

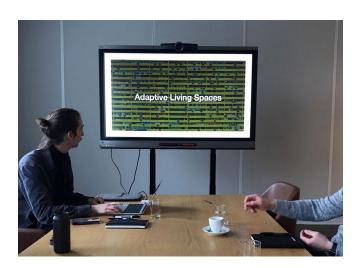
Renske Alblas Stijn van Cuijk Vít Slepička

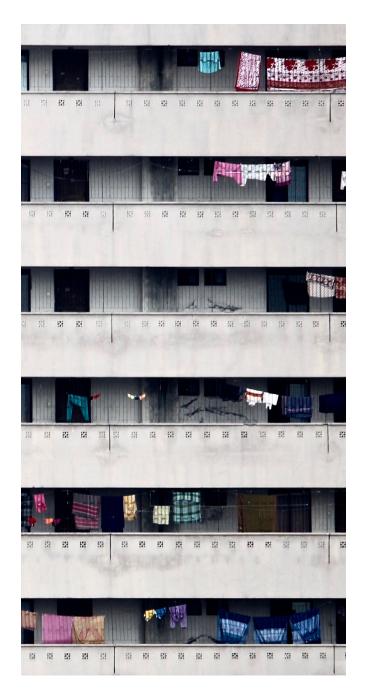
Co-Design Studio, 2019

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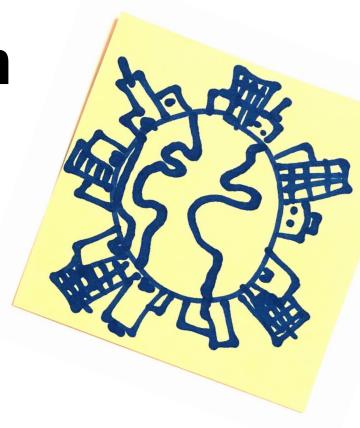








Introduction



The 2018 Revision of World Urbanization Prospects states that In 2050, 68% of people on earth will live in urban areas. That means that 6,7 billion people will be living in urban areas compared to 4 billion today. More people living in the city will mean less space for everyone to live. What will this mean for how people use their space and the furniture in it?

Briefing

Our client, Charlotte van der Lande is starting a new furniture label geared towards small living; people right now are living around their furniture, how can we change this and have living spaces adapt to the users needs? We like to call this Adaptive Living Spaces.

We are looking for design opportunities for this new furniture label by researching what the needs are of people who live in small spaces. What is important for them in their living space? And what are the challenges they are facing?



Process



Briefing

Project kick-off together with the client.

Secondary research

What is already known?

Recources can be found in the "Secondary Research" folder.

Writing design brief

Setting goals: what are we going to do? Aligning this with the client.

Exploration

In-depth interviews with target group.

Mapping interview data

Turning collected data and our experiences into insights.

Defining research

Creating personas and storylines connecting our insights. Formulating conclusion and design question.



Ideation

Concepting Prototyping

Testing

•••

Methodology

Because of the explorative nature of this research we are doing qualitative research. Going in depth with our target group to find out what their real challenges and needs are. Within the gained insight we can see what opportunities arise for new solutions regarding furniture for small spaces.

Target group

We did our interviews mainly with young professionals (age 25 to 35) living in dense urban area's who make sacrifices when it comes to the size of their space to be able to live in an area which empowers them in their career and social life. A limited budget forces them to live in relatively small spaces and co-living situations. They are flexible and willing enough to make this compromise.

Interviewing tool

Visiting people in their living space is not always an option. We looked into how we could talk with people about their space without being there.

What we want to know: What does the space look like and what is in it? How is it used and why is it used that way?

What does the space look like and what is in it?

To answer this we let the subject draw a rough floor plan of their space and the furniture that is in it. At this point they will already reveal some info about the space and furniture. It also makes them create a mental image of what the space looks like.

