

# Microliving

Small but diverse

Angelika Juppen  
Andréa Zemp Nascimento  
Richard Zemp



**Legal notice**

Microliving – Small but diverse

**Authors**

Angelika Juppieri, Andréa Zemp Nascimento, Richard Zemp  
Contact: kollektivort@gmail.com

**Editing**

Kirsten Thietz

**Translation**

LinguaHeber

**Issued by**

Hawa Sliding Solutions AG  
Untere Fischbachstrasse 4  
8932 Mettmenstetten  
Switzerland

Tel. +41 44 787 17 17

Fax +41 44 787 17 18

E-mail: info@hawa.com

&

kollektivort

Architecture | Spatial Research | Photography

Brauerstrasse 51

8004 Zurich

E-mail: kollektivort@gmail.com

© Texts: Angelika Juppieri, Andréa Zemp Nascimento, Richard Zemp

© Pictures: the photographers and architects (see picture captions)

© Title picture: Pedro Napolitano Prata

# Microliving

Small but diverse

<b>Introduction</b>	5
<b>Small households – wide diversity</b>	7
<b>“Small is Beautiful”: Yesterday and today</b>	11
<b>Spaciousness on a small scale: Five points</b>	17
<b>Networking</b>	18
<b>Improvisation</b>	20
<b>Uniqueness</b>	22
<b>Mobility</b>	27
<b>Equivocality</b>	30
<b>Literature</b>	32
<b>Authors</b>	34



# Introduction

*“Particularly in cities, single person households are now in the majority. For this reason, the types of accommodation that are available to the residents of a city have less and less to do with the life that takes place in them.”<sup>1</sup>*

The increasing individualization of society and differentiation between lifestyles do not just result in our living requirements growing further and further apart. Our living biographies are also turned on their head several times during our lives. The noticeable thing is: More and more people live alone nowadays. Living research talks about a downright explosion in single-person and two-person households. It is also noticeable that our everyday procedures involve increasingly fewer specified space functions. To name just one example: Whereas domestic activities such as preparing meals and looking after children are being moved out of our homes, more of us are doing office work on the kitchen table or even in bed. The question of the extent to which the accommodation that is currently available fulfils changing requirements appears to be more than justified. It's not just about finding an answer to current living reality. The increasing lack of resources also suggests that house building is in a tight spot: The resource-preserving lifestyle that is required can only succeed if we are in agreement about the new living qualities. Living qualities such as disconnecting well-being from private living area, and concentrating more on synergies between accommodation and the city.

Compact apartments are now taking center stage (again) against this background. In recent years, more and more living concepts have emerged under the term “Microliving” which supplement compact, small apartments with additional services and shared infrastructure and rooms.

“One size fits all” – the fact that this solution is becoming more and more of a dinosaur in housing construction also applies to Microliving. The motivations for deciding on this way of living are too different. The living realities are more complex and diverse in everyday living than trend research would like to suggest. This complexity and diversity must be taken into consideration in the discussion about Microliving, because otherwise there is a risk of failing to exploit the potential of this type of living for the everyday life of its residents. And last but not least, as well as structural and spatial correspondence, this type of living requires careful

---

<sup>1</sup> Maak, N. (2014). Wohnkomplex. Munich: Carl Hanser Verlag. P. 175

embedding into a functioning infrastructural and social network so that the radical reduction in private living space really can be experienced as added value. After all, it is not just about satisfying basic needs, but providing freedom for personal life.

The title of this brochure says it all. It should give interested readers a diverse overview of Microliving in a small space. As new as the term may sound, modern housing construction has always been dealing with the question of having a small and practical apartment, right from the beginning. It is therefore worth taking a look back into history and also looking forwards to the future. What was the motivation back then, and what are the drivers nowadays that are making this form of living attractive again? How are the changed living requirements ultimately reflected in today's small apartments? Which structural and spatial means can help the “small ones” to achieve diversity? These and other questions are dealt with on the following pages.

# Small households

## Wide diversity

Life patterns, household types, work structures and mobility behavior are gradually changing. The consequences of climate change and resource consumption can already be felt. And last but not least, all of these changes have consequences on the way in which we will live. But what does “contemporary” living mean? When you are dealing with changed forms of living, it is therefore important to first deal with the essential social changes and the effects thereof on our living requirements.

