IMAGINE

Exploring the brave new world of shared living

SPACE10 × Urgent.Agency

To hear more about shared living, tune
in to the IMAGINE podcast by SPACE10
featuring Jan Gehl, Grace Kim, Laura
Juvik, Meik Wiking and others.

No one can predict the future, but anyone can shape it – so let's inspire people to rethink the way we live and discover how shared living can help solve some of our biggest challenges.

The next time you complain about how packed your morning train is, picture the world in just over a decade's time, after we've welcomed another 1.2 billion people into the world.

The global population won't just be bigger, it'll be more densely packed than ever. The urban population has soared from 751 million in 1950 to 4.2 billion in 2018. And urbanisation isn't slowing down. The UN predicts that about 2.5 billion more people will be living in cities by 2050. By then, almost seven in 10 of us will live in an urban area.

Many cities will face huge challenges to meet the needs of their growing populations. At SPACE10, we want to explore whether "shared living" could provide solutions to some of the problems we'll face in our new urban realities.

Shared living is by no means a recent phenomenon. Since the dawn of civilisation, communal living has been practised across different cultures and for many different reasons. Indeed, the idea of living in a close-knit community, to pool resources and unlock a variety of benefits, is as old as humanity itself. We are, after all, social animals—and communal living is part of our shared history.

The modern concept of shared living first emerged in Denmark in the late 1960s. Bodil Graae's 1967 newspaper article – "Children Should Have One Hundred Parents" – popularised a new movement that saw the emergence of co-living communities that combined private living spaces with communal facilities. More recently, we have seen a new wave of start-ups turning the benefits of this housing model into a successful business.

This issue of IMAGINE explores how we can design shared-living spaces that not only make life more affordable, but also enable a better and more sustainable life for residents. It comprises articles, interviews and case studies that introduce the prevailing trends and best practices of shared living. We explore the modern concept of shared living that has largely developed in northwestern Europe, Japan and North America, and these are also the regions we focus on. We offer insights and showcase the work of many pioneering individuals in the field. And we strive to inspire a discussion about how we might (re-)design and build new realities that promote a sense of well-being and that improve the spaces we inhabit in terms of liveability, accessibility and resource efficiency.

Our exploration of shared living is by no means exhaustive. In fact, it has only just begun. Yet our beliefs about it have never been more certain. We believe it could become increasingly attractive to the many people that struggle to find affordable housing. That it could be an antidote to social isolation and loneliness, and offer new ways of supporting healthy ageing. And that it could inspire people to share more and consume less – to live sustainably and within the planet's means.

We hope you enjoy reading the second edition of IMAGINE, and feel inspired to join our journey.

SPACE10 & Urgent.Agency

SPACE10

Urgent.Agency

SPACE10 – the IKEA-funded "future living lab" based in Copenhagen's vibrant meatpacking district – aims to identify emerging trends and design innovative responses to the bigger changes expected to affect societies in the coming years. Unlike many innovation labs, SPACE10 doesn't start with IKEA's core business – in this case, home-furnishing solutions. Instead, SPACE10 aims to address the way we will live in the future by exploring everything from rapid urbanisation and the scarcity of natural resources, to food security and the lack of affordable housing, as well as how technological breakthroughs, such as mixed reality, artificial intelligence and digital fabrication tools, can empower people in completely new ways.

Urgent.Agency is a culture design agency specialised in culture strategy, brand identity and placemaking, with offices in Copenhagen and Oslo. The agency is built on the conviction that relevance defines our interaction with places, brands and each other, and it strives to nurture meaningful interaction wherever it may be – online, on-site – and, as is often the case, in the borderlands between systems and disciplines. Urgent.Agency's outputs include culture and development strategies, urban design, identity and communication – often combined. At the heart of Urgent.Agency is the belief that great solutions stem from a combination of deep specialisation and interdisciplinary approaches.

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"Living together, experiencing things together, sharing things with each other, is really what creates memories and happiness."

— Matthias Hollwich

PART I: SHARED LIVING IN THE 21ST CENTURY

We have scoured the world for ideas and attitudes towards shared living in the 21st century.
The message is mixed: the interest in shared living is massive, but so are the barriers that prevent shared-living initiatives from being realised. Here, we have laid out areas of potential progress as well as the challenges we still face.

As more people move to urban areas in search of better lives, our cities will grow like never before. The urban population is predicted to increase from 3.9 billion today to nearly 7 billion by 2050, which means our cities are projected to almost double. Yet with space becoming scarcer and the cost of housing rising, billions of people could struggle to find an adequate and affordable place to live.

This is a huge challenge, but so much of the housing debate is narrowly focused on finding ways to build more homes. As important as that is, we also need to think hard about potential ways of living, so we can use today's challenge as an opportunity to re-imagine how we might live tomorrow.

Shared living isn't just a trendy throwback to a utopian idea from the past. In fact, it may well be the answer to some of our biggest contemporary challenges. Like the lack of affordable housing, loneliness, our ageing populations, and enabling a better and more sustainable way of life for the many people, as their needs, aspirations and lifestyles change.

Welcome to IMAGINE.

Sharing
is
Urgent

Shared living isn't a lifestyle trend.
In fact, it has the potential to address some
of the world's most pressing problems

A way to create more affordable housing for the many

Through better use of space and by sharing costs, shared living could enable more affordable housing

The lack for affordable housing is a pressing issue in many cities today. Simply put, we aren't building enough affordable housing to keep up with the demand. House prices are rising in almost every major city, while the IMF says incomes have failed to keep up with the property market, meaning it has become much harder for ordinary people – not to mention students – to find an affordable place to live.

We believe that shared living could become increasingly attractive to people because it could enable more affordable housing through the better use of space and by sharing living costs.

The idea behind a shared-living community is that residents have their own private living space but also gain access to shared facilities. What is deemed communal space varies in each community, of course. But it is easy to imagine that instead of everyone having

their own kitchen, laundry, work space or dining room, these rooms could be shared by the community. Private spaces may be smaller but they would more efficient, and residents would have access to more space and better facilities, for less money.

A community can also benefit from economies of scale by sharing services and buying groceries and household products in bulk, or by being more self-sufficient in terms of energy, food and mobility. Moreover, in a shared space, residents can share everyday and specialist tools, rather than every household having to buy and store the same items. For example, instead of everyone owning a drill for a once-a-year job, why not share one between many? Or instead of everyone buying the cheapest vacuum cleaner on the market, why not share that little robot that gets the job done for everyone? Not only would it be more convenient and help reduce living costs, it would also be better for the planet.

1900
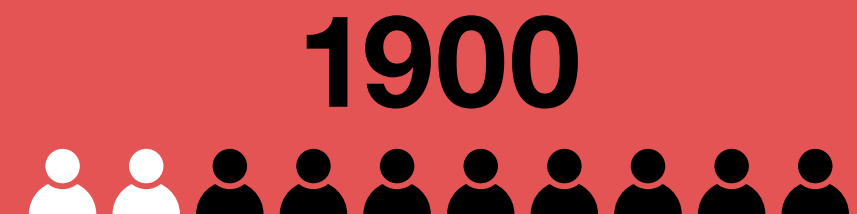
2 out of every 10 people lived in an urban area

1990
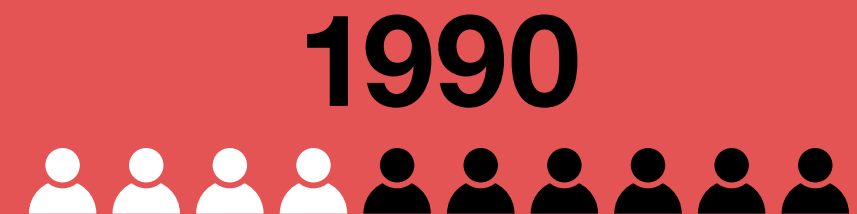
4 out of every 10 people lived in an urban area

2010

5 out of every 10 people lived in an urban area

2030
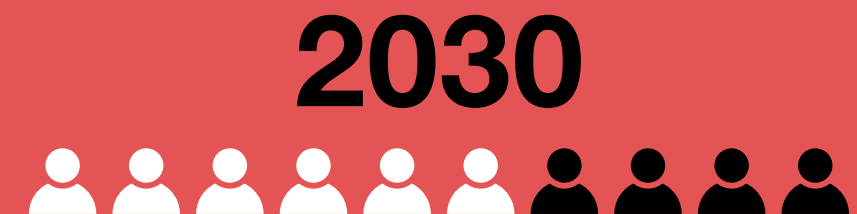
6 out of every 10 people will live in an urban area

2050
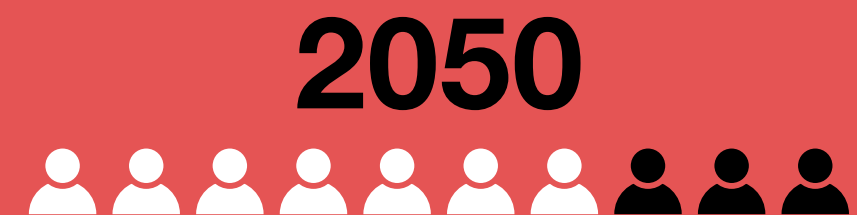
7 out of every 10 people will live in an urban area

Across the world, people are moving to cities in search of jobs and opportunities. The accelerating urbanisation of tomorrow will primarily take place in emerging economies. In fact, 90 percent of it. The UN Department of Economic and Social Affairs projects that future urbanisation in India, China and Nigeria alone will account for 35 percent of urban population growth between 2018 and 2050. India will have 416 million new urban dwellers, China 255 million and Nigeria 189 million.

Generation Rent

The widening gap between house prices and income levels means young adults increasingly struggle to get onto the housing ladder. In the UK, house prices have risen about seven times faster than the incomes of young adults over the last two decades – meaning home ownership among 25 to 34-year-olds has sharply declined. In the US, millennial homeownership is at a record low, according to government reports. With no sign of these trends reversing, there is a pertinent need to develop new ways to finance home ownership.

Average UK House Prices

Average Net Family Income Among 25-34s

House prices vs. wage rises

According to a recent report by the Institute for Fiscal Studies, house prices in the UK have skyrocketed against the average family net income.

PERCENTAGE GROWTH SINCE 1995-96

180%

160%

140%

120%

100%

80%

60%

40%

20%

0%

1995-96   2000-01   2005-06   2010-11   2015-16
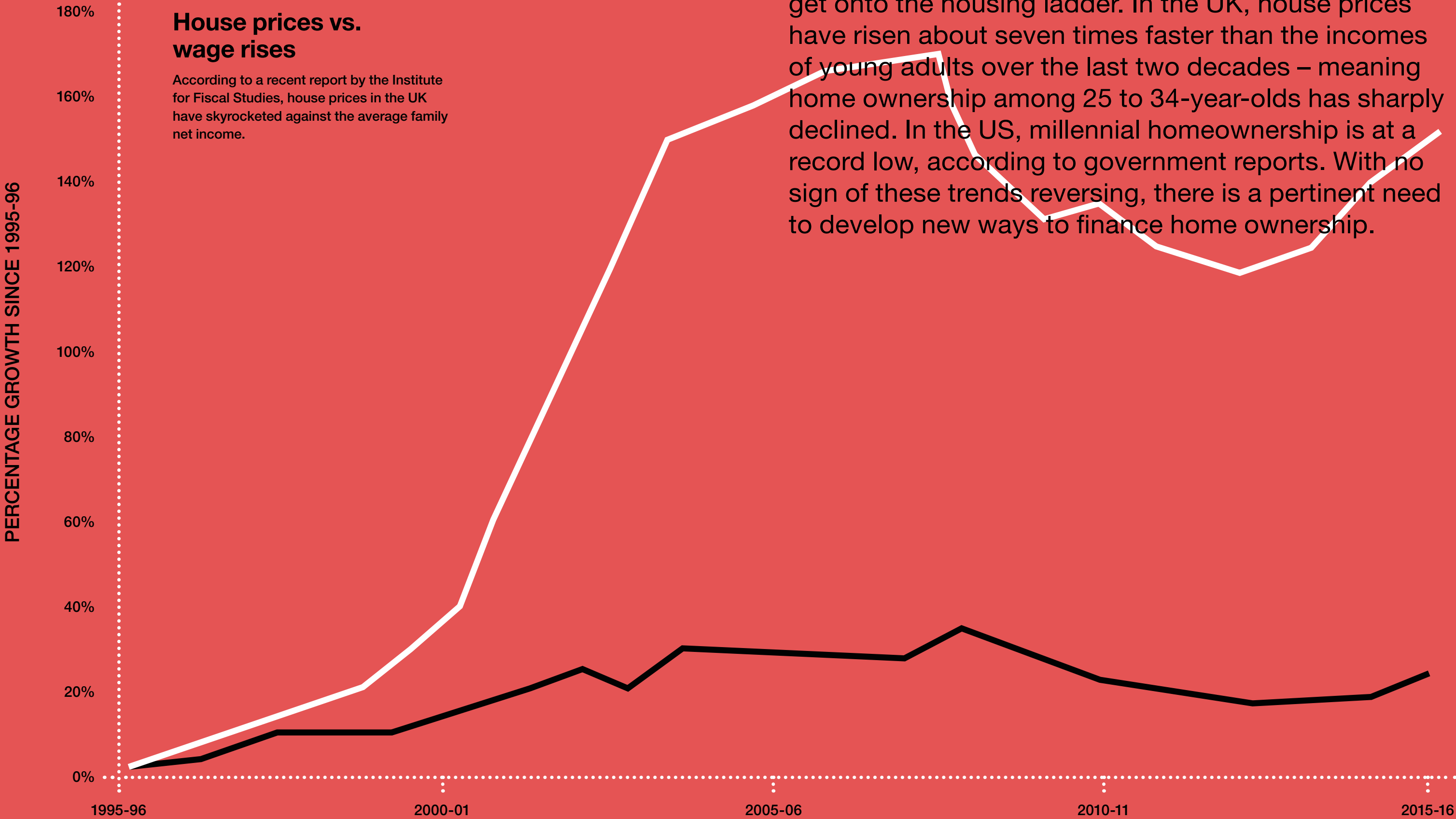
Housing: a political problem?

We aren't building enough housing to even remotely meet the demands of our growing urban population. In fact, to house a global population of 10 billion, a city the size of New York would have to be built every other month for the next 35 years. Politicians are beginning to address the problem. But no matter how ambitious they are, it's difficult to imagine how cash-strapped governments will solve the housing crisis through large-scale construction projects alone. We also need to consider how to better use our existing infrastructure – and explore how shared living could be part of the solution.

House prices are rising in many European cities, though nowhere as much as in Berlin, which has the fastest-rising property prices in the world today. According to property consultancy Knight Frank, the average house price climbed 20.5 percent in 2017, after several years of growth. Since 2004, the average price has increased by more than 120 percent, and from 2012 to 2017 average rental prices rose by 33 percent. The increase has been fuelled by cheap borrowing, a fast-growing population and speculative buying. Although apartments in Berlin are cheap compared with other European and American cities, the city is increasingly facing an affordable housing crisis. According to a study by the Hans Böckler Foundation, Berlin lacks 310,000 affordable apartments, making it difficult for many Berliners to find adequate and affordable housing.

Beyond affordability

It isn't just the lack of affordable housing that's inspiring us to reimagine how we might live. It's our change in lifestyles, too. More than ever, we are choosing to live alone. Single-person households are projected to see faster growth than any other property type in the coming decade. And that's a global trend in low-, middle- and high-income countries alike.

There are several reasons for this trend. One is that fewer people remain at home with their parents until they find someone to marry. Couples tend to be older than previous generations when they do get hitched. Divorce is more common today. There is much less stigma about living as a singleton. And we are on the move in numbers we haven't seen before, as we settle down in new places to live, study and work.

But here's the thing. Even though more people live as singles, it doesn't necessarily mean they want to live alone. The alternatives are limited, however. The housing market seems to consist largely of one-unit single-family homes, yet many people end up living with flatmates in homes that aren't designed for it. Shared-living spaces could be designed for just that, however, by prioritising people's individual privacy while offering spaces for a vibrant community and a social lifestyle to enjoy.

Strong communities and mental health

Michael Birkjær, an analyst at the Happiness Research Institute (HRI), an independent think-tank in Copenhagen, seeks to map changes in national well-being through the use of reports and "big data", with the aim of influencing public policy. "With rising global economic prosperity there appears to be a decline in overall happiness. While at the HRI we understand the difficulty of pinning 'happiness' to a metric, this loss of social capital is significant, especially when read with datasets of people living alone," Birkjær explains. "Might this unhappiness be due to an increased sense of isolation?" When Birkjær and his team explored groups of countries that were doing exceptionally well in terms of "social capital" for their income levels, such as those in Latin America, they began to consider the link between strong communities and mental health. "That's how we first got interested in shared living as one of the solutions," says Birkjær, "as we believe social engagement has a huge impact on well-being."

Social media is thought to distance us from "real life" interaction. We may have hundreds of "friends" and "followers" on social media, but when it comes to human relationships, it turns out there's no substitute for building them the old-fashioned way, in person.

Improving quality of life

Though we're living closer together, that doesn't prevent us from feeling lonely. Which is a another reason to think that shared living could become more attractive to people. From moving to a new city, to losing a job, to becoming a new parent, to retiring, many significant changes in life can also leave us feeling isolated and lonely.

Moreover, we don't have the same sense of community any more. We rarely greet our neighbours and the streets are filled with anonymous faces. Around the world we have embraced a culture of individualism, and traditional sources of solidarity – labour unions, civic associations, neighbourhood organisations and religious groups — are in decline. Increasingly, in many societies, people feel that they are all alone.

A study by the British Red Cross found that nine million Brits "often or always" feel lonely, while the UK's Office for National Statistics showed that people aged 16–44, renters and those less strongly attached to their neighbourhood were more susceptible to feeling lonely.

Little wonder that Britain appointed its first minister for loneliness to tackle what Prime Minister Theresa May called the "sad reality of modern life".

Having a lack of close relationships is a serious concern. Scientists believe that prolonged loneliness has a large impact on both our mental and physical health, and could even be a greater health hazard than obesity or smoking. Moreover, almost every study going finds that the quality of our relationships is often the best predictor of whether we're happy or not.