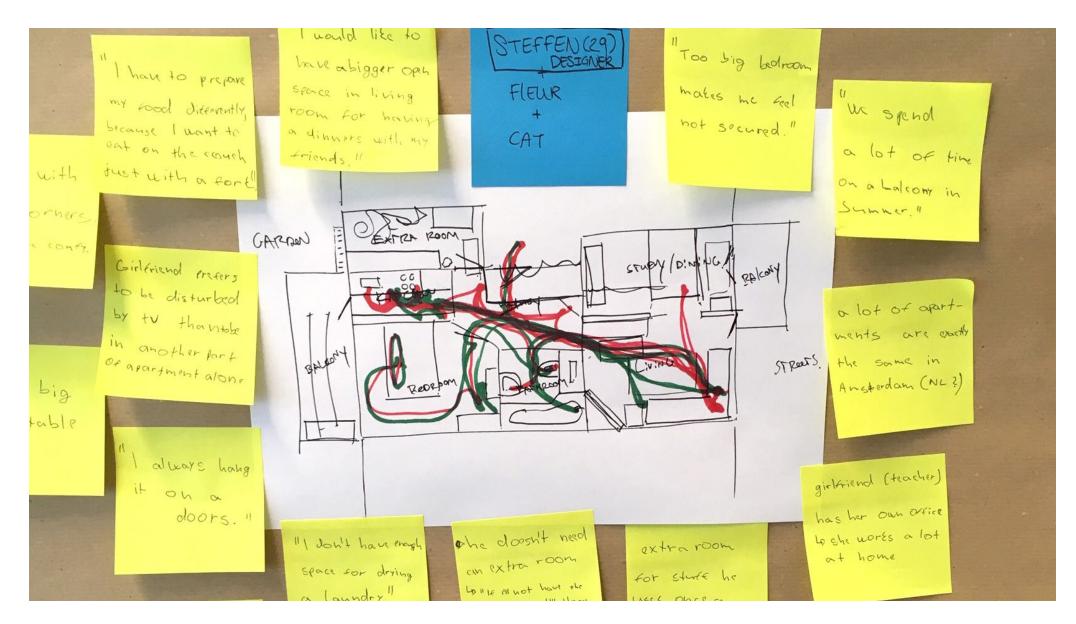
How is it used and why is it used that way?

After drawing the floor plan we give the subject a colored marker to draw the first part of a normal day. Later we ask them to draw the second part with another color. The lines show us where they go and what they touch and use. This will give us a lot of material to ask questions into why they do the things they do, and how that makes them feel.

Naturally, after this a discussion will follow about how it could be. At this moment we also present a scenario with unlimited resources (you can do whatever you like) and a scenario with a very small space. Then we ask what choices the subject would make in those scenarios and why. This gives us a deeper insight in what the person we are interviewing actually thinks is important.

We capture this with the drawing that is made by the subject and taking notes on a note taking template we designed for this tool.

You can find all of the captured information and profiles of the 7 interviewed people in "Attachment 1 - Interview Notes.pdf".



In this picture you can see one of the floor plan drawings. The green line represents the morning routine and red shows the evening/afternoon routine. The sticky notes contain quotes and remarks collected along the way.

Research Results

Main insights:

Per person within the target group, needs on different levels can strongly vary.

People need to experiment with their living space and the furniture that is in it to find out what works.

Per person within the target group, needs on different levels can strongly vary

After doing interview sessions with the target group, we found various needs from people that were contradicting eachother. See the example below.

Person 1: "When my girlfriend has to do paperwork and I'm watching tv, she still likes to sit on the other side of the room, even though we have a separate room where she could work. But when she sits here we can still be together."

Person 2: "When I want to work on my book and my boyfriend is doing something else in the same room, I move to the bedroom because I need to focus."

This shows us that people, even within the set target group, have such vastly different needs on different levels, you'll find that if you try to generalize their needs you end up with very basic needs.

People need to experiment with their living space and the furniture that is in it to find out what works

While living in a space, people will find out what works for them and also what doesn't. But the hard thing is that it's not a trial and error process; once people buy a piece of furniture it's not easy to make (small) changes.

By doing the interviewing sessions with people they made clear to us that it made them think about their space more critically, and some that they felt they could improve their space with this new awareness. Some also were already aware of some changes they wanted to make.

This indicates that awareness of how a space is used and looking at that critically may be necessary for people to make good decisions to change how their space is furnished. In some situations people can fulfil their needs outside of their space. The conclusion could even be that the space cannot facilitate their needs, and that you just need to move.

"When we open ourselves to a home that constantly evolves, we are better equipped to manage the changes in our lives too. But there are battles when it comes to creating an ever-changing home. We are at the whim of the forces within and outside our home that feel beyond our control, and for many of us accepting and embracing these changes requires a completely new perspective."

