories, makes me realise that it really is the slow process of growth that has stayed with me as a fascination.

One of the first and oldest ways of getting knowledge over a subject is to observe it. The only elements needed for this practice are time, and a context of observation. In that sense, a vegetable garden, whether it is a community garden or not, is a valuable context to study the growth process of nature, or more specifically plants. Structures of plants, reason behind it (climate, DNA...), source of energy (mineral of the ground, photosynthesis of sunlight...), a lot can be learned when observing the field.

This article talks about children having a workshop on nature growth processes. Even though the public is children, I think it is still a very good example of all the benefits of having a vegetable garden to study and learn Nature processes.

The workshop aims at following a scientific method, by that is meant correct procedures and techniques involved in science explorations. The inquiry being made is over the source of water, and how from one type of water to another (tap water, river water, salt water, carbonated water, and soda), the result on the growth of a plant changes.

Since this workshop aims at being as much scientifically-correct as possible, science experiment, an explanation over constants and variations is being made, in order to understand better what to ground yourself on when comparing the different growth of the plants. Certain materials, such as ruler and measuring container, are being distributed to report data (amounts, dimensions and proportions,...).

Legoman (one of the children participating in the workshop) is excited to wake up each day and "get to work".

Also, in the comments of the article, a couple of teachers (primary school mainly) ask for a printable version of this research, in order to share it with the class.

The workshop narrated in this article describes well how from a simple activity, vegetable garden could be a great field of observation and learning of the Nature processes. This can bring awareness to Nature, the magic behind it, inspirations and more.

To bring it to the context of community gardens, bringing the children there and educating them on science facts of Nature could bring the "nature sensitivity" part that is often missing in education.

Slowing down in a fast forward moving world is challenging.

The rapidly changing technological development over the past more than fifty years, has enabled us to connect with the world on numberless new levels. Globalisation has not only enabled us to communicate and exchange on numerous levels and provided us with greater mobility, but has also paved new networks for the trading industry.

However, to all these newly opened doors there is also a backside to the medal. Modernisation of our time has enabled us to easily access and share information, which on one hand enhances our ability to develop further, but on the other hand also provokes "the need for instantaneous responses". Within the globalisation of matter and culture, our experiences of time are shaped and distorted by new "production processes and transportation infrastructures" that speed up trading processes as well as our own working hours and lifestyle.

With new trading deals, the agricultural domain experienced a big shift. The high agricultural demand to feed the entire world population has led us to an unstoppable acceleration of food production. Exotic and non-seasonal fruits and vegetables found their place in Europe on various supermarket shelves. Food piling

Nowadays and without thinking about it, we quickly run to the supermarket to get our groceries that are ready to be taken home, but we rarely think about the origins of that red pepper that was lying on a big heap in Jumbo.

Witnessing the growth from the beginning gives us a different sense of time. Instead of roaming around in this fast forward moving world, community gardens can contribute to regain a sense of time and to share this experience with other gardeners.

up on heaps, ready to be chosen and bought by the consumer is the new classical approach that society has towards food. This hinders many consumers in breaking free from the imposing pattern of quickly dropping by the supermarket to get some groceries, instead of investing time in cultivating their own vegetable garden.

Living in this accelerated world, makes us lose touch with the actual process of growing our own aliments. We tend to take vegetables and fruits for granted and forget about the ‘behind the scenes’ and effort it takes to prepare the soil, plant the seeds, wait for them to sprout, germinate and eventually, hopefully, grow into crops that will be ready to be harvested after some weeks or months.

Growing your own vegetables in a community garden requires a lot of time, practical knowledge and effort, such as for example: knowing when to start planting the first seeds? When is the last and first day of frosting of the season? What type of soil to use, how much light, warmth and how much watering is required? Acquiring this knowledge in itself is already a good step towards being able to revalue the effort and time it takes for crops to grow. However, theoretical knowledge is not enough.