We believe that shared living could improve our quality of life and help tackle loneliness. Being with other people and having a sense of belonging is fundamentally good for us. It has been widely reported that people who lead more social lives are healthier and have increased life expectancy. By enabling people to live their own private life but still be part of a "community" and have a social life, shared living could improve the health and well-being of many urban dwellers.

By 2050, the number of people aged 80 or older will have tripled

While Japan's population is forecast to shrink by about a third in the next five decades, the proportion of over-65s is expected to reach 38 percent in that timeframe.

The Age Boom

As people live longer and the global population gets older, we need to rethink the living environments of elderly people to ensure their participation and social interaction in communities.

A major demographic shift is underway. With a few regional exceptions, the global population is getting older. Our housing needs are changing, which is another reason to rethink how we design our cities. The living environment of elderly people is crucial to allow the "new ageing generation" to stay healthy and social and to keep participating in society.

The number of people older than 60 will rise from about 1 billion today to 2.1 billion in 2050, according to the UN Department of Economic and Social Affairs. That means that 22 percent of the world's population will be over 60, while in countries such as Germany, Italy, Japan and the United States, almost one in three people will be 60 or older. Globally, the number of people over 80 will more than triple, from 137 million to 425 million.

This new elderly generation will have far fewer family members to look after them, and specifically fewer younger persons to turn to when in need. That means

it's vital that we design new types of living environment for them – environments that provide social support structures and a sense of purpose, and that play a major role in the longevity and overall health of this group.

We believe that shared living could provide new and improved models of housing and help elderly people continue to participate in communities, interact socially and remain physically and mentally active. Shared-living spaces could be designed for multiple generations, bringing people of all ages together and creating more meaningful and supportive communities that would benefit everyone. Elderly people in a community (who are more likely to have spare time) could help look after the children, which would not only give them a greater sense of purpose and more of a social life, it would also benefit the children and the parents alike, who in turn would be on hand to look after the elderly people.

The United Nations Department of Economic and Social Affairs projects that the global population aged 60 and over will rise to 3.1 billion by 2100.

60+

3.1 BLN

of the worldwide population

2100

60+

2.1 BLN

of the worldwide population

2050

60+

1 BLN

of the worldwide population

2017

60+

0.5 BLN

of the worldwide population

1990

Traditional care homes often limit individual choice and isolate residents from the local community. But new models for providing residential care are emerging in Europe and beyond.

Multiple generations under one roof

The concept of intergenerational living has gained traction in recent years. The idea is that younger and older people live together in supportive communities, where the needs of both groups are acknowledged and met. It harks back to the early 20th century, when multiple generations of families lived under one roof. After the Second World War, and the dawn of inexpensive, standardised housing, the trend waned. Today, shared-living innovators are revisiting the idea by launching retirement homes where students live on-site.

Go big: An ambitious intergenerational housing project in the Danish municipality of Aarhus. Visualised by architecture firms AART and FORCE4, and landscape architects Møller & Grønborg, Generationernes Hus would combine housing typologies for a diverse group, including young people, families, senior citizens and disabled people, with shared facilities such as a kindergarten, kitchens and common areas within its 27,000 sq m footprint.

"It is extremely important to make housing that improves the possibility of valuable interaction," says one of the project's architects, Kathrine Hegner Stærmose. "We wanted residents to be able to participate in the community on their own terms." If realised, Generationernes Hus would be a blueprint for how to create complex, intergenerational shared-living communities on a large scale.

Humanitas is a long-term care facility in the Dutch town of Deventer. In exchange for 30 hours of volunteer work per month, students are able to stay in vacant rooms free of charge. It's a mutually beneficial arrangement at a time when cuts to elderly-care budgets are keenly felt and students are struggling with a high cost of living. One young resident, Jurrien Mentink, told the BBC: "I don't pay rent, so that's €30,000 I've saved in comparison to my friends who live in student housing." But that's not the only reason to live at Humanitas, he says. Mentink and the other students say they are genuinely interested in improving the lives of the older residents and do so in different ways – whether that's preparing and hosting evening meals in the dining room, helping residents exercise, or simply sitting down to talk. "What I've learned here is to respect all of the older people in our society," says Mentink.

Since Humanitas opened its doors to students in 2012, two more nursing homes have followed suit in the Netherlands, while a similar programme was recently introduced in the French city of Lyon.

Co-housing for seniors

A group of elderly women in North London forge a community

The Older Women's Co-Housing Community (OWCH) constructed a complex in North London for women over 50, comprising 25 private apartments – 17 lease-hold and eight social rental – arranged around a large courtyard garden.

Launched in 2016, it is the first co-living development for older people in the UK, a market that until now had primarily targeted young professionals, families and students. Almost all of the 26 women living in the community previously lived alone. OWCH is actively managed by the residents who set it up, and all of them have opportunities to share in the life of the group and contribute in various ways, like cooking meals, tending the garden and organising social events.

Resident Hilary Vernon-Smith says financial hurdles stood in their way at first. "The main problem was that none of us had a lot of money," she says.

"And we wished to stay in London and also offer rental apartments, as well as some for the women to buy. The local council just didn't understand the importance of us being together as a community." Though the senior-support charity Hanover Housing stepped in to help the women buy a plot of land in North London, it still wasn't plain sailing. "As we had to sell our properties first," Vernon-Smith says, "it became a real problem when the move-in date was pushed back. We had an 80-year-old woman having to sleep on a friend's sofa." Despite the challenges, the women now have a friendly and supportive community around them every day.

"Senior co-housing communities could enrich the last years of many and reduce pressures on health and care services, if local authorities, planners, policymakers and housing developers helped to remove the many obstacles society puts in its way," they conclude.

"Senior co-housing communities could enrich the last years of many and reduce pressures on health and care services, if local authorities, planners, policymakers and housing developers helped to remove the many obstacles society puts in its way."

— OWCH

Matthias Hollwich

21st-century ageing and intergenerational living

We spoke to author and architect Matthias Hollwich, co-founder of progressive New York firm Hollwich Kushner

Matthias is the co-founding principal of the progressive New York architecture firm Hollwich Kushner (HWKN) and co-founder of Architizer, the largest platform for architecture online. Combining his understanding of how architecture and cities can perform better with his research as a visiting professor at the University of Pennsylvania, Matthias has developed a new line of thinking about how to make ageing an empowering process. In 2016, he published *New Aging: Live Smarter Now to Live Better Forever*, in which he describes ageing as a gift that we receive with life and outlines smart, simple ideas to help us experience it that way.

I: **Do you think there is a rising interest in shared living? And if so, why?**

MH: Absolutely – I see a huge interest right now in shared living and shared experiences. I think for a very long time we have believed that ownership and privacy make us happy. But I think we are all being proven wrong. Actually now we are waking up again. Living together, experiencing things together, sharing things with each other is really what creates memories and happiness. And that is what we are all trying to re-explore and re-invent.

I: **What do you see as the housing needs of the future? How will they change?**

MH: I see two generations that are really changing everything right now. One is the millennials. They have a very different background in terms of digital use. But also their income, I think, is an important point because they do have to live on a more economical budget. On the other side, there are the boomers who have lived a life of pure independence, and now what they see is being offered them in the long-term future is something they are very afraid of and not interested in, which are these industrially prepared nursing homes and assisted-living facilities.

These are the two different generations changing the status quo by wanting something much more in tune with their way of life and way of thinking. For the millennials it is about the experiences they treasure and want to nurture, and for the boomers it is more urgent because they know that if they do not live in an active, social network, then they will have to move into a type of nursing home, which they don't want to be in. If they are able now to create a stronger social bond with people, that bond will be able to compensate for some of their physical and social deficits, so that they can be able to live the life they want throughout their entire life, and that is what connects the millennials with the boomers.

Skyler is a new-ageing apartment prototype developed by Hollwich Kushner that offers new apartment types customised towards the baby boomers, a generation that has lived a life liberated from tradition. From micro-studios that maximise affordability by minimising size, to pooled apartments that can be shared between friends and eliminate isolation, to duplexes that absorb the single-family home lifestyle quality in an apartment building setting, Skyler's units can become homes that are perfectly in tune with the lifestyle and physical demands of its inhabitants, while compensating for emerging physical deficits.

I: What is wrong with the current model of assisted-living facilities and retirement communities?

MH: The core mistake of that model is that it segregates old people from everyone else. It does so because of the efficiency of services, so for example you take 200 people and put them into a building which can provide food, medical support and all the things they need. But the challenge nowadays is that we are not interested in segregation any more. We don't believe in racial segregation or sexual segregation – but age segregation is still very present in these types of models and that is really what I see as a core mistake. Of course these services are still important, but with new technologies and new ways of thinking, we can provide these services on-demand to people where they want to live and avoid having to push people to live in a place where it is convenient for the services. It needs to be the other way around.

I: Why intergenerational living? What are the benefits?

MH: That's where the magic happens – when we bring the generations back together, because we can learn so much from each other, and we can also be there and help each other. Younger people might need guidance and could be curious about stories and experiences. The whole idea of mentorship is incredibly powerful, where people with networks and experience can hand them over to the next generation. On the other side, older people need updates on technology and the latest trends, or a hand with their living environment or the technology they're using. This is where you have a very natural connection between the two different generations. But it is also incredibly helpful for a younger person to experience the way of life for an older person and the challenges they go through, so that you can learn very early on what it means to grow older. If you actually learn and prepare, you will be able to live a much more self-determined life when you get older and will not be surprised by some of the challenges you might never have heard about.

I: What are the main barriers and challenges for building more diverse housing?

MH: So first you have to come up with a concept, which might not be so easy because of the many nuances that you have to decide on – for example, what is going to be shared, and there are of course many different variations. There are multiple ways of how this can be done. This is what I am excited about because we are doing that for many different companies right now and everyone is thinking a little bit differently, so it is not about finding one model, but about finding many models. When you have the concepts, you have to find an operator or developer who is willing to do it, but they will still have to find financing, and many times the financial model is based on proven typologies.

Co-living is something new, so you will have to prove that this has future potential and will be resilient against changes. We actually often prove to financial partners that this model with small alterations can be turned into something more traditional. This allows them to make a more traditional financial model and accept the more progressive nature of the project. Then you have to find a site and a contractor and, of course, people who want live there. I think we already see very successful models, so now everyone is waking up and doesn't want to miss the train. I think in the next couple of years we will experience an incredible amount of innovation in that field.

"The things that we really remember always have something to do with other people, so why not take that as a principle for the aim of our designs, so that we create more places and opportunities for people to be together and experience things they will remember."

I: What can we do to promote better knowledge sharing in the field of architecture and design?

MH: I think SPACE10 offered an incredible platform in New York where a lot of different players in different fields got together and discussed what they were doing and what we could do differently. Because one alone in that field will not succeed – but everyone together can really change the market and allow the co-living model to prosper and succeed. However, as soon as you leave that type of safe space then you will have non-disclosure-agreements and right now, for example, I am not allowed to talk about four of my clients at all. I would love to share more because I think it is so exciting and I think it is almost kind of ironic that co-living is all about sharing but I cannot share information. But I hope the trend of sharing experiences and insights will happen more frequently.

I: Thank you very much. Do you have anything else to add?

MH: For me, the proof-of-concept is when you ask people what they remember from two weeks ago. No one is going to say: oh two weeks ago I bought this wool jacket at a store in Soho. No one is going to say: I was home alone in my big apartment and watched TV. People will always be like: I was with my friends and we saw a great show and afterwards we had a drink and we talked about cool things. Or maybe they were at a dinner. So the things that we really remember always have something to do with other people, so why not take that as a principle for the aim of our designs, so that we create more places and opportunities for people to be together and experience things they will remember all life long.

Shared living is *nothing* new

A short history of shared living – from Stone Age settlements to 20th-century communes

How do humans live?

Shared living is by no means a new phenomenon: it has been practised across different cultures throughout history

The single-family one-unit home is a fairly recent phenomenon. Throughout history humans have lived collectively for many reasons and purposes. The American boarding houses of the 19th and 20th centuries were a transitory step between family life and independence. In Japan, the sharing of sanitary facilities has been practised since the beginning of the 17th century when small-scale, densely populated, mixed-use districts were the centre of urban life. Medieval people did not have designated rooms for sleeping, just a single living space for all. Of course, they put up with a lack of privacy because of a lack of alternatives. We saw the re-emergence of collective and communal living in the 1960s and 1970s as a way to shake up traditional family roles and break with convention.

Communal living through the ages

Modern shared living

In the last 200 years we have seen new ways of co-housing emerge, from the 19th-century boarding houses to the Kibbutz movement and the more recent co-housing movement of the 1960s. Today, a new co-living movement is developing, with examples of urban cohabitation that are partly driven by rising housing costs in cities, but are also thought to be based around the notion that more sociable living will create better, happier communities.

Nothing new under the sun

Tens of thousands of years ago, all living was communal, but through the ages, people have been looking for ways to share houses and communities, responding to the societal challenges and needs of the time. It is only relatively recently that we have moved away from communal living.

Moving forward

As rapidly urbanising cities struggle to provide adequate and affordable housing for their growing populations, and a new sharing movement emerges that could radically change the way we live, what will our future homes and cities look like? Is it likely that we might all have to get used to living with other people?
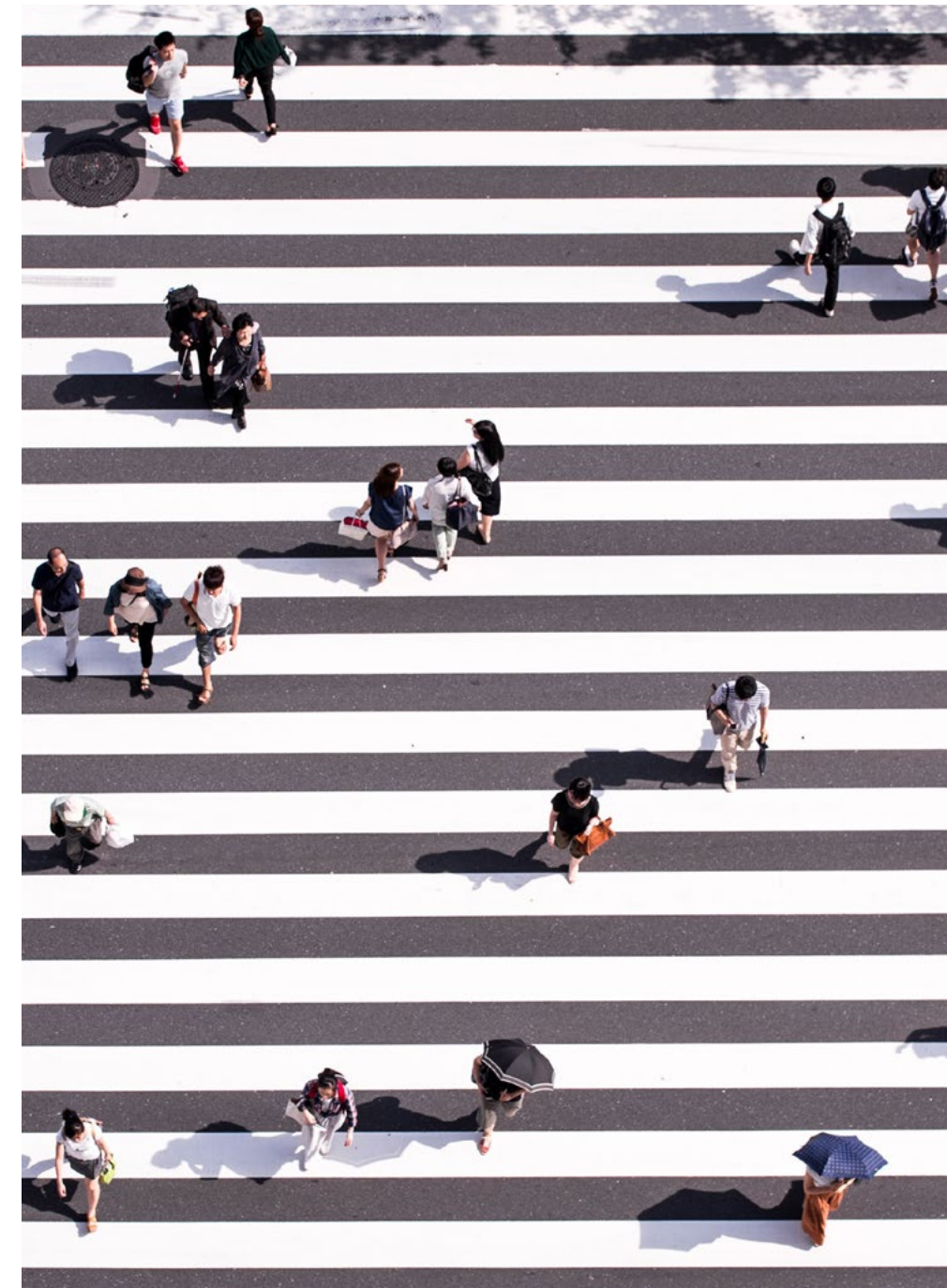
Common began by renting out co-living facilities in Brooklyn, New York but now has 14 projects in five US cities, each housing more than 400 people

Shared living today

With ordinary people struggling to find affordable accommodation, shared living and co-living spaces have grown in popularity, particularly in cities such as London and New York, where the housing crisis is especially acute. Shared living today comes in many shapes and sizes, from huge collaborative co-housing projects to small-scale community initiatives. The most recent co-living trend started in the US, where startups like WeLive and Common tapped into a market of under-35s who wanted the sociability and convenience of sharing property, but lacked the means to find good-quality accommodation. Many recent projects are associated with businesses such as cafes, shops, shared cars or co-working spaces. The concept has since spread to many other countries.

This way of living together is changing the way we approach housing. It can take many forms, from private homes that share services and facilities to a complex of a few hundred, like The Collective Old Oak in London, which is now the world's largest co-living facility. Shared living is not only practised in Europe and the US, but also in Asia. In Guangzhou, China, an old Colgate factory has been transformed into an open, airy and well-lit co-living space operated by YouPlus.