- IKEA Life At Home Report 2017

Personas & Journeys



These are personas that were created out of the insights gathered from the interviews: Jane and Ben. We created two personas because there are various insights that are contradicting eachother. We found that an important difference in people we interviewed was if they lived alone or with other people (e.g.: a partner). Another differentiating factor is that Jane has her own business (whether this is as a freelancer, consultant, etc.) and works at home a lot. Ben is a person who has a job outside of the house.

To show which insights we found we place them in a scenario with the persona's. This way they are more contextualized. The journey shows a day in the life of the persona's.





"I am very minamalistic. It's only more stuff. I keep my memories in my mind anyway."

Age: 28

Work: Fashion designer

Relationship status: Single

Location: BoLo, Amsterdam

Personality

Work-a-holic, Freelancer, Creative, Designer, Craftmanship, Coach

Introvert	Extrovert
Thinking	Feeling
Sensing	Intuition
Judging	Percieving

Bio

Jane is a fashion designer who makes her clothes by hand customized per order. By doing this she hopes to make the fast-fashion world a little slower and to spread awareness. She meets up with people at coffee places, co-working places or at her home.

She lives in an apartment in a neighborhood in Amsterdam. She has chosen to move out of the city center to a more quiet area to have a more village like feeling but still be close to everything a big city offers.

Her apartment in about 45 m². Within this she has her bedroom, kitchen, a shower and living area, but this is mainly used for her business; she makes the clothes, does the paperwork, has photo shoots and has clients over to discus the designs.

She shares the toilet and the washing machines.

Goals

To shake up the fashion world

Creating conscious fashion by making custommade clothing by hand.

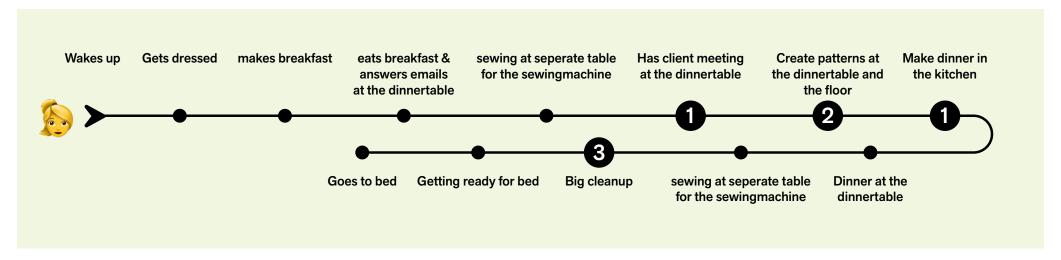
Supporting local sustainable textile innovation by working with local recycled textiles

Behavior

"Our kitchen table is used as a work space and dining table."

"More stuff is annoying when it's not taken care of in a systematic way."

"I like to sit on the carpet while working."



The picture above shows the journey of Jane.

1

The dinner table can change into a working place.

The second insight we get from this is that the redundant space at the table will be used to store Bens wife's stuff in the meantime.

2

People will use any surface as a working surface if they need more surface area than their desk/table offers. (e.g.: the floor, a bed)

After the client meeting she starts by making the patterns for the clothes. She does this on the table, but because she needs a lot of space for this she also works on the floor.

3

People struggle with their stuff: In a small space, everything needs a designated spot.

When Jane is making the clothes she uses the entire room.

Therefore, the room is a mess at the end of the day, so cleans up her whole apartment. She does this because the apartment feels very full when she doesn't.



"I have small personal things and plants that I like to show."

Age: **33**

Work: Entrepreneur / Project

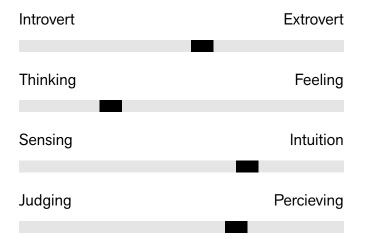
Manager

Relationship status: Married

Location: Lunetten, Utrecht

Personality

Outdoors, Creative, Planner, Organized



Bio

Ben lives with his wife in a 90 m² apartment in Lunette, Utrecht. He is a project manager and co-founder of his company which helps teams to get more creative.