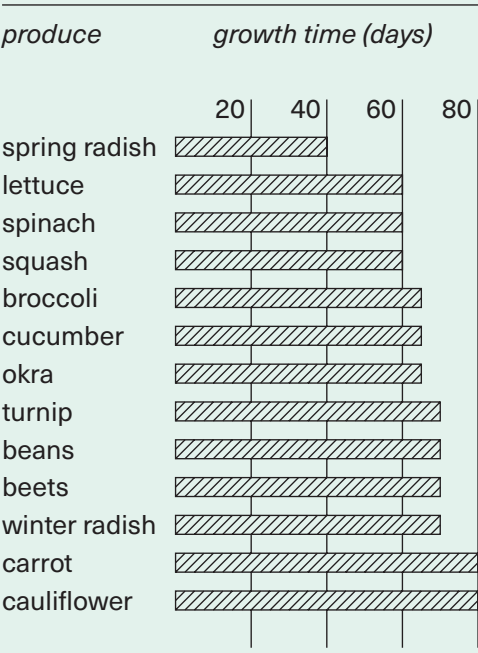
Being in close relation with our environment, actively participating in gardening and witnessing by first hand each step of the process, in comparison to only spending time in urban settings, will change our subjective perception of time. A study conducted by Mariya Davydenko on “The Effect of Nature Settings on Time Perception”, shows that spending time in nature might make us perceive time as passing by quicker if we are in a pleasant moment, while we would perceive it to pass by much slower, if we are in a mindful or meditative state.

While urban areas are mostly noisy and packed with various attractions, nature provides us a calming and quiet space for attention restoration. Spending time in nature or more specifically, on gardening, helps improve our focus by “ignoring irrelevant stimuli”, which often occurs in a busy city. Being focussed, allows us to build up an awareness for our surroundings and enriches our actions with a more mindful approach.

This meditative state allows us to pay more attention to the growth of for example vegetables or plants in general. We allow ourselves to reflect upon the process and to put it in relation to previous experiences, that perhaps required less effort to obtain a carrot.

Growing our own vegetable garden gives us a new understanding and perspective of the entire forgotten process, which is speeded up in our modern times. The process behind growing for example green beans implies a lot of time and right conditions for growth. After having prepared the soil with optimal moisture, the green bean seeds take about seven- fourteen days to sprout. Throughout the next 50- 65 days, the soil has to be kept in the right conditions for the plants to be fruitful. Failures are part of the process, which is also forgotten, when we buy the perfectly looking vegetables.

Community gardens would be a good starting point to get involved in a collaborative context, but also to reflect on this process together. Diving into the whole process is essential in order to restore our awareness for the effort and process it takes, to position ourselves, and thereby regain an understanding of actual time in our human constructed, accelerated society.



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The agri-food process and its issues

I often feel out of reality of what is happening behind the supermarket. How do certain vegetables grow, what are their needs, and how complex can it be to grow it to its end term.

The "behind the scene" of agri-food is unclear to me; I don't have much control over it. How the vegetables grow, how much polluting or/and unhealthy the production chain might be...

Growing them on my own would give me this control back, after losing it by buying in supermarkets.

Agri-food has nowadays become a necessity for human society. The growth process is under high control, processes and planning. The food chain is made easy from the source of production to the shops to buy it. The vegetables end so easily in our shops and then in our plate that it takes an effort to requestion it. How do all vegetables look so perfect? How is it that there are tomatoes in the shop during the whole season of winter, even though it is not the season tomatoes are supposed to grow?

Food safety, genetic modification, exploitation of workers, agriculture being in the shade (not integrated in our society), monocrops, finite resources,... Many issues come up when talking about the agri-food world.

Everyday we hear about stories dealing with food safety, or better call it food unsafety. These stories are the result of the quest for optimal profit, both from the producer, and from the industry lobbies. This is at least partially because industry lobbies make sure that inconvenient regulations are not passed. The latter make sure that inconvenient regulations are not passed.

Now talking about exploitation of workers. As mentioned previously, tomatoes in the supermarket in the middle of the winter season is of great surprise. A survey has been made on Immokalee, in Florida, where "Between December and May, as much as 90 percent of the fresh domestic tomatoes we eat come from", according to the survey. The survey mentions many cases of involuntary servitude.

Communities gardens give us a take on the urgencies that the global food system is inducing. Diversity of species you are growing helps to reduce the over-exploitation of the soil, handwork to control how and with what you grow your food, low scale production to be more open to the wildlife that exists around it, ability to grow different species in order to not reproduce monocrops scheme,... Many benefits come from community gardens when compared with the agri-food world, and gaining back the control we have lost (or never had...) with agri-food is one of them!

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Issues reconnecting us with  
nature on a lower scale

Functioning like a small simulation of greater industrial agriculture, community gardens offer a space to practice different systems of cultivation. Participating and benefiting from a community garden requires a greater commitment and investment of labour and resources than simply purchasing industrially produced goods. Its small scale, manageable and interconnected nature helps in overseeing certain processes of cultivation. In terms of interpersonal relationships, management of waste, relationship to wildlife and knowledge that comes from observing these processes, valuable insights are gained.