Shared-living projects are growing in popularity in many major cities. In London, more than 500 residents live in The Collective Old Oak, in dorm-like apartments supplemented by communal facilities

The "share house" is an increasingly popular style of communal living in Japan. The Yokohama Apartment complex, designed by Osamu Nishida and Erika Nakagawa, features four micro-apartments, with cleverly designed communal spaces – such as the shared courtyard, which functions as a kitchen and art gallery – that make it feel more spacious and liveable.

Top-down and bottom-up shared living

There are two notable trends within shared living. On the one hand, there are standardised commercial projects like WeLive, Common and The Collective, which target young creatives and are generally fairly expensive. They tend to offer an "all inclusive" model that sees residents more as passive receivers of services – closer to the idea of serviced apartments, just with shared amenities. This model can be great for some, but it seems limited to a certain demographic and does not offer any real co-creation, ownership or diversity, in terms of its business model, design or management.

On the other hand, there are the more community-organised, bottom-up shared-living concepts, notably found in Northern Europe. These come in many forms and sizes, but are most often initiated by residents themselves.

However, the process of bringing a shared-living concept to life is still incredibly complex and hard to realise. Today, most community-initiated shared-living projects fail to materialise because the process can be extremely long and include difficulties such as securing land and financing.

While new models of living are seeing a huge interest, shared living is still insignificant compared to standard single-unit housing concepts. Although we see many interesting experiments, ideas and concepts, bottom-up initiatives have difficulty when it comes to replicating or scaling them up. Our research suggests that new models of financing, organisation and design could potentially drive sharing forward.

Co-living and co-housing

The terms co-living and co-housing are often used interchangeably, but there is a slight difference in meaning. Co-housing is the more commonly used term, and defined by the Cohousing Association as "an intentional community of private homes clustered around shared space": it often specifically refers to a group of small homes within a neighbourhood that share some common grounds and facilities. The term "co-living" is often used for single buildings with shared facilities that are targeted at urban audiences.

In each community there will be differences in what is shared and what is private. Some groups are closer and will have many joint activities, facilities and rules. Others are looser and more private, with fewer shared facilities.

Community-based co-housing

Lange Eng, Copenhagen

"The large communal space is divided into smaller areas with 'soft' divisions of the spaces by plantation and paths, creating a sense of both the large scale of the total area as well as creating intimacy in the individual spaces."

— Dorte Mandrup, architect of Lange Eng

ARCHITECT
Dorte Mandrup

LANDSCAPE ARCHITECT
Marianne Levinsen

UNITS
71

MODEL
Ownership of individual house – sold at market price

DESIGN
Designed as a typical Danish housing block, surrounding a large communal garden. Every housing unit has access to this outside space.

SERVICE
Self-management
Four sharing cars
A 600 sq m shared space that includes a 30-seat cinema, mini-football, music systems, fine-art workshop with sewing machines, black-boards, cafe with bar, espresso machine, play area, piano, sofa bed, PC for games, storage room and toilets.

Lange Eng in Albertslund, just outside Copenhagen, is one of the largest co-housing communities in Denmark. Completed in 2009, it was initiated, funded and constructed by the residents themselves, and is in many ways an updated version of traditional Danish co-housing from the 1970s.

Residents have prioritised common spaces and the community of families living there. The building has been designed as a typical Danish housing block surrounding a large common courtyard and garden; each of the units has direct access to the garden, bringing life from the private homes into the outdoor spaces. Meals are served communally six days a week, but families can choose whether they participate in the meal or take food home. Adults and children older than 12 are assigned to groups that are responsible for purchasing and cooking for three days at a time.

Co-housing – from dream to reality

We spoke to Laura Juvik, co-founder of Danish co-housing project Lange Eng
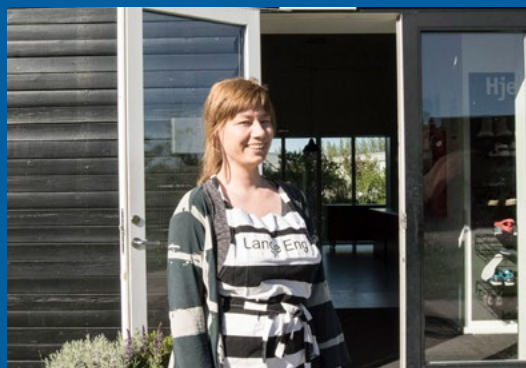
I: How did you initiate your co-housing community?

LJ: I am an architect, but we had an advisor and firm who assisted us and managed the process. We started out as a group of six, then eventually four people were able to get the deal to build 100 units. It took about six months just talking to municipalities and landowners. Eventually we found a contractor that made a package deal, offering a fixed price including the building permits and all the financial aspects in place. We then decided on Dorte Mandrup as our architect.

I: How were you able to raise the funds with just the four of you?

LJ: I don't understand either, but we signed the contract for all the money and loans in the summer of 2006 and we only saw the site in January. We had the first public meeting in November where maybe 20 people showed up.

I: Were you selective about the people who could join?

LJ: No – everyone was allowed. We had an email list with 40-45 people who were interested, but when many of them realised that it was going to be based in Albertslund – which does not have the best reputation – there was only one family left that actually moved in with us. So it's a bit crazy that we actually managed to get them to build it. We weren't allowed to advertise, so we were just emailing and spamming people!

I: Do you have a waiting list?

LJ: No. These are just privately owned buildings, and you are not allowed to have a waiting list if you want to have loans on normal terms. The houses just go to the highest bidder, and there is not much we can do about that. We are just above 200 people now – 100 adults and 100 children.

I: What are the main differences between living in a community and regular housing?

LJ: There are so many differences, but the biggest one is that if you want to have an informal chat it is not a really a big logistical deal. You can also fill up the need for some low-key social interaction quite easily, so you don't have to make a lot of friends. There are a lot of meetings sometimes: everybody is in a group that cooks or cleans, and there are also other types of groups like the children's group or the group for the common house. We eat together six days a week; on Sundays everybody takes their food home to eat and the other days it is optional. Normally it's about one-third sitting together and two-thirds taking it home.

Fully serviced co-living

WeLive, New York

With an emphasis on community, flexibility and convenience, WeLive offers studio apartments where people can move in for a night, a month or longer

In 2016 the $20 billion start-up WeWork expanded its co-working concept into co-living. One of many similar recent co-living housing projects to have sprung up, WeLive is built around the idea of providing dorm-like apartments supplemented by communal facilities. It now provides co-living in New York and Washington with communal facilities, such as chef's kitchens, event spaces, media rooms and activities like daily happy hours, comedy nights and yoga classes. Catering mainly to millennials, WeLive offers month-to-month flexibility and fully serviced apartments including a full-time community concierge.

ARCHITECT
ARExA

UNITS
200

MODEL
Rent/Membership

DESIGN
Fully furnished apartments and shared spaces: chef's kitchen, laundry, arcade and yoga studio.

SERVICE
Full-time community concierge and housekeeping team. Refreshments including fruit, water, micro-brew coffee and tea are available to members. Premium cable, high-speed Wi-Fi and general utilities.

Kathryn McCamant

Does co-housing automatically create communities?

We spoke to architect-turned-consultant Kathryn McCamant

Kathryn McCamant is one half of co-housing firm McCamant & Durrett Architects and the founder of California-based CoHousing Solutions. She has visited over 250 co-housing communities and has been involved in the design of more than 50 American, Canadian, Danish and New Zealand co-housing communities.

I: **What is your role in bringing co-housing projects to fruition?**

KM: I assist co-housing groups with pretty much everything but the design. I am an architect but now I am more focused on helping co-housing groups with budgets, investment and financing, as well as marketing and membership – all the pieces that need to come together in order to develop a co-housing community.

I: **What is your opinion about the trend for co-living?**

KM: Co-housing and co-living have been around for many years, in many different versions, from boarding houses to shared houses and collectives. The new version is to monetise it. The only thing that is new is that somebody is trying to make money on it, right? So the new part is making it a business, where that business controls the whole place and rents out rooms so that residents don't have to deal with each other. I think co-housing serves an important purpose and it is really great to see it coming back, but I have a lot of questions about whether there really is any community there. And I think in many cases there is not. So I think that the question is: are they really providing community or just cheap housing?

"There has to be a social design. You have to get people connected, for there to be a sense of community, otherwise the common facilities will never be used, people will go straight to their room."

I: **What could current co-living initiatives learn from previous co-housing projects?**

KM: That it is not just about the design or the physical architecture. There has to be a social design. You have to get people connected, for there to be a sense of community, otherwise the common facilities will never be used, people will go straight to their room. They will eat in their room, be on their computer in their room, and they won't really use the common facilities, so you have to think not just about the architecture, but about the social design and how to connect people.

For example, if you want community, you have to eat some meals together. It is the easiest, best way to bring people together. The biggest difference between shared houses that really work, and the ones that do not, is whether people eat together on any sort of regular basis, even if it's just a great dinner once a week. We see that pattern in co-housing, in all the variations of co-living, and in shared houses. I was at a senior co-housing space recently where the residents had just moved in and we had an interesting conversation. It was market-rate senior housing where they provide meals and cleaning and they have activities, but it's a very service-focused model, which has parallels with current co-living schemes. Residents pay a lot of money and then they do not have to worry about the garden or the cleaning, but that creates a very weird culture that takes away the purpose or reason of living together. Residents no longer need to figure out how to work together, how to organise stuff, because they were paying to have someone do it for them. So I think you have to be careful about providing services that take away from the sense of community.

"I think we are finally starting to figure out that there is a role for a community facili-tator who can act as the translator between potential buyers and local residents and the real-estate development."

I: **What is the hardest part of establishing a shared-living community?**

KM: I think the hardest part is actually finding property. I think it works if you set up a system where professionals identify the land and then organise the group around that, like in Germany in the *baugruppen*. It is more common in Denmark that cities control land and put the land out for proposals. That is very rare in the US, where you are competing for land with every developer out there. It can also be difficult to get people to commit to it early instead of waiting to see what happens, but the actual design and development process doesn't need to take any longer than regular housing projects.

I: **What would make it easier for more shared-living communities to be established?**

KM: I think we are finally starting to figure out that there is a role for a community facilitator who can act as the translator between potential buyers and local residents and the real-estate development. In that way there would be someone who understands both sides, because it's two different cultures and different languages.

The biggest difference be tween shared houses that really work, and the ones that do not, is whether people eat together on an y sort of regular basis, even if it's just a great din ner once a week.

— Kathryn McCamant

People are *ready* to share

Ten years ago, the sharing economy didn't even have a name. Its worth is forecast to grow from $14 billion in 2014 to $335 billion by 2025

The shift towards sharing

Living together is about more than inhabiting the same physical space. We need everything in our everyday life to be more efficient, and to use our resources more sensitively

We are sharing more goods and services than ever before and many of us use the sharing economy in our day-to-day lives – from ordering a taxi to finding a room for the night. Subscription models like Spotify, Netflix and SnappCar have also had a massive impact on traditional models of ownership. Instead of owning things, we are now accustomed to subscribing to services that provide us with music, movies and transportation.

Urban life as such is about sharing: we share our streets, restaurants, parks, waste handling and energy systems. But modernist planning, based on industrial production, urban development, infrastructural changes and car transport, has significantly challenged more communal modes of organisation. Beyond the practical and economic reasons, the rise of the sharing economy reflects our craving for human connection. People are brought together through these services, turning digital connections into real meetings and new ways of living together. Although the first phase of the sharing economy might have started to fizzle out, emerging technologies might soon resurrect it in a more radical form. As you can now easily turn your car into a taxi or your house into a hotel, in the future you might be able to turn any type of asset into a productive piece of capital.

What are we sharing?

Besides the most common sharing services such as transportation and short-term home rentals, there are now services that allow us to share anything from solar panels and skills to food and tools. For example, apps such as OLIO, EatWith and Meal Sharing connect neighbours and strangers so that food can be shared, reducing waste and creating new connections between people. Platforms like Streetbank and Peerby now make it possible for neighbours and communities to share anything from rollerblades to fondue sets. Although some of the biggest platforms, including Uber and Airbnb, are undergoing regulatory setbacks, there is little sign that their popularity will decrease.
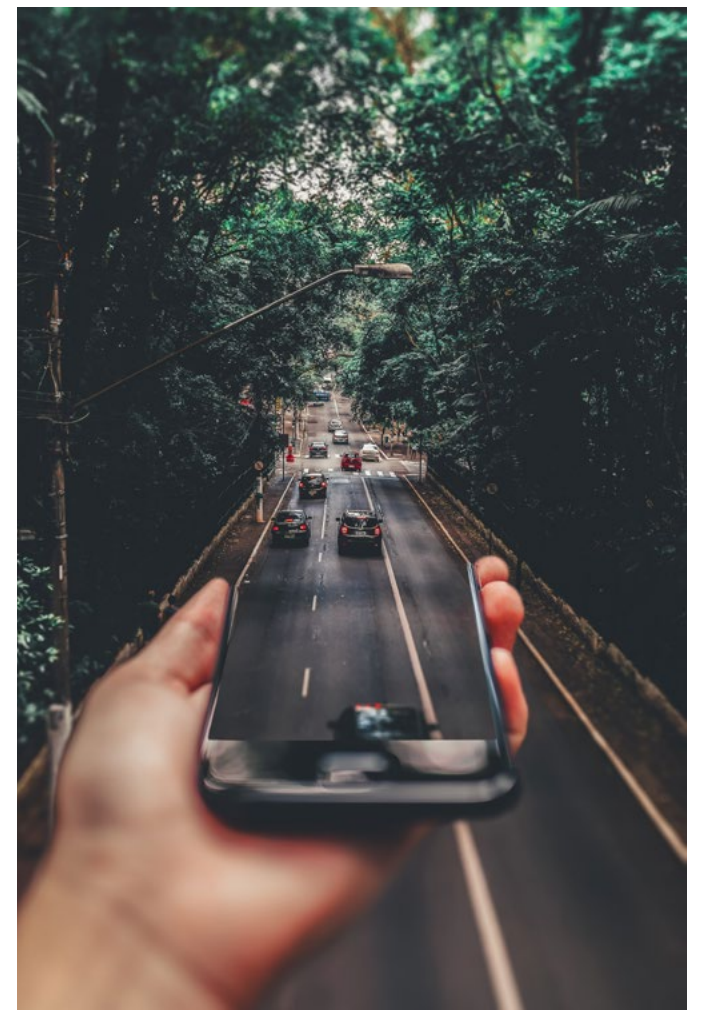
Airbnb is the biggest platform in the networked hospitality business with over 4m lodging listings in 65,000 cities and 191 countries; it has facilitated over 260m check-ins. Without owning any real estate Airbnb has transformed the way we travel and disrupted the hotel industry across the world.

BlaBlaCar is an online marketplace for carpooling originally from France, but available in 21 countries. The platform connects drivers and passengers willing to travel together between cities and share the cost of the journey. BlaBlaCar is one of many carpooling services that aim to make travel more environmentally friendly and reduce travel costs.

The sharing economy and housing

Considering the sharing economy's predicted growth, and the technological advances influencing behaviour among young people (where many now value experiences over ownership), the sharing economy could lead to a drastically different housing market. Venture capitalists also see the immense potential of shared living. In London alone, deep-pocketed investors have pumped more than £1 billion into co-living spaces. With our planet's growing population and depletion of natural resources, sharing homes will be inevitable for many people around the world – and could go beyond a service and once again be a normal part of everyday life as we seek a more sustainable future.

Food waste is one of the major problems facing our planet today. OLIO connects neighbours with each other and local businesses so that surplus food can be shared, not thrown away. This includes food nearing its sell-by date in local shops, spare home-grown vegetables, bread from the bakery, or groceries left in your fridge when you go away.

What won't we share?

Playful research into shared living

"Today we live in our own little echo chambers of information and are surrounded by so much like-mindedness. It's lovely that despite this bubble creation, when people are asked, they'd prefer to live with people who are different to them."

— Irene Pereyra, UX director
   and founder of Anton & Irene

SPACE10 collaborated with New York-based designers Anton Repponen and Irene Pereyra to launch an online survey titled One Shared House 2030. More than 13,000 people from almost 175 countries were asked about how they would like to live together and what they would – and wouldn't – be willing to share. Although the project isn't a scientific study – it's a form of "playful research" designed to get people thinking about the future of living – it raises some interesting points about how we should approach and design shared-living concepts. Here are a few of the most interesting findings:

We want to live in small communities
The majority of respondents reported that they would prefer to live in tight-knit communities of four to 10 people. The exception was couples with children, who would prefer to be part of a slightly bigger community of 10-25 people – presumably to share the workload of looking after the kids. None of the respondents reported that they would prefer to live in bigger groups, which

seems to contrast with most of the corporate co-living concepts rolled out today, which are often designed for hundreds of people.

We like diversity – up to a point
The majority of respondents would prefer to live with others of different backgrounds and ages. The survey also asked people to prioritise who they'd prefer to live with. The majority of people would be most willing to live with childless couples and single women. The least popular house members would be small children and teenagers.