He works full-time so comes home in the evening. He and his wife often cook together. After dinner he likes to relax on the couch and watch some TV.

His wife works part time, so she has time for her hobbies (painting, sewing). She does this at the kitchen table. Therefore there is often a lot of stuff on it.

Their apartment is close to the city center.

Therefore Ben can travel easily to his clients. In the apartment they have a kitchen, bathroom, bedroom, living room, dinning room, and a spare room.

Goals

Help others become better designers.

Take on creative challenges.

Create cool products.

Behavior

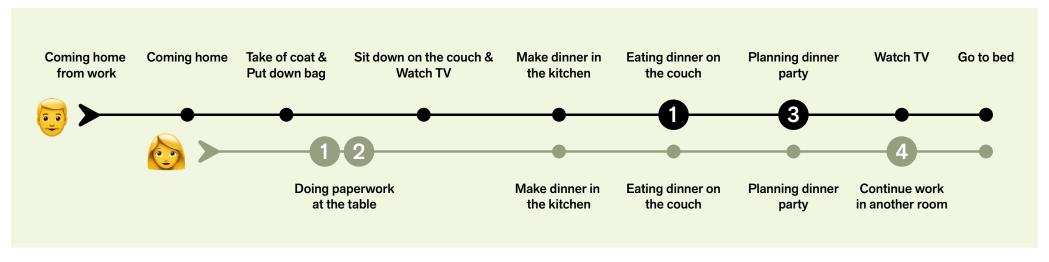
"The table is always full of stuff, even when we eat there."

"We would like to have a bigger dining table for the dinner."

"Party we have every three months."

"New furniture is expensive and isn't always the way I want it to be. "

"When my wife is watching television and I am doing something else, I have to move to the bedroom."



The picture above shows the journey of Ben (black) and his wife (gray). Because Ben is at his work during the day the timeline starts when he gets home.

1

Objects can have unconventional or multiple purposes.

The fist insight we can get is the fact that Ben's wife does paperwork at the table, she also continues this after dinner. Therefore she keeps it at the table while having dinner. This causes that the table is not used for eating. Ben and his wife eat at the couch.

2

Redundant space quickly becomes storage space.

The second insight we get from this is that the redundant space at the table will be used to store Bens wife's stuff in the meantime. 3

People's space needs to accommodate being together with other people and social gatherings.

After dinner they discuss the dinner party they are planning to have. Ben has a group of friends that likes to organize dinner parties. This time it's Ben's time to host it. They struggle with this because they don't have enough space to always have a big dinner table, but they need it in such situations.

4

Personal space is important for people.

When Ben's wife continues doing paperwork after dinner, she moves to another room for more concentration.

Conclusion

How to best use their space is a journey for people. Along the way of using the space people discover what works and what doesn't. But the awareness of what works and what doesn't isn't always there.



Design Opportunity: Empowering People to Change Their Space

If we want to fulfill people's specific needs we enter the territory of tailored solutions. If we empower people with a product that allows them to customize it to fit their needs, we are asking from them to think creatively, and to be aware of their needs regarding their space.

If we ask people to think creatively about their space and design it for their actual needs, we have to make them break through social and cultural barriers to be able to make honest decisions. How do I think I should be using my space? How do I actually use my space? How do

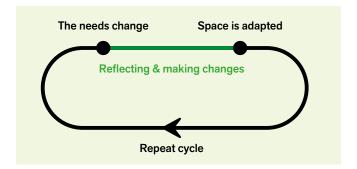
I want to use my space? If we want to solve any tensions with a physical piece of furniture, people first have to be aware themselves of this tension, before they will be able to take action on it.

This brings us to the following design question:

"How might we empower people living in small spaces to change their space to fit their needs, and have the furniture facilitate that change?" "How might we empower people living in small spaces to change their space to fit their needs, and have the furniture facilitate that change?" To answer this we suggest to take these three steps:

- 1 Activate: Stimulate people to take a look at their living environment and reflect on the way they use it.
- 2 Reflect: Help people reflect on their living environment in an honest and critical way to find out what they need out of their space.
- **Facilitate:** Provide furniture that can facilitate the changes people want to make to their space.