The agreements established within the community with regards to the maintenance of the garden reflect the values shared by the participants. Knowing that the survival of the garden depends on communication and sharing ingrains the need for strong interpersonal relationships. A relaying of tools, resources and excess could save much time, money and material while also building beneficial connections with fellow community members. Part of the functioning of the garden. The choice to collectively use pesticides for example is easier to establish and observe in such a small context, if one person would choose not to abide, they will be able to observe the implication it has on others and themselves. Seeing how certain choices affect the whole community is an insight into how the agricultural industry can make choices with nothing more than profit in mind. Exactly because of these close relationships, the community has a greater awareness of the societal impact of their actions.

Consciousness around waste is also more present within a community garden context. Since the garden requires more labour-intensive methods of production, purchasing many machines to speed up processes is unnecessary. Members can share tools which minimizes the amount of materials used, composed generated can be redirected into mulching the gardens and excess produce can be gifted. This system of sharing incentivises a more mindful approach to waste.

The absence of the need to mass produce also allows for more diversity of life in the garden. Different plants and animals live somewhat more intertwined in the garden than in a monocultural setting. This diversity, be it an aesthetic choice, provides for a more natural ecosystem to operate whereas single crop farming induces the need for fertilizers and pesticides.

Through community gardens we learn how to trade, connect and cultivate in healthier ways. By choosing to dedicate oneself to the maintenance of such an environment, the members are compelled to commit to caring for the land because the issues hit closer home. This awareness or feeling needs to be multi(applied) to the rest of the world. The ease of consumption is a reason we can neglect the environmental degradation that comes with it. Returning to a more personally engaging system of production could reconnect us with nature and each other.



Now I live in a city.  
My environment consists of  
asphalt, bricks, a few flower  
beds with very domesticated  
flowers, put in place with  
an intention to decorate the  
brick, sitting bored by the  
city, silent. When was the  
last time I was in a garden?  
A real one. I don't think I  
remember. If I pass by a house  
with a nice garden, I get  
jealous of their treasure.  
It reminds me of the good  
times back at home, in my  
mother's garden.

The time we spent together,  
growing up together was  
truly a precious time. I  
learned so much just by  
lingering through you.  
Sitting or laying all day  
outside just doing ordinary  
things. Observing the ways  
you move, sit still, change  
colours, textures and how  
your blossoms change to  
fruits, made me excited  
for the seasons to come.

Forest, park, street, house, apartment, backyard, living room, bedroom, kitchen, dining room, terrace, garden, and so on.. Day to day we live within constraining boundaries of our shared environment. Categorising it, giving ownership, labelling it, and forcing our expectation on it. Each of us have different bonds to nature, in different values and depths. Since there is so much diversity in our views, it is easy to get lost and forget some parts of our natural instinctive knowledge. It is hard to hold so much information coming at us at once, on a daily basis. Being in presence with nature and how we use it is one of them. How we position ourselves as individuals, as well as as a group in a community we live in. How can we unlearn our static connection to nature, and treat our outdoor space as you would treat your inside space, dwell in its captivating feeling of being present?

Using surrounding to our shared benefit long term. Noticing opportunities, from what we can learn from. And it starts from exiting your comfort zone of private space into shared public space, ideally blurring the boundaries of architecture and nature. For limited resources and space, a community garden is a great solution to bring us and our knowledge together.

Gardens obviously need to perform a range of functions for the human users, but it should also cater for local wildlife, and help support biodiversity. Taking note of subtle seasonal changes, the magic of gardens is that they're constantly changing and evolving. Slowing down and noting small changes, by caring for plants, you look forward to each season of the year. Gardens can connect us to the natural world in meaningful ways, whether we're plucking the first ripe berries of the season or pausing to watch birds mingle around, doing their own business. Animals and insects give gardens life. The buzz of bees, the singing of a bird in a tree or perhaps the glimpse of a hedgehog, can instantly grab your attention and make you feel more present.

It can be a powerful place for connecting us to our roots. Perhaps you remember smelling a specific type of flower your grandmother grew, biting into a homegrown tomato or sitting under a specific tree reading. By surrounding ourselves with nostalgic plants, we can build a more emotional connection to our living environment and engage with our senses.

Gardens are often places we go to wind down from the rush of everyday life. A place to help us slow down, and recenter mind, and be grounded. It's a space of meditation with the tools of gardening. No thinking, debating, arguing or analysing needed, just us being present. Having a place that feels more like a soothing retreat for caring for oneself and the garden, rather than an obligation to have something to maintain.

Starting a new tradition. Having ways to connect future generations in a garden. Whether you plant a tree for a special event, or you have friends place hand-prints in cast-concrete pavement or building a swing together can be additions that can make gardens feel more meaningful to the whole community, having shared ownership of beloved precious memories.

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