Our biggest concern is a lack of privacy
The main concern for most respondents is that shared living would mean a lack of privacy. The majority said co-living would be a good way to socialise with others and that they would be willing to share their home. But they still worry about the potential intrusion on their privacy – and insist on their private space being off-limits to others.
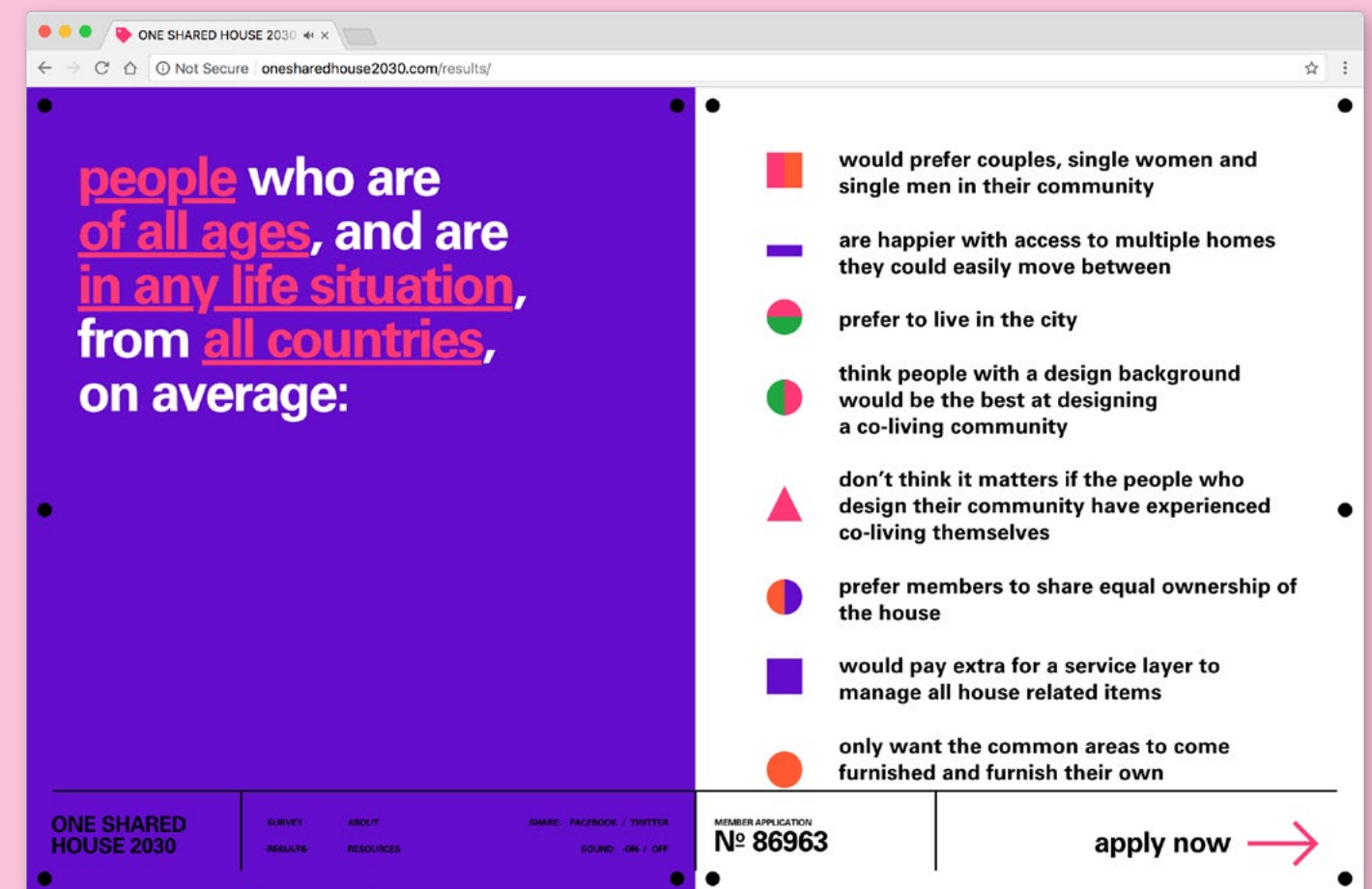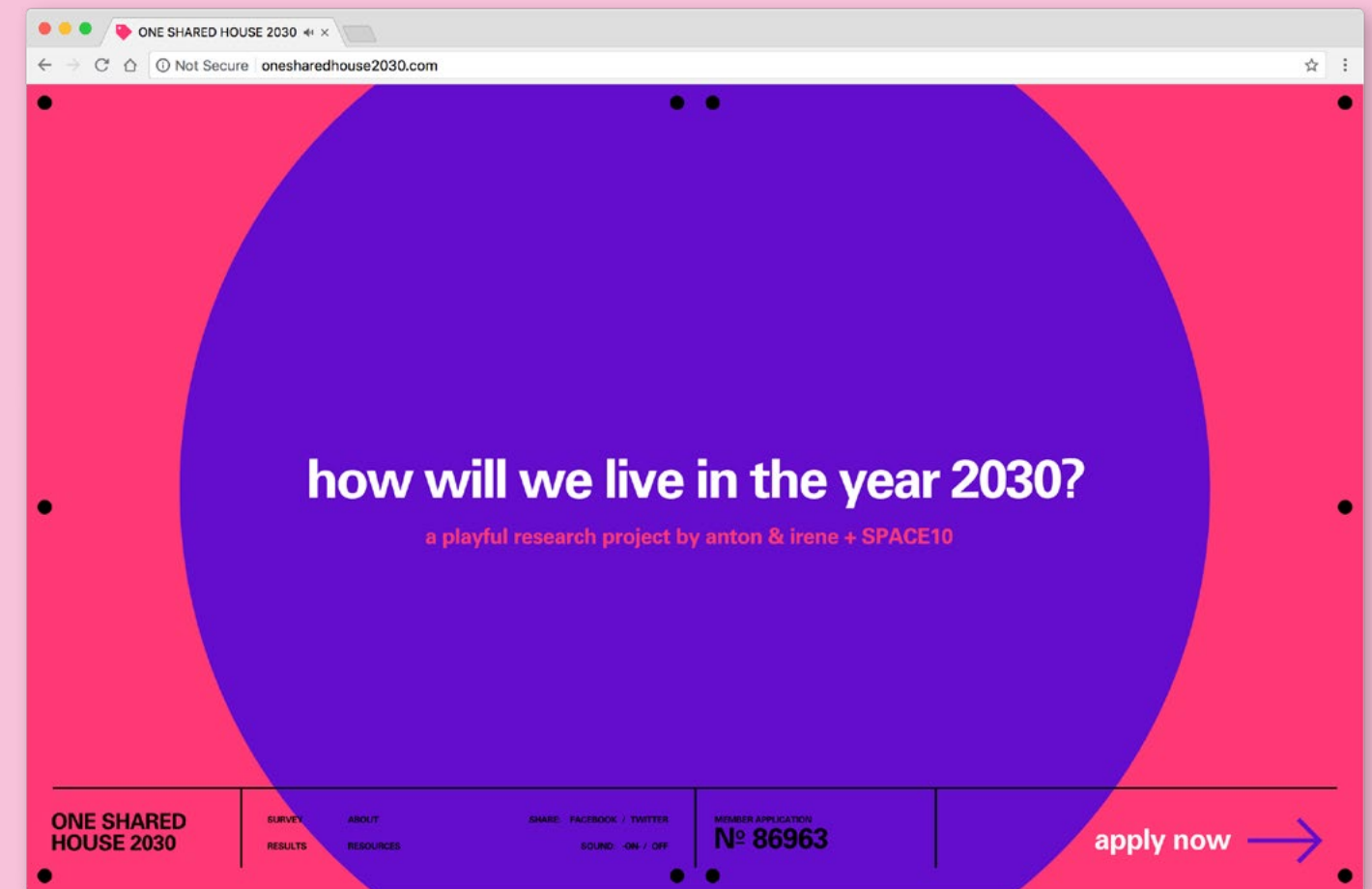
Lydia Choi-Johansson

What makes a better life at home?

We spoke to Intelligence Specialist with
Inter IKEA Systems, Lydia Choi-Johansson

For the past four years IKEA has published its Life At Home report, which brings together insights from global surveys, home visits and interviews with experts on how people live. For the 2017 report, IKEA went further than ever to understand people's needs and dreams at home, journeying across the globe and spending 874 hours exploring people's lives in order to understand what makes a better life at home. We talked to Lydia Choi-Johansson about what the report says about shared living.

I: **What were the main findings from this report?**

LCJ: In 2016 we asked "what defines a home?" and we identified four measures, which were space, place, things and relationships. In the 2017 report we wanted to go deeper into that in order to really understand what happens when those measures interplay, as well as the struggles that people deal with in their everyday life at home. We were able to identify five tensions that people struggle with, no matter where or how they live.

"Of all the arguments we have at home, 17 percent stem from intruding in each other's spaces and 42 percent of people say they find it hard to ask for their own areas."

I: **Were there specific insights about sharing things at home?**

LCJ: Yes, actually one of the biggest tensions we were able to identify was what we termed "the myth of minimalism", where we discovered that having too much stuff was the single biggest cause of stress in the home. Globally, 27 percent of people think society puts pressure on us to live minimally. And 49 percent of people say the main cause of their domestic arguments is due to different feelings about clutter. This affects people when you share spaces and can create tensions. Secondly, we found that people really need their own space and that negotiating what's yours and mine is often a battle. Of all the arguments we have at home, 17 percent stem from intruding in each other's spaces and 42 percent of people say they find it hard to ask for their own areas. Those two tensions have a direct impact on shared living, I believe.

I: **Did you see any big geographic differences?**

LCJ: We always try to focus on commonality, but from last year's report one of the differences is the desire to integrate technology in the home. In many countries in Asia, people are quite excited about

having smart technology, whereas in many Western European countries and in the US, people are a bit more sceptical about having too much technology at home. This also crosses over in consumption trends: minimalism and sustainability issues are becoming a dominant market ideology in the western market, but in China and India, for example, we see that consumption is really at its peak.

"We know that people are willing to share more, and that there has been a rise in sharing in general with Airbnb, car sharing, and so on. But there are different ways of sharing."

I: **Did the findings identify a trend for sharing more where we live?**

LCJ: We know that people are willing to share more, and that there has been a rise in sharing in general with Airbnb, car sharing, and so on. But there are different ways of sharing. Sometimes sharing is rational and driven by economic benefits, and sometimes it is more emotionally driven. Interestingly, in China there is this niche trend where people are sharing clothes. People are also willing to share children's toys, which is often driven by efficiency and cost, as opposed to meeting people and social bonding.

I: **Why has there been a recent rise in shared living?**

LCJ: On a broad level, I think that we are shifting in terms of how we see our lives and the perception of value – and of course that affects the things we share and how we view space. Conventional thought said that a house was a lifetime investment, and that life happened in more of a linear progression – whereas now it is much more about enjoying the moment. Now, people invest more in lifestyle, so it is not as linear as previously and that affects the choices that we make. So shared living is no longer a passive choice. Instead it is a proactive choice. But of course it is not mainstream yet – and for many it is still a reactive choice because, for example, you have limited resources and have moved to a city.

Why don't we build *more* for sharing?

The interest in shared living is clear. How come so few residential projects actually take shareability into account?

It's the economy, stupid

To understand how to bring more shared-living models to life, we need to take a closer look at how the worlds of financing, planning, design and construction operate

Our initial research found that the complexity of financing, designing and managing shared-living projects prevents many schemes from being realised. Both developers and community initiatives struggle with a variety of barriers that make it unattractive and/or risky to pursue new models of organisation and design. The uncertainty of the organisation and market for shared living makes it a harder business case than "business as usual". It really is about the economy.

In addition, there are planning obstacles that make it difficult to explore new types of buildings. Planning regulations have good intentions, such as ensuring quality of living, green spaces and light, but outdated or rigid regulation often impedes new spatial solutions. Today, the entire flow of forming a building – from inception and business model, to planning and design, to operation and management – is not really fit for shared living.
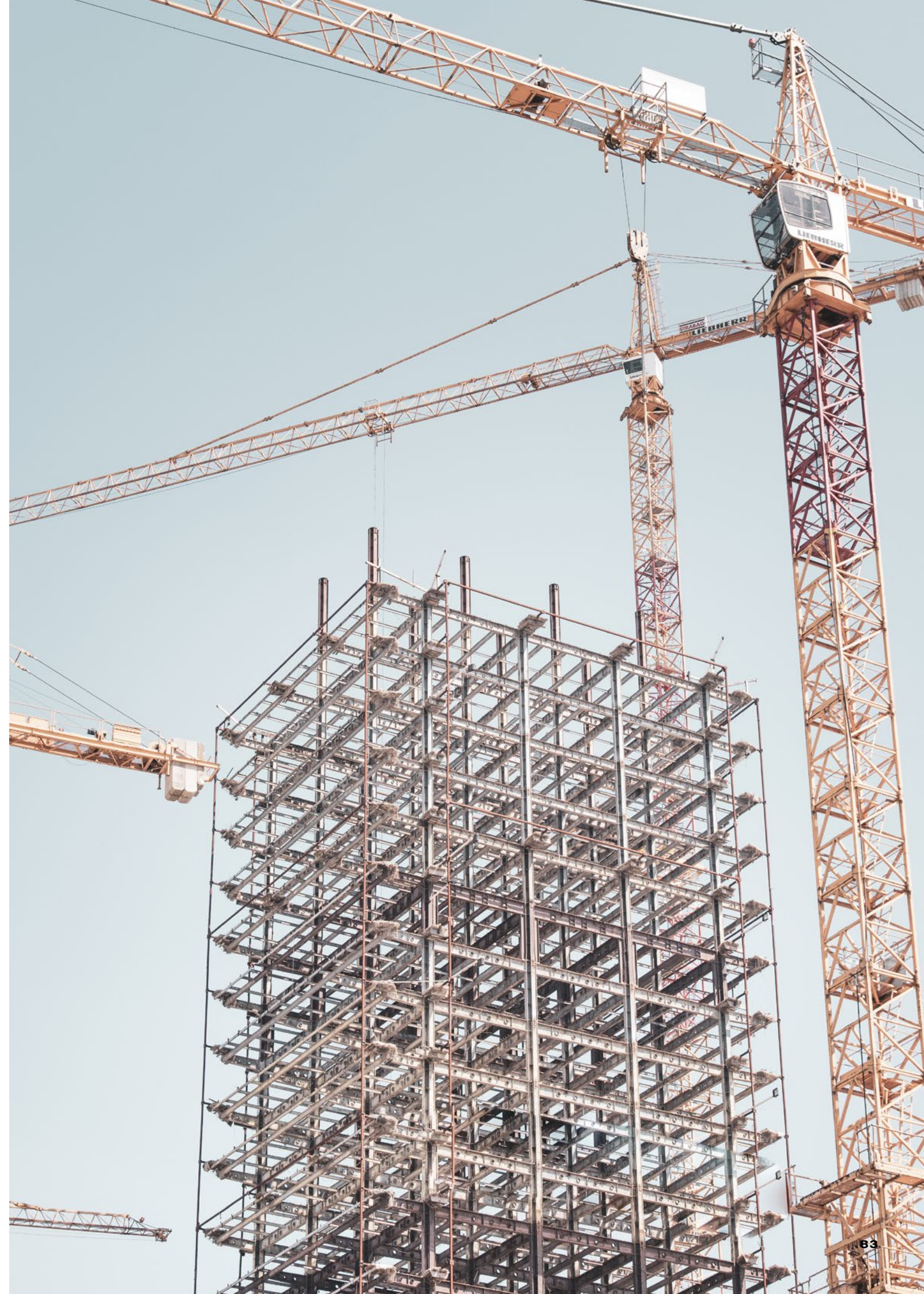
Barriers of shared living

CONSTRUCTION: the design and definition of space

The design and construction of residential buildings focuses almost exclusively on "traditional" family set-ups, leaving little space for new forms of spatial organisation. This is largely the result of the economic and political context. Construction is a cost driver and, within the dominant model of construction, it is considered hard to offer affordable "experimental" housing. Affordable, high-quality schemes exist, but they tend to demand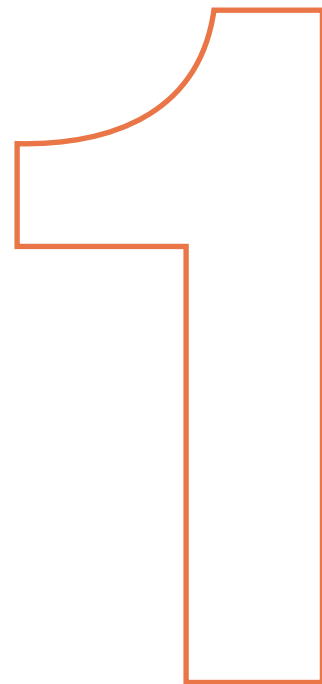 more of the design process and require a more long-term understanding of "value" than just an immediate maximum return on investment.

The planning and construction industries are generally quite conservative and have only recently started exploring new design approaches such as prefabricated design, new digital tools and recyclable materials. Recently, the massive amount of CO_2 emissions that stem from building work has focused attention on the process of construction – including demands for a more efficient (co-)use of the built fabric, since building less is an incredibly efficient way to reduce CO_2 emissions.

Planning and construction industries need to start exploring new building types that support community and interaction. Sharing best practice in terms of both planning processes and designs seems to be a good place to start.

PRE-CONSTRUCTION: the conditions of what and how we build

As investors and developers are working to minimise risk and maximise profit, there is a strong tendency to keep building (and selling) what they already know. And since the housing markets in bigger cities are generally very heated, there is little incentive to explore new designs. Most common investor models and modes of organisation do not support community-generated or community-owned development projects. To bring forward new modes of living and sharing, we need to address the investment structures, business models and planning processes that define the types of buildings that are constructed.

Local planning regulations are also important. The design of a building is a direct result of regulations that govern everything from overall density to building height to relations with the community. Planners have a crucial role in moving forward the shared-living agenda.

OPERATION: facility management

Facility management is the art of operating and maintaining a building over time. If you own a home, the responsibility might be down to you as an individual; if you rent, it might be down to a service provider. There are alternative models that operate with shared ownership and responsibilities (such as *andelsboliger* in Denmark and *baugruppen* in Germany). In addition, there is an increased interest from strategic investors to ensure long-term investments, which means they are taking a more holistic interest in neighbourhood and community building.

Largely, however, the current investor-driven model does not support community-based facility management. New models need to be developed that address questions such as: how do you ensure a feeling of responsibility for members of a shared-living project? What types of organisational set-ups promote community and sharing, while still being effective and operational?

Charles Bessard

Challenging the barriers to diversity

We spoke to architect and academic Charles Bessard

Charles Bessard heads his own architecture practice and works as a researcher and assistant professor at the Royal Danish Academy of Fine Arts. His research has covered the economic and political conditions for contemporary planning and construction. Here's his view on how we could create more diverse building types, including shared-living schemes.