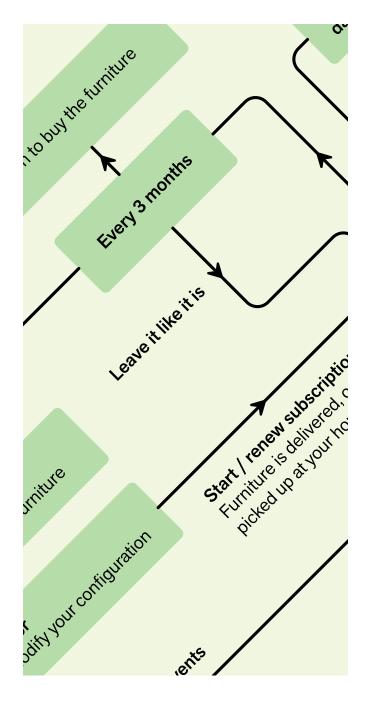
Important to note is that these steps are meant to be repeated at any point the needs change (See figure).

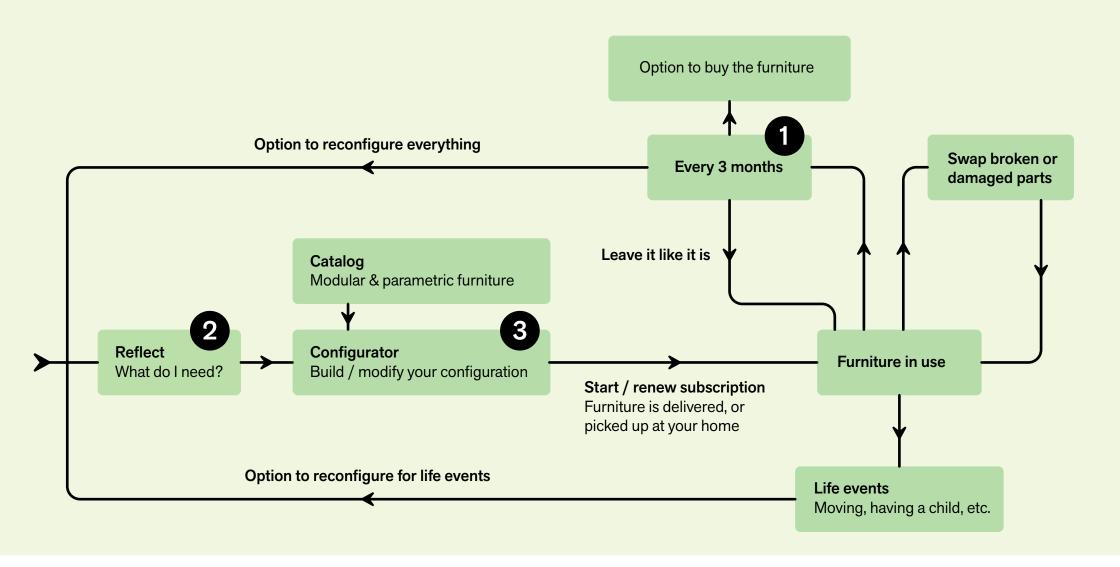


Based on our research we believe a solution built around these three steps will empower the target group in finding out and facilitating their needs. Thus providing us with a solid base for ideation and turning those ideas into a concept.

Concept: Furniture as a Service

People are the experts in how they want to use their space, we believe they can also be experts in how they furnish it. This service assist people in thinking creatively about their space by lowering the bar for making improvements and playing around with different ideas. The freedom this service model offers to people makes it possible for them to have their space easily adapt to their needs, even if these needs change over time.





The service model gives an answer to the three steps we created that we believe will empower people to change their space to their needs.

1. Activate

By giving the option to reconfigure you furniture every 3 months, we create a moment where people will be aware of the fact that they can make changes.

2. Reflect

We help people reflecting critically and honestly. But not make decissions for them. It is important for people to be in control of their own space.

3. Facilitate

With the configurator people can build and modify their configuration of furniture. This will provide "tailor made" solutions to their needs.

Catalog Modular & parametric furniture Reflect What do I need? Configurator Build / modify your configuration Option to reconfigure for life events

Reflect

To help people reflect on the way they use their space we developed a small Reflection Tool Book. In this book you will find different tools to help you find out what you really need in your home. Do you really know what your ideal home could be?

To help you find out what this could be we will help you with different exercises you can try out in your own home. Once you get a feel of what you might need at this point in your space and life, we encourage you to experiment with your space and furniture.