I: **What's stopping us from building a diverse range of residential buildings – notably shared living?**

CB: The reason we talk about diversity as something we need might stem from the most obvious flaws of big-scale modernist planning, with endless mono-functional urban areas and identical apartments. In recent years, there has been more hope that the market – guided by public planning – could bring about the aspirations of diversity. But the question is: what do we mean by diversity? It might be that we have become better at making areas that seem diverse, by making them look less monotonous. An example could be Teglholmen, in Sydhavn in Copenhagen, where the building façade, the windows, etc. are different, but the core of the entire area is super-standardised apartments which target only one user group: the upper-middle class.

I: **So what's stopping us from developing more diverse options for living?**

CB: The investor-driven markets of today are not capable of producing genuine diversity. It might produce some diversity of form and architecture, but that's not the same as new typologies and new modes of living. Also, in terms of ownership, it's limited to two options: owning or renting. There are so many other ways to use and consider ownership of urban territories!

"First of all, we need to start initiatives on a political level. Governments can do many things in terms of regulation and processes related to planning."

I: **Why is the current model this way?**

CB: We funnel diverse needs into a very limited market. Developers are focused on protecting the investment, which usually means getting in and out as quickly as possible. Predefined solutions, with minimum risk, work. People buy what they can get, because of the enormous pressure on the cities. A very small number of parcels [of land] are offered, which do not even nearly meet demand.

Teglholmen is a new neighbourhood in Copenhagen's Sydhavn district. It may not look monotonous – but that doesn't mean it is diverse.

I: What can we do about this?

CB: It's not easy to rethink such an investment-heavy market – and there is no quick fix. But there are plenty of things to do. First of all, we need to start initiatives on a political level. Governments can do many things in terms of regulation and processes related to planning. Today in most countries – and certainly in northern Europe – most acquisition of land is quite opaque and really only for professional developers. What about opening that process up? When new land is sold and planned, the public can demand certain types of investors – for example, communities or self-organised groups. You could start by designating around 15 percent of new land to new types of living that offered some special quality in terms of sharing and sustainability. Another important tool is the plot size. Investors like to buy big plots and make simple structures, but most of the places we like, in the city centres of European cities such as Paris or Copenhagen, for example, are much smaller. And smaller plots could be manageable for more self-organised initiatives – like the *baugruppen* in Germany or other more shared developments where people are engaged in making the building they are going to live in.

I: What else can be done to support more social buildings?

CB: We need to bring different types of actors into the market – existing developers are not capable. It's not that all current developers are bad people or that we don't need developers at all. But we need other types of development to bring about more diversity – and to introduce a system where other aspects than money are given priority. The system and the actors of today rarely have the time or the will to invest in a more complex design process to build for shared living. The thing is: most people don't know what they need. It requires a will to form a process that people can be a part of. But the result can be a much more interesting city, with buildings that have more quality and character, because people are building something for themselves to live in – not just making a quick buck.

"I think as soon as you start to see examples and processes that work, it can make people aware about potentials they didn't know they were aspiring to."

An example is the Copenhagen community Urbania, which is trying develop a vertical shared-living project. It has taken them 10 years just to find the land. This process could be done more strategically by the public sector. The cities or regions can work as a market facilitator, promoting diversity by giving priority to shared-housing projects. I think as soon as you start to see examples and processes that work, it can make people aware about potentials they didn't know they were aspiring to.

I: What do you think is at the heart of shared living?

CB: I think it's important to really consider what we speak about, when we speak about shared living. It's not only sharing a few extra spaces and a sauna, for example. We should think about life! We need to look at the diversity of family patterns and really think about people's trajectory through space and time. What do we really need? Should owning and investment really be such a big part of the equation? Couldn't we make architecture and business models that are more sensitive to the actual living conditions of people? We must challenge a housing structure that is so dominated by capital interests and refocus on the question: what is meaningful living?

Charles Bessard's Beyond Luxury model is a simple yet radical idea: to maintain quality of life and affordability in increasingly urbanised cities. Each citizen is given a "right to the city" – and, to maintain this right, the municipality needs to change its main stakeholder for housing production from developers to co-operatives and non-profit organisations. Municipal and state-owned land is sold for urban co-housing, where a group of people are allowed to become the developers of their own future home. Their combined income is used to leverage the financing of the construction costs. For the municipality, the land is sold at the same price but the price tags of the apartments radically drop, keeping the city affordable. Housing costs are held below the threshold of 40 percent of the average income while offering apartments which are 50 percent larger.

The model shows a simple prefabricated timber-clad housing block, with a generous grid that allows for lifetime flexibility through generations. The model's price tag reflects the quality of the building and its usage, instead of its value for profit.

PART II:
BUILDING
THE SHARING
MOVEMENT

What does it take to bring more shared living to life? There is no quick fix. Here we come up with a course of action and highlight inspiring best practice.

We have identified four themes that are essential to making shared living happen. As we see it, we need to rethink business models, mobilise digital tools, design for sharing and build community capacity. The most successful examples of shared living demonstrate both architectural and social understanding – and increasingly we see an interest in including digital and economic thinking.

Many different aspects need to come together to allow shared living to take place. In the following overview we briefly introduce each theme and highlight thought-provoking examples, voices or projects that point to ways to strengthen the foundation for shared living. The examples are in no ways exhaustive, but rather should be seen as the beginning of a map of what is out there. And, as it is, the different themes overlap and relate to each other: the design of a building, for example, is incredibly dependent on the business model, planning conditions and – of course – a notion of community.

Developing business models that allow for new ways of co-owning and operating property is essential to foster and scale more shared-living projects. Ambitious yet functional models can help develop projects that are more socially, environmentally and economically viable. We've found examples to inspire potential community-makers, investors and developers alike

Rethink business models

We see an increased interest in challenging current urban development models and the rise of more inclusive and sustainable development frameworks. There is a sense of urgency regarding urban sustainability, not just in terms of environmental impact, but also in the overall social and economic viability of cities. The remarkable increase in property prices in recent decades, notably in bigger cities in the western hemisphere, has made urban living difficult for many. There is growing awareness of the challenges stemming from the growing divide between those who own property and those who don't.

So what can we do about this? In the bigger picture it is essential that the political vision supports more sustainable and socially conscious models of living. We must work with the political agenda, the culture of bureaucracy and the law. The public-planning tools in northern Europe offer substantial options to frame and direct new developments – and demand of the developers that they build better and more inclusive housing. It is also a question of building culture and capabilities that enable new business models and modes of organisation to thrive.

There are a variety of examples that could serve as a template. Some initiatives bring new life to older organisational structures that have sharing at their core – such as the *baugruppen* in Germany, the *andelsbevægelse* in Denmark or co-operative housing projects in Switzerland. Here we see a capacity for self-initiative and public-planning authorities that can accomodate alternative forms of organisation.

With developers and investors too concerned with short-term return on investment, we need more examples of successful shared living to prove the business case. Investors need to be shown that long-term income is possible by adding services and facilities. And if there are other beneficial effects, such as improved quality of life or life expectancy, that could prompt public bodies or NGOs to get involved, too.

Other projects explore smarter ways to share ownership. Existing financial models, not least the model of ownership, pose a substantial challenge, as it can be difficult to finance shared-living development projects. Having little data and knowledge about the long-term development of shared-living concepts, banks are often sceptical. Again, the *baugruppen* models might inspire projects beyond the borders of Germany and Austria.

The question remains: How do we design models of sharing where facilities, services, activities and finance not only promote well-being but help to accumulate wealth and ownership among residents?

The community as developer: Baugruppen

The *baugruppen* model demonstrates how communities can come together and act as a developer to realise bigger, urban projects.

THE URGENT QUESTIONS

× How might politicians and the public sector rewrite legislation to encourage shared-living business models?

× What tools can we put in place to empower people to take action and build communities?

× How can financial models, business models and organisational frameworks be redesigned to support more socially oriented urban development?

Baugruppen (German for "building group") stands for a long German tradition of people getting together to finance, design and construct their own residential buildings. Unlike many co-housing projects, which often consist of single-family homes in the suburbs, *baugruppen* projects are often multi-storey, multi-family buildings located in cities. Although projects differ in their financing models and social make-up, they are all self-initiated and focused on the community and the shared responsibility of the building. Beyond that, the project can become whatever the group and housing project want. Some might develop standalone units situated around a common garden, whereas others might develop single units divided into apartments.

The concept is especially popular in Berlin, where more than 3,000 apartments and 200 houses have been built as *baugruppen* projects in the last 10 years. The movement has developed a successful financial and legal model, which operates in four phases: *Interessensgemeinshaft*, where people get together, but without formal, legal or financial links to a project; *Planungsgemeinschaft*, where the group commissions an architect or planner to handle the construction and project planning and the future allocation of housing units; *Bauherrengemeinschaft*, where the client group purchases the property and starts construction of the project; and *Betrieb*, where the operation of the building is carried out as a condominium community according to the Condominium Act (WEG) or as a co-operative. Apart from their unique financial and legal model, most *baugruppen* projects add to the urban environment by considering social issues of inclusion and community. Many projects incorporate green community spaces that are often open to the neighbourhood and public. Overall, the *baugruppen* model shows how to practically finance, organise and construct buildings as a community.

New ownership models: Andel 2.0

By In-Between Economies in collaboration with DOMA and Eutropian

A century ago, Denmark initiated an early collective housing model – the *andelsbolig* – but over time it fell out of favour. Land values and risk have skyrocketed. But in 2018 we have the digital tools to leverage finance and co-ordinate large groups of people. What can we do with them?

During Copenhagen Architecture Festival 2018, Andel 2.0 – a project by emerging design studio In-Between Economies, in collaboration with DOMA and research and policy organisation Eutropian – explored this subject by curating a week-long workshop to co-create with other groups. The project took the first steps towards designing a new type of civic institution for housing that would make it easier for people to design, build and commission their own neighbourhoods.

Scaling the *andel* model
There are many building designs for collective housing that can be drawn on as a resource – but the number of economic models to realise these are few and far between. In-Between Economies aims to fill this gap, designing not the buildings for collective living, but rather the economic model to make them happen. By reframing the design task in this way, they translate housing from a noun into a verb, aiming to provide the infrastructure, both digital and physical, to support the citizen sector to build the homes they need. By taking advantage of platform technology to scale up the original *andel* model to the city and exploring what benefits a decentralised network of housing might bring, the project raises questions about the scale at which we form community.

Andel 2.0 works with five layers of stack: financing, enabling, dwelling, organising and sharing, each driven by a key question:

01. **Enabling**
    How can city planning encourage the development of collective housing?

02. **Financing**
    How do we finance housing collectively without banks?

03. **Organising**
    How does a network of people who don't know each other make decisions?

04. **Dwelling**
    What does housing as shared infrastructure look like?

05. **Sharing**
    How do we design a value system for exchanging care, skills and information?

On the following pages we share Andel 2.0's results and insights for each layer of stack.

ENABLING

- open bureaucracy ●
- civic planning ⊜
- civic financing ○

Our current mode of bureaucracy and planning is incredibly centralised making financing & planning slow and incredibly high risk. This places huge barriers for people to design, build & manage their own housing - often making it contingent on dedicated individuals within communities, often dedicating a lot of time towards fighting bureaucracy, planning and finance.

New technology is allowing new ways for civic collaboration and is challenge the existing speculative development model of providing homes. Andel 2.0 uses open neighbourhood data and open city information modelling (BIM) to creates a new, digitally verified land market that give permission for new types of civic financing, planning rights and legal status for civic groups to design and build.

This shifts our current model of state infrastructure to a new model of a joint civic 'platform' for providing cooperative housing and neighbourhoods.

UNIQUE APARTMENT URL
Each member of the network owns a unique ID tied to their home, giving open information to city/civic services.

LOCAL ROOFTOP PLAN
Permitted development for Andel rooftop extension paid by the network to increase density & housing supply

DIGITIZED LAND MARKETS
Splitting use rights from development rights and making the tradable via blockchain tokens

CIVIC DATA STANDARDS
Secure, anonymised housing data that is open and available as a public service. Showing with price, density, performance & use

DYNAMIC PLANNING
City information modelling to open up the planning process

FINANCE TEST ZONE
Location based testing for new financial technology (eg. Blockchain equity, P-2-P financing, energy trading, etc.)

2

FINANCING

Ease of mortgage lending in Denmark has provided a route onto the housing ladder for many, but has shifted investment from the real economy (business and services) to the housing market. This pushes up house prices and m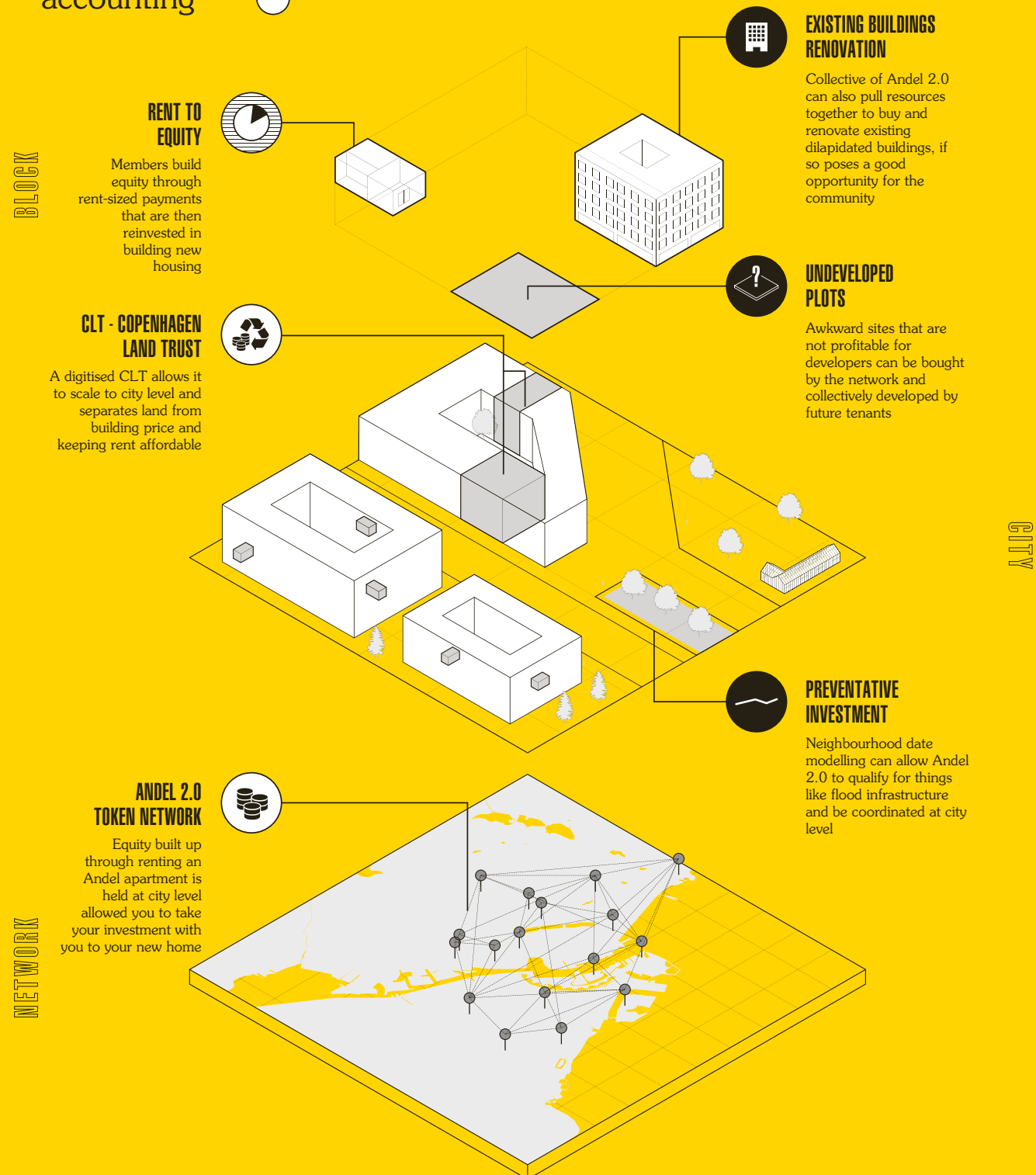akes Copenhagen one of the most expensive cities for renters. Andel 2.0 acts as a type of city wide collective 'landlord' allowing people to use their monthly rent payments to build up equity within a city wide system, via state-backed blockchain tokens.

In order to avoid price inflation throughout the city, the Andel 2.0 savings are used to continually seek out new plots for direct procurement and design, and incorporating them in a distributed community land trust. This 'networked' peer-to-peer financing model de-risks the procurement, planning and construction process while continuing to providing customised, more affordable, high quality homes for the city.
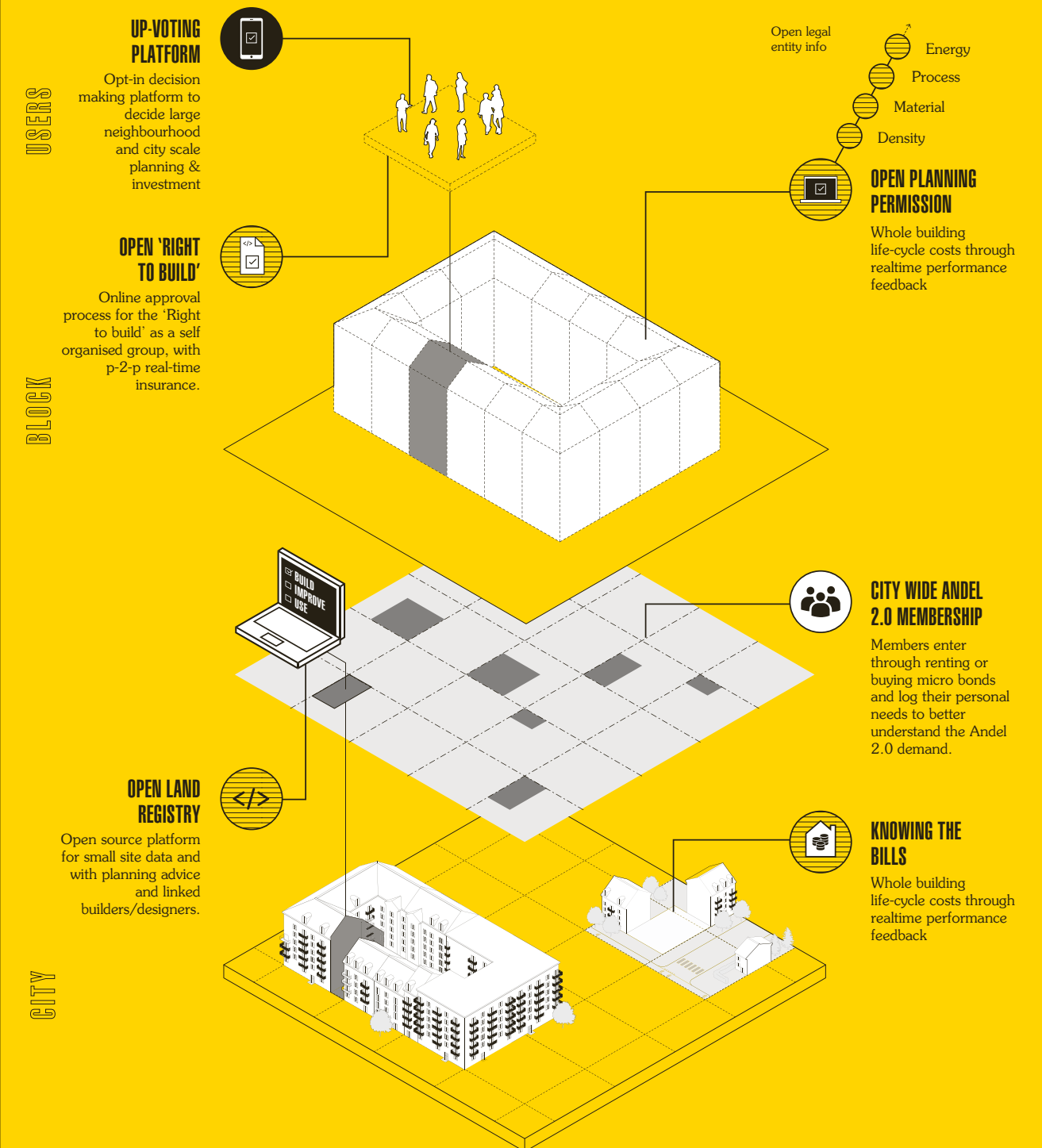
leveraging ●
de-risking ⊖
accounting ○

RENT TO EQUITY

Members build equity through rent-sized payments that are then reinvested in building new housing

CLT - COPENHAGEN LAND TRUST

A digitised CLT allows it to scale to city level and separates land from building price and keeping rent affordable

EXISTING BUILDINGS RENOVATION

Collective of Andel 2.0 can also pull resources together to buy and renovate existing dilapidated buildings, if so poses a good opportunity for the community

UNDEVELOPED PLOTS

Awkward sites that are not profitable for developers can be bought by the network and collectively developed by future tenants

PREVENTATIVE INVESTMENT

Neighbourhood date modelling can allow Andel 2.0 to qualify for things like flood infrastructure and be coordinated at city level

ANDEL 2.0 TOKEN NETWORK

Equity built up through renting an Andel apartment is held at city level allowed you to take your investment with you to your new home

BLOCK
CITY
NETWORK

3

ORGANISING

Within a system comprising investors as well as dwellers, how do we organise a group of people who don't know each other to make decisions at different scales? Andel 2.0 would operate as a platform, structured by a series of databases to make decision-making transparent at each level.

We can establish a Copenhagen Land Trust to take decisions on new purchases, development and construction, orienting the institution towards civic improvement. Day-to-day we can leverage digital decision-making platforms to host real-time voting, inviting participation from the whole Andel community, even whilst on the move. The community of investors and dwellers would be connected on a shared platform for voting in real-time, and a database of small plots is made available to make it easier for citizens to get involved in the design and development process.
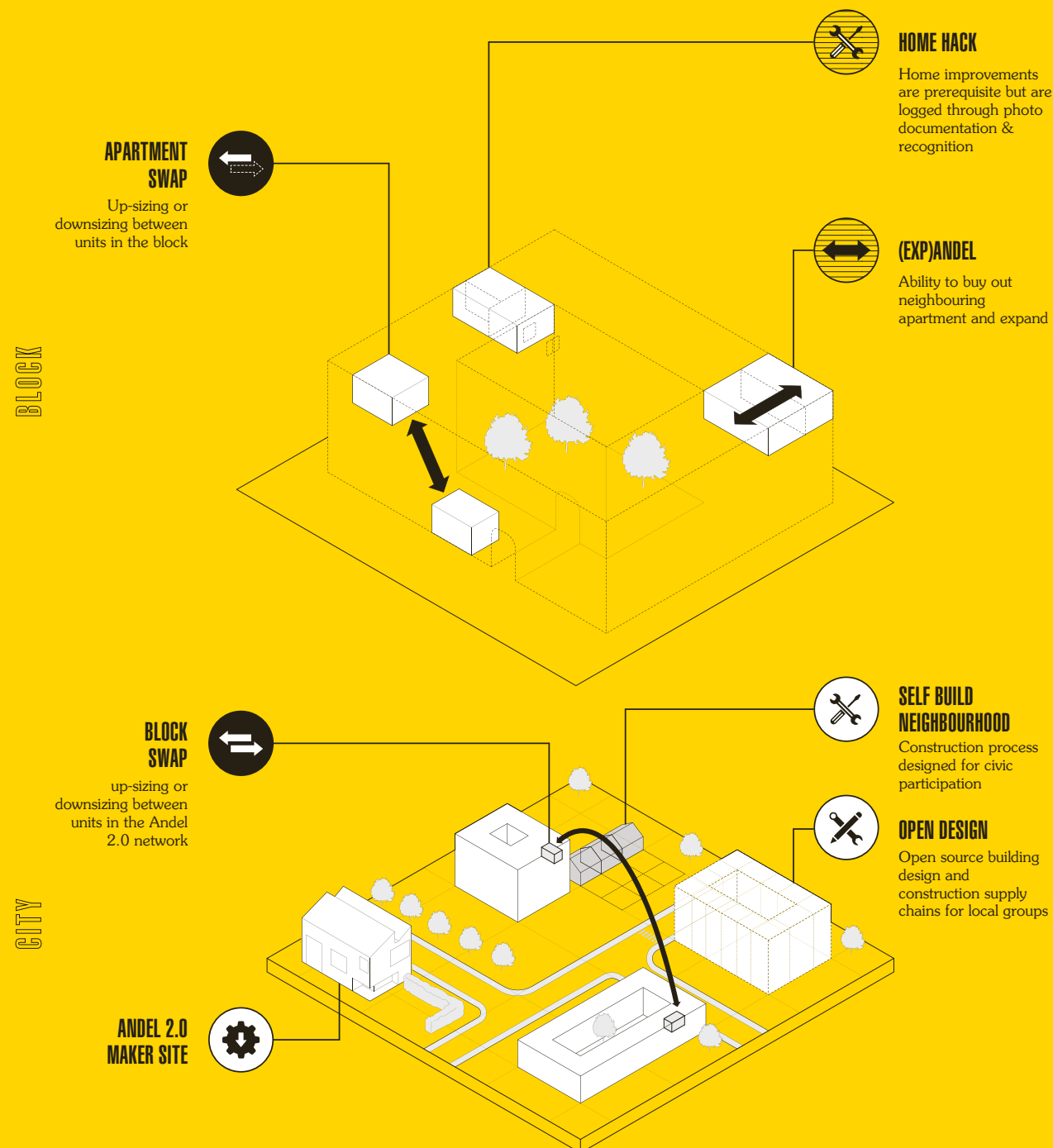
decision making ●
future planning ⊖
membership ○

UP-VOTING PLATFORM

Opt-in decision making platform to decide large neighbourhood and city scale planning & investment

OPEN 'RIGHT TO BUILD'

Online approval process for the 'Right to build' as a self organised group, with p-2-p real-time insurance.

Open legal entity info

Energy
Process
Material
Density

OPEN PLANNING PERMISSION

Whole building life-cycle costs through realtime performance feedback

CITY WIDE ANDEL 2.0 MEMBERSHIP

Members enter through renting or buying micro bonds and log their personal needs to better understand the Andel 2.0 demand.

OPEN LAND REGISTRY

Open source platform for small site data and with planning advice and linked builders/designers.

KNOWING THE BILLS

Whole building life-cycle costs through realtime performance feedback

USERS
BLOCK
CITY

4

5

DWELLING

using ●
improving ⊜
building ○

Building homes is risky. It takes a lot of money, time and knowledge to get it right, and you don't know who's going to live in them at the end. Because of this we build speculatively, relying on large scale developers to create our cities - not as homes but as one-size-fits all assets for imaginary future tenants. The Andel 2.0 model democratises this process, shifting housing from a noun to a verb, and activating citizens to take part. By alleviating the debt-burden from dwellers desperate to own property we shift the emphasis towards owning a share of a collective asset: a new type of civic institution. One that makes it easier for people to design, build and commission their own neighbourhoods. When people own the process of creating their home - rather than just the space itself - they invest time, money and energy into making it a diverse, sustainable place to live.

By taking advantage of open-source housing design together with smart insurance and maintenance models, Andel 2.0 provides a framework for civic participation in housing design, construction and management, building not just homes but catalysing a new movement for city-making.

HOME HACK

Home improvements are prerequisite but are logged through photo documentation & recognition

APARTMENT SWAP

Up-sizing or downsizing between units in the block

(EXP)ANDEL

Ability to buy out neighbouring apartment and expand

BLOCK

SELF BUILD NEIGHBOURHOOD

Construction process designed for civic participation

BLOCK SWAP

up-sizing or downsizing between units in the Andel 2.0 network

OPEN DESIGN

Open source building design and construction supply chains for local groups
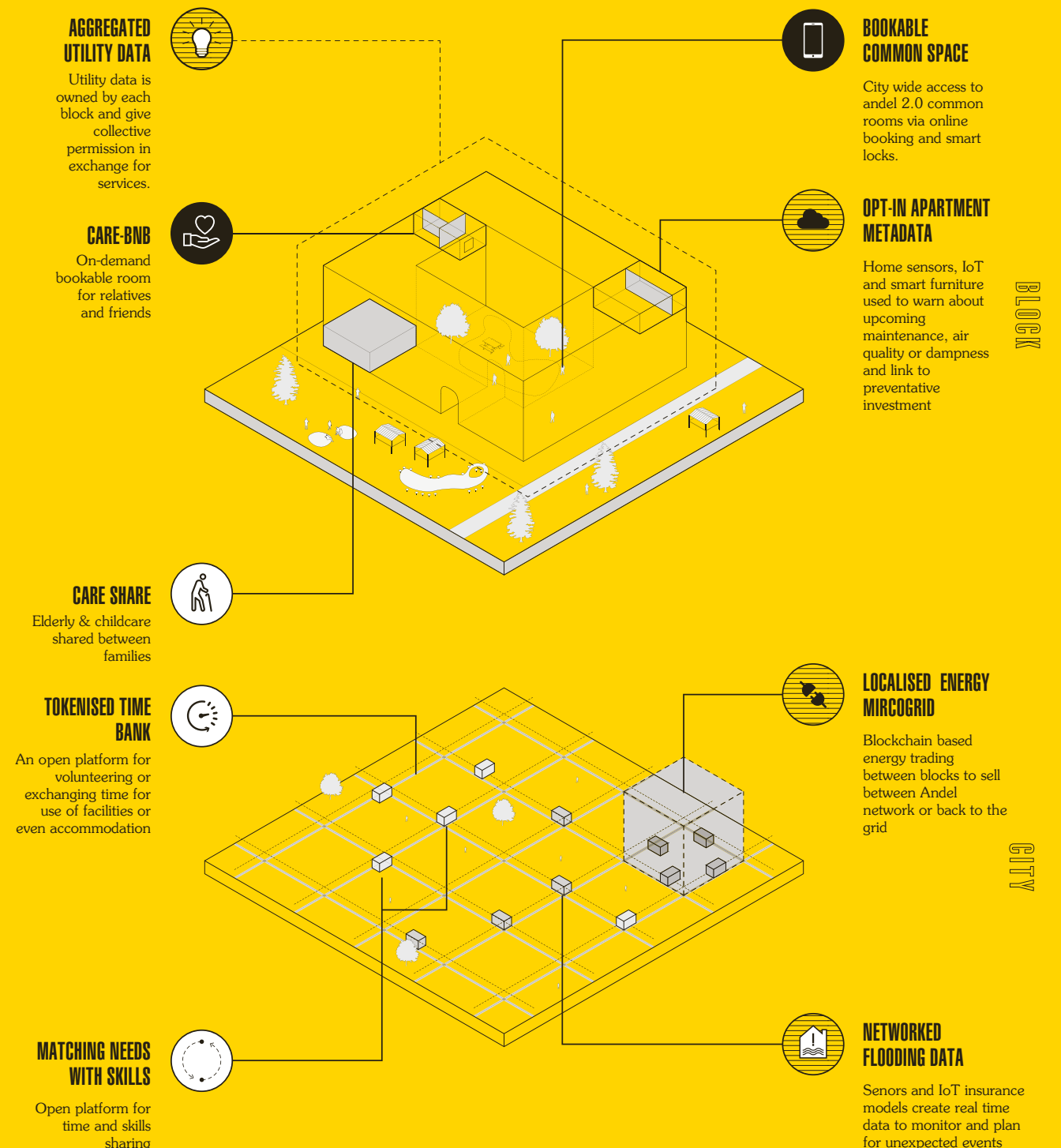
ANDEL 2.0 MAKER SITE

CITY

SHARING

space ●
data ⊜
care ○

Much of today's co-living and shared apartments, from the users side, are narrowly focused on space. Here we turn our attention to the other pieces of 'infrastructure' that could enable sharing to happen, and how this can be taken from a block scale to the scale of the neighbourhood, or even city.

The key advantage to sharing is the networked capacity and power it can bring - and how we can turn that power into a competitive advantage. The Andel 2.0 separates sharing into three distinct layers - space, data and care (time/skills) in order to differentiate the specific type of infrastructure needed and at what scale these would need to operate at.

Creating working platforms for sharing (whether analogue or digital) is a core challenge of the sharing economy & one that will need further discovery and experimentation.

AGGREGATED UTILITY DATA

Utility data is owned by each block and give collective permission in exchange for services.

CARE-BNB

On-demand bookable room for relatives and friends

BOOKABLE COMMON SPACE

City wide access to andel 2.0 common rooms via online booking and smart locks.

OPT-IN APARTMENT METADATA

Home sensors, IoT and smart furniture used to warn about upcoming maintenance, air quality or dampness and link to preventative investment

BLOCK

CARE SHARE

Elderly & childcare shared between families

TOKENISED TIME BANK

An open platform for volunteering or exchanging time for use of facilities or even accommodation

LOCALISED ENERGY MIRCOGRID

Blockchain based energy trading between blocks to sell between Andel network or back to the grid

MATCHING NEEDS WITH SKILLS

Open platform for time and skills sharing

NETWORKED FLOODING DATA

Senors and IoT insurance models create real time data to monitor and plan for unexpected events

CITY

Swiss business models for community-driven shared living

Mehr Als Wohnen is Switzerland's biggest co-operative housing project, comprising more than half of the city's housing co-operatives

There are some inspiring examples from Switzerland of how community-organised living is financed. For example, Mehr Als Wohnen (More Than Living), just north of Zurich, has paved the way for a new scale for co-operative housing – the size of an entire neighbourhood. It was originally founded by 35 housing co-operatives and now comprises more than 60 of the 120 co-operatives operating in Zurich.

The city has a long tradition of co-operative housing, with the earliest examples having been formed in the 1920s. Today, around a quarter of housing stock consists of not-for-profit accommodation. The co-operatives are largely self-financing operations and run on equity deposits and membership fees paid by residents and other private investors, as well as below-market-price apartment rentals. When residents leave their homes, their share is returned, adjusted in line with inflation, but not market speculation, which prevents the housing market from becoming overheated.

What makes Mehr Als Wohnen exciting and revolutionary is the way it has expanded a tried and tested model to a massive scale. Today 1,200 residents and 150 employees live and work across the precinct, which contains 395 apartments, 35 retail spaces, and shared care and community facilities across the neighbourhood.

Mobilise digital tools

Technology can help enable shared living. The rise of the sharing economy suggests that people are ready to share more than we thought – and that there is a bigger potential still to be harnessed. And, speaking more specifically about the design and construction industries, a wave of new tools and opportunities are also in the making. From augmented reality to community-matchmaking processes, there are some interesting possibilities – as well as important ethical discussions. Here, we take a closer look at some of the most innovative ideas and perspectives

We have already looked at the sharing economy and how digital tools have changed the way we look at ownership. An undercurrent of new apps shows how technology can also contribute towards creating and maintaining real-life communities, through sharing spaces, tools, knowledge, skills and services. Platforms like Omni, Borigo and Meetup bring people together in the real world and enable them to share things, communication tools and interests more easily.

The social aspect of community-making poses a genuine challenge that might be addressed through technology as well. As we share more, we are also more vulnerable to social tensions and disagreements. We see developers (such as Denmark's Almenr) that are looking into AI and algorithms that can assist in matchmaking processes for different types of potential housemates. Technology will not by itself solve the social challenges related to shared living, but it might help in both the making and the running of shared-living projects.

Blockchain technology, as explored by non-profit housing co-operative DOMA, offers a whole new way to design and produce contracts and organise ownerships – independent from traditional (expensive and conservative) middlemen such as banks and lawyers. Blockchain technology can open up access to ownership by redefining it not as floors and walls, but as shares in a company or building. It's a company structure that is transparent and (once developed) does not need to be set up by banks and lawyers. Smart contracts based on blockchain technology might help overcome some of the structural barriers and reduce overall "hidden" costs. It might also help develop new modes of shared ownership where it's easier to understand how to enter and later leave a shared-living model.