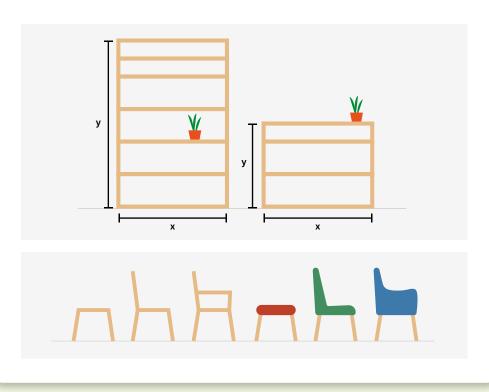


Catalog Modular & parametric furniture Reflect What do I need? Configurator Build / modify your configuration Option to reconfigure for life events

Catalog

The catalog contains all of the available furniture. The furniture will be designed based on principles of modular and parametric design. What this means is that people who want a storage solution in their space put the dimensions (parameters) of the available space in the configurator. The configurator will then look in the catalog for modular parts and then put them together in a way that will fit in the given dimensions. This is then still customizable by the user.

Modular options could also include different upholstery, colours, material options and other add-ons.



Option to buy the furniture Configurator Option to reconfigure everything The configurator is an application which allows the user to create a configuration of furniture based on their needs and available space. It draws from the catalog to create these configurations. It also keeps track of the furniture that is already in your house. You Catalog could for example change the color of the upholstery of a chair. Modular & parametric furniture The configurator already knows that you have the framework of the chair, so the only part that has to be delivered to you is the upholstery. Reflect Configurator Another example: Your shelving system is too large so you remove What do I need? Build / modify your configuration the top two layers. The delivery system will then know to pick up those two layers. Option to reconfigure for life events Life events Moving, having a child, etc.

Furniture in Use

When the furniture is in use there are several different options available for people.

Swap broken or damaged parts

When people recieve a faulty part or it breaks by normal use, they should be able to have it picked up and replaced.

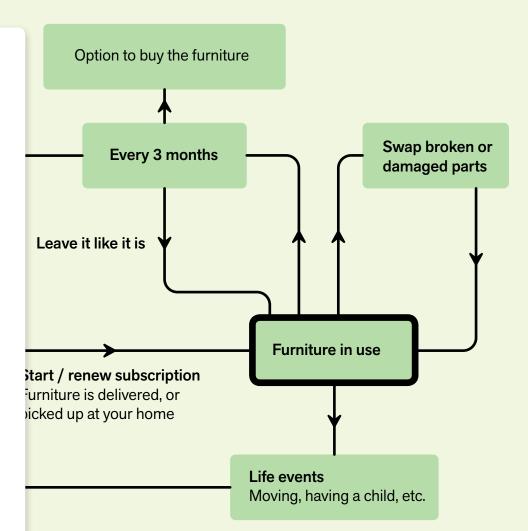
Every 3 months

Every three months people will have the opportunity to change their configuration. You could also leave everything like it is.

Outside of that there is an option to buy your current configuration. Depending on how long you have the furniture in your home this could become cheaper. Buying the furniture could be out of financial concern or beceause people have the feeling they have found their ideal configuration. In none of these situations should the ending of the subscription mean that the furniture will disappear.

Life events

If a needed change is urgent there should be options to change you configuration outside of the "every three months" moment.



Sustainability

If we look at the future and the environmental concerns that come with it, service models like this create opportunity for more sustainable solutions.

By having people pay for a service and not the physical object, you create incentive with the provider of the service to make the physical objects as long lasting as possible. Providing high quality, long lasting objects will pay off in the long run. It means less repairs and returns caused by faulty hardware.

Less objects will end up in landfill beceause of modular and replacable parts that are owned by the provider of the service.

Having people use the objects that are still owned by the provider of the service, you are essentially doing large scale user testing. Returned furniture will give insight to designers and manufactures in how to improve their product.

Next...

This service model for furniture creates many new challenges that can be designed for. It requires a different viewpoint form which to design furniture.

It also requires a different mindset from people. Because it does not only provide furniture for people, it provides an entire new way of living with your furniture.

An important next step is to evalute this concept with the target group. How do they see this influencing their lives? Do people gain enough from the service to do away with the trusted idea of ownership?

Special thanks to

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