Design and production tools are rapidly changing, too. The makerspace and fab lab movement hints at how production can be transformed in the future, demonstrating how more local, custom-made and diverse forms of production might arise from generic tools like 3D printing, including printing entire houses and CNC routers. This can be the start of open-source digital innovation as shown by Open Systems Lab. The last few years have also seen a massive increase in interest in virtual reality (VR), augmented reality (AR) and artificial intelligence (AI) tools. Since designing for shared living requires substantial work with defining the architectural programme (the character of shared functions, flows and private areas, etc.) these new tools might help facilitate more smooth explorative and collaborative design processes.

Viewed together, the list of new tools and digital services can change the design, planning and operation of communities – and can be used to develop more shared living projects. However, there is a long way to go before we realise their potential. We need to push the technologies and their applications forward in the world of finance, design, construction and operations as well as potential communities in the making.

Home-user to homeowner – by the power of blockchain

DOMA is a non-profit housing co-operative with an ambition to bring affordable housing to the many

THE URGENT QUESTIONS

× How can digital tools like blockchain inspire and enable new community-friendly business models?

× How can we mobilise new technology to inform design, planning and construction for shared living?

× How can technology assist in fostering more affordable living opportunities and access to ownership and savings?

DOMA is a non-profit co-operative that purchases housing stock in post-Soviet city centres, with the ambition to eventually invest in the most dynamic urban areas all over the world. Its mission is to structurally change the unsustainable ownership model where our homes are seen as a mechanism for accumulating wealth. DOMA v. 0.1 was launched in collaboration with the Strelka Institute in Russia as part of its The New Normal programme; DOMA v. 0.2 has been live since September 2017 and is run by Maksym Rokmaniko, Melissa Frost, Enrico Zago and Francesco Sebregondi.

Contemporary urban populations are becoming known as Generation Rent, where homeownership is a luxury available to the privileged few, as opposed to the many. In what they call #RentWithBenefits, DOMA brings affordable housing for the many on a platform powered by blockchain technology and secured by smart contracts, creating network-owned units. The users of the platform pay a monthly price to buy in to a network, rather than a stationary inhabited unit; the price decreases over time and, in return, the users are granted equity shares in this network. Users are also able to move between the network's units while accumulating these equity shares, allowing for flexibility, mobility and stability. Uniquely, DOMA doesn't rely on banks and mortgages, but on a network of people and places. Users become an active part of the network by maintaining voting rights, a data co-op and developer status in a peer-to-peer marketplace of in-home services and goods, paid for with a positive equity balance as credit. Overall, this is grounded in the vision that cities should be more affordable, inclusive and sustainable.

Alastair Parvin

Open-source digital innovation

We spoke to Alastair Parvin, founder of Open Systems Lab,
a non-profit R&D organisation focused on digital change

With a background in architecture, Alastair Parvin looks at the surrounding economic, social and technological systems. As the founder of Open Systems Lab, he works with a team on open digital innovation for industry and society, with the aim of transforming architecture, construction and cities. The lab works with private, public and third-sector organisations, and currently runs two projects, WikiHouse and BuildX, both of which use open-source design files to fabricate buildings.

I: **Why is there an interest in communal and shared living at the moment?**

AP: I think the interest is coming from two directions. One is simply because you have a whole generation of young people who are getting forced out of home ownership – Generation Rent – and there is a whole market of companies saying, "Why can't we make that experience better?" It's not the most exciting or optimistic side, but it is the reality, so why don't we design for it?

"The moment you take a longer-term view of homes as places to live, then it suddenly begins to make a lot of sense to start looking at shared living and co-housing, because there is so much evidence that it is necessary."

The other side is the recognition that living has always been shared and that it was an accident of history and the 20th-century housing model that we got atomised out into these isolated individual units. There is a scale of social organisation, which has worked throughout almost all of history, that we used to call the village. Throughout the 20th century that social organisation has been hugely important in terms of our well-being, so if you start moving away from the perception of housing as pure real-estate objects and start looking at housing over a longer period of time, you realise that's the platform where the big societal things play out like isolation, loneliness, well-being, health and care. The moment you take a longer-term view of homes as places to live, then it suddenly begins to make a lot of sense to start looking at shared living and co-housing, because there is so much evidence that it is necessary.

What is interesting is that the first is focused mainly on young people. The second one comes mainly as a result of an ageing population. Some governments are realising that they have a care time-bomb on their hands with the baby-boomer generation getting old. The future of the care system which lies in front of the baby boomers offers a quite unappealing picture, where you have lived independently your entire life and then suddenly you are in a home. A lot of people are also realising that it is going to cost a fortune in care bills, because we stripped out that social layer where people look out for each other – the citizen sector – and shared living is of course hugely important in that.

"We explore how we can use the web to make it as easy to design and manufacture a house as it is to design and manufacture a car. If you can take away the risk, then it profoundly changes the housing model because you can move from this mass-to-many model."

I: **You have set out to reinvent the way we make homes. What is wrong with the current model?**

AP: Where do you start? On one level the problem with the current model is that we basically only have one model of mass housing, which is effectively housing as storage for humans. These identical one-size-fits-all stacked boxes, in neighbourhoods where you don't know your neighbour, are basically permanent hotels for people with mortgages. How did this happen? It came from the idea that development is not done by people, it's done to people. We do not build cities. Cities are built for us by large developers. Of course it's quite complicated, but a big part of it is the sheer cost, difficulty and risk of building. Most people can't afford that scale of difficulty and risk, so in the 20th century we rely on big companies to do it for us.

I: **How can technology disrupt such a well-entrenched system?**

AP: The power of digital, as we have seen in so many other sectors, can design us out of that risk. It can take and use data and automation, and that's really what we are exploring with WikiHouse and the BuildX platform. How we can use the web to make it as easy to design and manufacture a house as it is to design and manufacture a car. If you can take away the risk, then it profoundly changes the housing model because you can move from this mass-to-many model. And obviously that has profound implications, because from an environmental point of view we all agree we need to build low-energy homes, but the only people with the intention to build low-energy homes are the people who are going to pay the heating bills for the next 15-20 years. Unless people are involved in the making of homes, we won't get sustainable homes.

WikiHouse can be thought of as a kind of "digital Lego". Parametric scripts "code" the building, generating detailed 3D models and cutting files. Designs can also be modelled directly using software such as SketchUp or Rhino. The files can then be sent instantly for local digital CNC fabrication. A micro-factory capable of fabricating WikiHouse components can be set up by anyone for a fraction of the cost of a traditional prefabrication facility, ready to manufacture precision, high-performance homes. Hundreds of fab labs already exist. The components can then be rapidly assembled like a large flat-pack, to millimetre precision. They can be assembled by any able-bodied person, even if they do not have traditional construction skills. This makes it ideal for self-builders or local businesses.

It applies to so many other aspects besides energy, though. When we look back at the places that are most successful in cities and villages, they are places that have been built by many, over time – not by one developer in one go. That is why we are focused very specifically on digitising the supply chain for homes – it is not just technological excursion for us. The question at the heart of it is: can we make it so simple to locally manufacture sustainable homes that we can flip the mindset from making top-down boxes, to putting the tools of building sustainable homes into people's hands?

"We need to make it simple to have conversations about what we want to share. We need platforms, not just the design – the hardware and software of neighbourhoods. We have to build new infrastructure to unlock this space."

I: **How can open systems lead to innovation in housing?**

AP: People generally have a pretty poor understanding of the importance of open systems. I think that we have been trained into this language of the market and state, but in the middle of this are the operating systems that we all run on. Open systems are public infrastructures, which are sometimes built by the state and sometimes they are not. The internet is obviously a hugely important open system. If we are to change the construction and development industry, it can't be done by just one company or a single disruptive start-up. This is really a system-change story. So that is why we created Open Systems Lab – to try to get into the layer of looking at the new kinds of common operating systems for everyone, not just for one company.

I: **How do we enable the construction of more types of housing, including different models of shared living?**

AP: First we have to build the digital infrastructure, because we have to make it simple enough. If you ask anyone who has done this sort of shared-living model, they will tell you that the rewards are incredible but that it is extremely hard. It requires an insane level of commitment not to give up. So a big part of it is building digital infrastructures and digital tools and a market around it where companies provide new products and services to support this – and make it simple for people to do it. We need to make it simple to have conversations about what we want to share. We need platforms, not just the design – the hardware and software of neighbourhoods. We have to build new infrastructure to unlock this space.

The other big barrier is changing our attitude towards land. Because, at the moment, most governments are still in a mindset where they just give the land to developers, which will give us the same product that they have always given us. So although we are seeing some intervention into shared living by the private sector, I think there is a really interesting paradigm shift that will begin to happen more and more, where governments will realise that if they can make a land pipeline, where a percentage in any given city or new development goes directly to prospective shared-living communities, they will start seeing amazing outcomes in terms of affordability and quality of placemaking.

I: **How can we build more capacity and knowledge sharing in the architecture and construction industries?**

AP: That is a huge question. The short answer is the world wide web. Obviously, knowledge sharing in person is good. Then we started with open source and sharing files, but we are working on how to digitise this knowledge. In this evolution, parametric design is extremely important, so that we can share design solutions, not just a few bits of files. If we can add code we can put it out there for use on the web. This is not rocket science, it is what the web is really good at.

We have used the web to transform a whole range of other sectors, such as the service or media industries. It's time now to use the web to transform the way we design knowledge. We are trying to develop a new kind of operating system or a kind of new digital ecosystem for the design and construction industries, where knowledge can be licensed online and pulled into these digital supply chains, also including data.

Platforms for shared living

Many recent apps and platforms are designed to help enable shared living. They allow users to share resources, ease and strengthen communication in housing associations, and bring people together in communities

Meetup – Creating thriving communities

Meetup is a digital app that allows people to connect with like-minded people in real life. It is grounded in the idea that bringing people together around their shared passions will create thriving communities, impactful societal movements and lifelong connections. Meetup topics cover most bases, from straightforward social get-togethers to book clubs, sport and careers.

Borigo – A digital platform for your housing association

Borigo is a digital tool that helps residents in a housing association communicate with each other. The mission is to strengthen the sense of community and facilitate sharing. Borigo entails everything from virtual bulletin boards, booking washing machines or common areas, to user forums and codes of conduct.

Omni – Live lighter

Omni is a digital platform providing three services that allow users to live more flexibly, without being weighed down by possessions that they rarely use. Omni offers storage space, collecting, documenting and delivering items when needed. Additionally, it works as a marketplace for renting everything from bikes to air mattresses.
If users rent out their things, they can earn credit to spend on Omni – or cash it out for other purposes.

3D printing your own home

Project Milestone in Eindhoven is piloting the first habitable 3D-printed homes

3D printing is no longer just a prototyping tool. Today, you can print anything from titanium to cement, metals to polyamides. Digital fabrication is still emerging and has yet to fulfil its potential, but that potential is enormous. Today, these machines are becoming cheaper, smaller and more user-friendly, and hence increasingly accessible.

The potential to use 3D printing to build inexpensive and environmentally friendly houses is already on the horizon. Though large-scale industrial 3D printing has only existed for a few years, several houses and larger architectural structures have been printed and are standing strong around the world. In the Dutch city of Eindhoven, Project Milestone by Dutch construction company Van Wijnen is working towards being the first in the world to offer permanent homes made by a 3D printer. The company expects the first five houses to be on the market next year. Initially, only the exterior and inner walls will be made using the printer, but it is hoped that by the fifth house, other elements such as drainage goods will also be made in the same way. The new technology can make construction easier and cheaper – and could potentially empower communities to build more tailormade designs.

Design for sharing

It's a challenge to develop and design the physical spaces we share. Although there are a variety of projects that demonstrate how we can share spaces better, there is a real need to build capacity and knowledge among professionals in the world of architecture and construction. By sharing the good examples and showing what is possible by employing visionary thinking and design, it becomes more within reach for communities, architects, developers and planners to bring more projects to life

At the heart of human-centred and sustainable shared living is design. Although a community is, in a sense, intangible – and can be facilitated through, for example, activities and online platforms – the physical, practical world of spaces and objects is essential. At the end of the day, the practical layout of a home defines how we live. Are we capable of sharing a meal? Are we naturally inclined to meet people or do we have to make an effort? Can a spatial design balance the need for privacy and the desire to socialise?

Projects like the Share House LT Josai in Japan are great examples of architecture mediating privacy and sharing. And there are many other captivating examples of shared living in various scales, materials and layouts. For example, in Norway, projects such as Vindmøllebakken are developing co-housing models for the commercial market.

However, the amount of shared-living projects being realised is still very limited in comparison with "standard" housing models. The current market situation does not produce innovation at scale in the built environment. There is a need to expand the number of architecture and construction professionals who have the right knowledge and experience.

The result of the last decades' predominant mode of planning and market-driven developments are generic buildings and urban areas, fit for the (existing) mass market of "standard families" and commercial activities. Many of these have become rather sterile environments, where people are not thriving and communities fail to form. Not only do we see growing concerns about loneliness and mental health, we are also witnessing an increasing lack of local connectivity and community. Though architecture alone cannot remedy all of society's pathologies, the design of our everyday surroundings can have a great impact. A well-designed, inspiring space is proven to encourage better behaviour, where residents are more considerate and committed to their surroundings and the people they share it with.

The built environment can either support or diminish our everyday sense of well-being. Making well-designed spaces where people love to be can create the framework for a safe, affordable, vibrant, active and healthy community. This comes back to the importance of design. Can we bring neighbourhoods and buildings into being that are more organic and less machine-like? We see very literal attempts to do this in the case of ReGen Villages – a vision for a network of productive self-sustaining eco-villages.

But we also see other variations where the making of a community is formed more organically. In the cases of Tila apartments in Helsinki and R50 in Berlin, people are engaged to finalise parts of the design and construction themselves. This can both reduce construction costs and offer the chance to creatively customise the design for sharing.

Balancing privacy and communal space

Share House LT Josai in Nagoya, Japan encourages residents to interact in various ways

THE URGENT QUESTIONS

× How can great design support more co-creation and co-ownership in the making and operation of buildings and neighbourhoods?

× How can the conditions for good design be improved in order to encourage types of buildings that are more experimental and suitable for shared living?

× How might we inspire developers and investors to build more sustainable and empowering housing concepts by applying great design?

The "share house" concept – where unrelated individuals share kitchens, living spaces and bathrooms – is increasingly popular in Japan among young people who want to gain independence without having to buy a place of their own. Share House LT Josai, designed by Naruse Inokuma Architects, is an exceptional recent example of how to design for interaction and community in a shared home.

The house consists of 13 identical private bedrooms distributed across three floors and with access to multiple shared areas, each with a different sense of comfort. While the individual rooms are only 12.4 sq m, and its total floor area divided by residents just 23 sq m per resident, the various shared areas, dispersed over a series of vertical spaces, make creative use of the building. By using every inch, residents have ample space – both private and communal – but are also encouraged to interact because of the layout.

Contemporary affordable housing

R50 in Berlin was realised with intensive participation of its
future residents

R50 is a *baugruppen* project in Berlin and a model typology for low-cost affordable housing. It was designed by the architects Heide & Von Beckerath with the intensive participation of its future residents – the apartments and shared community spaces were developed through a collaborative process of consultations, discussions and design. R50 consists of 19 individual apartments and shared spaces. The architects wanted to realise the project in an especially cost-effective way using simple construction principles and forgoing any cost-intensive design features.

The design is based on the residents' aspirations for collective and affordable living. The building is structured around a concrete skeleton with modular wooden elements and a wire-mesh façade, offering maximum capacity for adaptation and flexibility. The ground floor is a double-height shared space, which has been designed flexibly to allow for later transformation into two levels. The wraparound balconies are shared, acting as a secondary exterior circulation route between apartments. The structured yet open design process has allowed for extensive participation and mutual decision-making about the location, size and features of the building's shared spaces.

New commercial co-housing models

Vindmøllebakken in Stavanger, Norway is based on principles of sharing and social relationships between residents

Vindmøllebakken is the first co-housing project being built based on the Gaining by Sharing model developed by Helen & Hard, Indigo Vekst and Gaia Trondheim. The project is currently under development in Stavanger, Norway, and is based on principles of sharing. The main intentions are to reduce its carbon footprint, while increasing quality of life and solving social health challenges – for example, health problems linked to loneliness.

The establishment of a Gaining by Sharing living community starts with the residents meeting for a workshop. Through user involvement from day one, residents develop the solutions they need and want, but also become familiar with one another early on, with everyone getting a feeling of ownership of the community from the very beginning.

It's a co-housing model aimed at the commercial market that not only includes physical solutions such as architecture and infrastructure, but also seeks to ensure the best possible quality of life and social relationships between residents. The goal of the model is to create social, environmental, economic and architectural gains, through community and sharing.

Innovative off-grid village life

ReGen Villages is a new model for developing off-grid eco-villages that are as self-sufficient as possible

ReGen Villages puts the focus on self-sufficiency, whether for food, power or water. The first ReGen Village project is currently being developed in the Netherlands, with an architectural vision that has been developed by Copenhagen-based EFFEKT architects.

The concept combines a variety of innovative technologies, such as energy-positive homes, renewable energy, energy storage, on-site high-yield organic food production, vertical farming, aquaponics/aeroponics, water management and waste-to-resource systems.

A variety of technologies are integrated into the community, providing clean energy, water and food right on the doorstep. ReGen Villages aims to empower people by creating a shared local ecosystem, remaking the link between growing and consuming food so that people are also more connected to nature.

Open building and DIY methods

The Tila housing block, built in 2011, is a pilot project for loft apartments in Arabianranta, Helsinki. It was built according to a new concept created by the design company Talli and follows an "open building" and do-it-yourself philosophy; by selling the apartments as raw space, the individual owners can build the interior and subdivisions of their apartments according to their individual wishes.

The five-storey concrete and steel-frame building comprises 39 five-metre-high units of 50 to 100 sq m, which were left unfinished. Each apartment was fitted with a bathroom and utilities connections, with the rest left to residents to decide according to their own pace and budget.

The Tila apartment block in Helsinki's Arabianranta district, which adopts the principles of open building and DIY methodology

Building and sustaining a community over time is arguably one of the most important elements of shared living. But how to successfully achieve this is not always obvious. How do you foster a sense of community? How do you organise and facilitate community-building? A new generation of projects is helping answer some of these questions

Build community capacity

Sharing spaces naturally requires more interaction with others, so there is an art to developing and defining social expectations. And it is not easy. Conflicts between neighbours are thought to be the most predominant type of conflict in the world. The potential complexities of sharing make many people sceptical about these lifestyle changes. How do you address tensions and conflicts as you live more closely together? What are the rights of the individual (or family) in relation to the collective? How is a code of conduct established?

It seems that a deeper understanding of how to build social infrastructure, form ties and sustain communities is still quite undeveloped in the making of our built environments. On a macro level, new cities, suburbs and rural areas are set up without any serious consideration for their social patterns and potentials. Functions and people are spread out in weird functional divides, leaving many either dependent on long transportation time or simply out of the loop.

In the case of buildings, the story is the same: we seem to think that community life just materialises by itself. We rely on individuals and coincidence, rather than consider how to make it grow. The fact is that knowledge, models, and ideas for community building are rarely shared or scaled. We do see interesting examples, though. Danish developer Almenr is, for example, a specialist in the development of shared-living projects, with a deep focus on how to build communities, including the social and economic aspects of the community, before thinking about design and construction.

As many countries' populations age, we also see an interest in the development of shared-living communities that support healthy ageing and intergenerational living.

It relates to bigger questions such as: What makes us happy? How do we design the spaces we inhabit to help us lead healthier and more fulfilling lives? Historically, communities have come together to work and an essential way of forming communities relates to (seemingly) old-school activities such as cooking. Both Kathryn McCamant and Grace Kim from the Capitol Hill Urban Cohousing project in Seattle point to the importance of the communal ritual of meals.

It is a fact that sharing spaces and fostering relations can improve people's psychological and emotional well-being. By doing so, people are often encouraged to interact more with others, eat better and stay healthy. But it requires substantial thinking and action to develop a community's capability to succeed.

THE URGENT QUESTIONS

×   How can we empower people and communities to understand, address and solve the complexities related to shared living?

×   How can models and ideas for social organisation be developed and shared to build capacity in the field of shared living?

×   How can insights into social and societal needs be brought into the world of development, architecture and planning?

The communal ritual of dinner

"We have dinner together every other night, we watch each other's kids and borrow each other's cars. We participate in community events and political rallies and we support each other through difficult life circumstances."

— Grace Kim, Capitol Hill
   Urban Cohousing project

Food and the ritual of sharing meals is central to shared-living communities. It is a fundamental aspect of our existence and one of the most important ways that people come together. Eating around a table as a group has known benefits, but sadly it's on the wane. An increasing number of people eat at the computer or in front of the television. But eating together builds relationships and the dinner table can act as a unifier, a place of community. Recent research from the University of Oxford has revealed that the more often people eat with others, the more likely they are to feel happy and satisfied with their lives.

Lars Lundbye

Rethinking how we design, finance, build and live

We spoke to Lars Lundbye, founder and creative
director of Almenr, which is helping people and companies
come together to realise co-living communities

In founding Almenr, Lars Lundbye has joined forces with a cross-disciplinary team from architecture, social media, psychology, participatory design, gaming and financing. Together they want to challenge a stale real-estate sector based on the one-family home built by developers, and make it easier for people to get together and realise co-living communities.

I: **What is Almenr – and why is there a need for what you do?**

LL: We are trying to revitalise the co-operative building tradition for the 21st century. Almenr is a social platform that tackles two main barriers to shared-living. Firstly, how communities form and get together – how you find people that share your values and aspirations and agree on shared dreams. Secondly, we assist communities with the systemic and financial barriers such as mortgages and planning permissions. Currently, the real-estate market favours developers and is based on a market of single-family buyers financed through the mortgage system. This is where we come in. Almenr is building a platform co-operative to bypass these barriers by integrating shared financial models with co-design processes. We use tools from social media and organisational psychology to optimise how people get together, and then bring in a blended finance model based on co-operative principles, which allows people to bypass the worst barriers.

I: **How does the process work?**

LL: The first step is to join the online community and set up a profile of yourself and your dreams. Once there is a critical mass, we form an interest group based on this data and match the group with a specific project such as a building or plot of land. In the next phase the group meets, co-dreams and specifies the dream with the assistance of Almenr's designers. At the same time, Almenr takes care of the financial side, deals with authorities and building permits and formalises contracts with suppliers. Once the formalities are in place, the design community transforms into a building society, which is then internally or externally financed. Participatory design and co-creation values permeate all our processes, but in an accelerated and facilitated manner to secure fast progress.

I: **What have you found from your matchmaking service? Who wants to live together, how many and so on?**

LL: Most importantly, we found that people are different. When we talk to people, they have different dreams and aspirations for how they want to live. Today the market, to a large extent, assumes that everyone is the same. That being said, we have been able to identify certain tribes, or archetypes as we call them.

The Krake workshops' visualisation of an active, creative, child-oriented community

Do stuff together and c o-own stuff. We have thousands of years of e xperience showing that those two principles re ally work.

— Lars Lundbye

We see, for example, a number of people with small kids who desire to live in a village, but still want to be connected to the city. Then there is the person who desires sustainable urban spaces with a high degree of behavioural support mechanisms – and wants to live with people with shared values about sustainability. One more example is the co-shared summerhouse – such as the group developing a village on a Swedish *ödegård* [remote farm]. All in all, we work with eight or nine archetypes.

We have to be really good at spotting exactly what people mean, which is why we are quite data-driven. For instance, when you ask how people want to live with their neighbours, they will often say that they want to live heterogenously. But the reality is that most of us prefer fairly homogenous communities in larger heterogenous ecosystems. Basically we are tribal – and at Almenr we support the co-existence of a plurality of tribes.

"Most importantly we found that people are different. When we talk to people, they have different dreams and aspirations for how they want to live. Today the market, to a large extent, assumes that everyone is the same."

I: **Why do you think that there is an increased interest in shared-living at the moment?**

LL: I think it's a global phenomenon. But it is not new. We have seen it all throughout industrialisation, for example with co-operative worker homes. However, in the last decade we have definitely seen an increase of sharing paradigms. The last century's drive towards urbanisation, consolidation, centralisation and individualism is creating alienation. People are feeling alone. In the process we gained freedom and wealth, but something got lost. We lost connection and many of us long for closer, more meaningful human relationships.

Very simplified, I think phenomena like Brexit or the Tea Party movement in the US have some similarities with what we see on the Left, with people drawn towards small, ecological communities. It is all part of the same longing for social belonging. The key point is to find a balance, not to pursue a romantic, retro ideal with social constraints we left behind 100 years ago. Instead, we want to reinvent co-living with both the modern notion of freedom and social coherence.

Almenr is striking a balance between convenience and freedom on one hand, and sharing on the other. You can see this polarity unfold in consumer co-living ventures like WeLive, which is

co-living as a convenience product. But on the other side of the spectrum are the user-driven, bottom-up co-housing projects that take years to realise. You could say that Almenr is a mix of the two – bringing ease and convenience to the process while emphasising community and shared ownership.

"The key point is to find a balance, not to pursue a romantic, retro ideal with social constraints we left behind 100 years ago. Instead, we want to reinvent co-living with both the modern notion of freedom and social coherence."

I: **What is essential in order to create a sense of community in shared-living?**

LL: Do stuff together and co-own stuff. We have thousands of years of experience showing that those two principles really work. That's why we are so focused on rethinking co-operative finance and governance – we know from commons–based and co-operative economies how local co-ownership, and doing things together, are the basis of strong, resilient communities.

Bodil Arlif

The making of a community

We spoke to Bodil Arlif, a resident of the Munksøgaard co-housing community in Roskilde, Denmark

Long-time resident Bodil Arlif discusses life at Munksøgaard – an organic community with shared housing and communal space established in the 1990s.

I: **What were the biggest challenges when founding Munksøgaard?**

BA: The founders worked very hard with the authorities to get everything together. And then there was the task of organising all the people who wanted to move in. Those of us who wanted senior housing met every second month, talking about ideas of how the community could work. We discussed how we could eat together, how we should organise everything – that sort of thing.

I: **Is it a challenge to live with many people, and make decisions together?**

BA: Yes, it's a big challenge one has to get used to. But it's very useful, I think. You get more tolerant. You improve the ability to work things out, and pick your battles.

I: **Did you know each other beforehand?**

BA: No, we didn't know each other before we moved in. The original initiators put an advert in the newspaper asking for people who were interested in co-housing. The tricky part was to combine different types of ownership and rental. There are plenty of "andels" or owner types of co-housing, but not so many that combine them.

"The big difference is that you know people. It is very promoting for the health for older people to feel secure – to know that there are people around, so you don't feel so exposed."

I: **Who owns it then?**

BA: The non-profit organisation. This one is called Boligselskabet Sjælland. It is not private, and it's not for profit. The local authorities have some interest in it, so they invested some funds, and the rest is normal loans. That is the normal way to do it, and there are a number of different organisations depending on where you are located in the country.

I: **If you had an organisation to help you, what would you ask them to do?**

BA: We had an organisation help us get established in the 1990s. There are some others doing it now. They help with advice and with the

authorities in the start-up phase – when you're figuring out what you want. It's important that you talk about specifics before you move in together. We have other co-housing projects nearby where they don't eat together or share activities. Their social life is very different from ours. Here, we socialise and share a lot. There are other places that share even more than we do.

I: **What is the biggest difference between living in a community and living alone?**

BA: The big difference is that you know people. It is very promoting for the health for older people to feel secure – to know that there are people around, so you don't feel so exposed. It is really nice; it is like a small village. I have always lived in big cities, so it's a big change.

I: **How often do meet and eat together?**

BA: Normally we eat together three times a week, but it's not required. There are some people who come almost every time and others who come every now and then. We don't have rules about it. We have three groups that cook in a week, and the people in the group meet and decide what to cook, and we try to alternate the groups. One of the very good things, I think, is that you eat better when you eat here.

Make shared living *happen*

We asked Jamiee Williams of SPACE10 and Christian Pagh of Urgent.Agency to discuss the backdrop for exploring shared living. How was the interest in shared living sparked, what's the vision – and how do we move on from here?

I: **Where does the interest in shared living come from?**

JW: SPACE10's mission is to identify emerging trends and inno-vative design responses to the bigger challenges expected to affect societies in the coming years. We primarily work within the framework of five macro-trends; accelerating urbanisation, demographic change, political and economic shifts, technological breakthroughs and the scarcity of natural resources – all of which will pose huge challenges to everyday life.

"Personally, I've been obsessed with shared living for as long as I can remember. It always seemed weird and ineffective to use a 'standard' family model where everybody goes to the supermarket and then home to cook for themselves."

Current trends of increased loneliness, lack of affordable housing and access to ownership highlight the need for innovation in our current housing system. We believe that shared living could be a solution to some of these problems and will become increasingly attractive to the millions of urban dwellers who will struggle to find adequate and affordable places to live.

CP: Personally, I've been obsessed with shared living for as long as I can remember. It always seemed weird and ineffective to use a "stand-ard" family model where everybody goes to the supermarket and then home to cook for themselves. I've always been interested in exploring a more collective way of living. Years ago, Urgent.Agency started doing some genuine research into shared living, mapping out examples, experiences and business models. As this also testifies, there is incredible potential in reorganising space to support shar-ing – not only in terms of sharing resources, which makes sense in itself, but also to lead lives that are more connected.

I: **What's your vision and purpose?**

JW: Our vision is to explore alternative options to what currently exists. To do that we first research and gain insights, learning from the world around us, those who are already doing it and those who aspire to. Alongside that, we dive deep into breakthroughs in technology, new design concepts, innovative architecture, digital tools and anything that leads to ideas that could become feasible solutions. At SPACE10 we know that to drive change, you need to inspire and encourage a shift in thinking.

CP: Ultimately, I'd like to discuss quality of life and values that have noth-ing to do with economics, but at the same time we also have to be realistic about money. I know we can develop models and designs for

sharing that work as business cases while simultaneously improving standard of life. But it requires an investment, knowledge and shifting the culture related to what we expect from our homes.

I: **How do you see the state of shared living today?**

JW: It's definitely clear that there is a rising demand and interest in shared living and what it has to offer. People are really passionate about discussing the current housing situation in terms of what already exists but also what comes next. People are keen to explore how we can design and build environments that promote a sense of well-being through their liveability, accessibility and resource efficiency.

Sharing allows us to build new relationships and to move from an ego- to an eco-based culture. I also believe that atti-tudes towards ownership are shifting. Instead of owning, more people share, trade, borrow and rent.

CP: Right now there is a rising market for standardised co-living options for the creative class in projects like WeLive, The Collective, etc. – usually in big, expensive cities like London and New York. But the set-up and layout tends to be pretty generic – and it's not for everyone. We also see collectives created bottom-up by people with great skills and the will to see their ambitions met. But, for the people in between, it's quite hard to find alternatives to a standard apartment or house. And, of course, if you're poor, it's hard to find anything at all.

JW: You are totally right. SPACE10's mission is to seek solutions that create a better life for the many. That includes affordable housing, and currently the majority of shared-living initiatives don't cater to low-income renters.

"The context, architecture and environ-ment created to host co-living should be seen as a service. It plays an essential role in facilitating residents' interaction and behavioural roles."

CP: I would like to see more options in the middle. It needs to be easier for people to explore the idea of sharing, and that will be possible as innovative ideas emerge and new ways to share become possible.

I: **What roles can architecture, design and planning play in enabling shared living?**

JW: The context, architecture and environment created to host co-living should be seen as a service. It plays an essential role in facilitating

residents' interaction and behavioural roles. Architects and designers have a responsibility to make a difference by improving spatial quality as well as the inclusion of service layers, technology and facilities that support the needs of the residents and improve their quality of life. Matthias Hollwich, who has worked tirelessly on understanding how we can redefine retirement and create empowering communities for the ageing, has pointed out the connection between architecture and medical responsibility. If we design for inclusivity and flexibility, it can have huge health benefits on its users by encouraging certain behaviours.

CP: The fascinating thing is that construction is a very practical thing. It's about building a house, with walls, a roof, etc. But it's also weaved into complex economic and political systems. There is no quick fix to how we share more in our everyday lives. It is complicated to live together, but I do have faith that good, thorough design and cultural understanding can help bring about a better quality of life for many people.

JW: You're right that we need to start seeing the complexity of the process. In my opinion, co-living shouldn't just be about those residing in the shared-living community itself, it should be inclusive of those living and working within the area. In some ways a shared-living space can act as a community space or hub. In fact, I think this can only make the concept stronger. A growing problem in cities is affordable housing, but time and time again you see local councils struggling to create and manage community spaces that activate cross-generations residing in the area. By softening the boundaries, it would foster creative ways of using public space and both would benefit from each other. For example, sharing the responsibility of childcare, health facilities, exercise classes, educational workshops, waste management and food services.

"To spearhead more shared-living examples we must engage the stakeholders that plan and develop housing. We must inspire new mindsets, tools and methods into the world of development. We need to build a movement – and maybe institutionalise it."

CP: The layout of the modern city is quite random, as it is so defined by the car. I think we really need to start thinking more radically about how to design infrastructure and space on the urban level and the level of the building. To move that agenda forward you need to look at both culture and architecture. The concept of home is so crucial in that equation.

I: So what is most important to push the shared-living agenda forward?

CP: To spearhead more shared-living examples we must engage the stakeholders that plan and develop housing. We must inspire new mindsets, tools and methods into the world of development. We need to build a movement – and maybe institutionalise it. I dream of fostering an academy or an institute that can share knowledge, best practice and ideas. There is a lot happening, but it's quite spread out. We must connect the dots – and the people – and spread the news about the potential of great design, based on curiosity about culture and what we can share.

"What if we start to look at the cost of our everyday lives and try to combine and condense them into a number of integrated services? Redefining home could be a good exercise – sharing food, energy, mobility, digital services and media could perhaps help reduce our living costs through economies of scale."

JW: This publication is a small step in the right direction. It's about sparking ideas, driving a conversation, encouraging a critical eye on the options that exist today and provoking thoughts on what can and should come next. We need to start asking ourselves questions such as: How do you want to live in the future? Are you satisfied with what is available or accessible on the housing market? How do we design spaces that help us lead healthier and more fulfilling lives? How do we design models of sharing where facilities, services, activities and financials help to accumulate wealth and ownership among residents? And as many countries' populations age, how do we encourage the development of shared-living communities that support healthy ageing?

I: What initiatives do you think could inspire more shared living?

CP: What if we created a sharing academy for investors, developers and public planners, focusing on the potentials and practices for shared living? It could propose a diverse programme of courses, symposiums, online learning, publications and network activities to help build the cultural understanding between the different actors in the planning process. It could also foster sharing-friendly policy and framework conditions in the public planning processes and tenders.

JW: What I find interesting is that the price per sq m is currently the only, or at least the main, card being played in terms of reducing cost. If we only look at floorplans, we are only going to be able to live smaller and smaller. Is that really how we want to live? What if we start to look at the cost of our everyday lives and try to combine and condense them into a number of integrated services? Redefining home could be a good exercise – sharing food, energy, mobility, digital services and media could perhaps help reduce our living costs through economies of scale.

"It's about connecting and developing ideas that are working to demonstrate that shared living isn't a scary or risky thing. It has value and could allow us to lead better lives. However, first and foremost it's about understanding how people aspire to live."

CP: I agree. It seems to me that the art of community building and management needs a push forward. We propose for everybody to consider building an incubator programme dedicated to shared living – looking at new ways to build the business models, services and concepts that could move the field forward.

I: What are the next steps?

JW: It's about connecting and developing ideas that are working to demonstrate that shared living isn't a scary or risky thing. It has value and could allow us to lead better lives. However, first and foremost it's about understanding how people aspire to live. Any solution that is going to solve some of these huge challenges we are facing must stem from a human-first approach. Well-being and happiness must be at the core.

CP: I think it's really crucial to try to help people in fields of urban development, production and management to consider the concrete art of sharing by giving them tangible examples, methods and practices. That's not done overnight. *But we have to start somewhere.*

IMAGINE
Exploring the brave new
world of shared living

A SPACE10 & Urgent.Agency publication