In general, we are now seeing a growing diversity of lifestyles. This means that traditionally “predetermined” life cycles are being questioned more frequently and supplemented by new lifestyle models. This is also evident in our living biography, which shows an increasing number of breaks, detours and experiments. The bandwidth of family relationships is also increasing: More and more people are consciously opting for “adopted families” for a limited time. Our mobility behavior is being influenced by the ubiquitous digitalization, and leads to completely new working time models and a shift of commercial activities into apartments. On the one hand, this provides new opportunities for individual life design. On the other hand, social differences are also intensified by automation and outsourcing. However, increased individualization also leads to the need for new spaces, which encourages changed forms of cohabitation.

The increasing number of single-person and two-person households is connected to the increasing demand for small residential units. In its scenarios for the development of households<sup>1</sup> in Switzerland, the Swiss Federal Statistical Office is predicting a 26 percent increase in two-person households of between 2017 and 2045, and as much as 31 percent in single-person households. The picture is similar in many other European countries.

What are the life designs and motivations behind these statistics? Firstly, it can be said that

---

<sup>1</sup> Schweizerische Eidgenossenschaft, Bundesamt für Statistik (Publisher). Szenarien zur Entwicklung der Haushalte 2017–2045. (Corrected version, 24.11.2017). Retrieved from <https://www.bfs.admin.ch/bfs/de/home/statistiken/bevoelkerung/zukunftige-entwicklung/haushaltsszenarien.assetdetail.3682859.html>, p. 1-3

we are talking about an increasingly heterogeneous group with different life backgrounds, just like the motivation and duration of living alone or as a couple vary depending on the lifecycle phase. Living alone can be experienced as an act of personal “freedom” or as a stroke of fate. Especially in younger years, e.g. after leaving the family home, living in your own small household can be an important step in your personal development. There are often very practical reasons nowadays why young adults between the ages of 18 and 34 mainly use apartments which are “shared out of necessity” as a lifecycle phase-related type of living, or even continue living in their parents' home. Because the duration of education and training is constantly on the increase and entry into working life and therefore financial independence takes place later, limited financial resources are an obstacle in starting your own household. Younger generations are also starting to have their own families later, which is why cross-household relationships are becoming the norm among young adults. In adulthood, living alone is often caused by separation and divorce, and single parents, too, live in a single-person household again after their children have left the nest. However, as well as the increasing divorce rate, the considerable increase in small households is primarily due to the fact that the baby boomer generation (1945–1964) has reached retirement age. A healthy and long post-professional life cycle phase is characteristic of this generation. People in this generation differ from the pre-war generation due to the fact that they want to live in their own home for as long as possible, and shape their everyday lives themselves.

Living alone doesn't necessarily mean being alone. Contrary to popular belief, individualization will not necessarily result in the breakup of social relationships. On the contrary, relocation and diversification of social relationships is taking place that goes beyond the limits of your own household. In an increasing number of cases, family contacts such as those between adult children and their parents and between grandparents and their grandchildren are social arrangements that go beyond household boundaries in which the grandparents take over the care of their grandchildren. There are also few clear differences in neighborhood contacts and friendship relationships between people living alone and people who do not live alone, whereby the main onus is on the social aspect of the relationship with the former.

Social situations also vary among people living alone. As well as single adults who do not give up their own household despite being in a two-person relationship, or two-person households without children in which both partners are working and financially well off, there are also increasing numbers of socially weak and disintegrated people living alone. The type of household therefore says as little about the individual life situation as it does about the social relationship network.

What effect do all of these aspects have on changing living requirements? Ernst Hubeli sums it all up when he says: “Neither heterogeneous living requirements nor diverse uses fit into one system. The question is not about the functions and the number of square meters that an



apartment provides, but the room for maneuver that it opens up – for things that are unknown, provisional and unpredictable.”<sup>2</sup>

The life history and social differences between people living alone and small households are therefore tremendous, and so are their living requirements. This diversity must be taken into consideration in the discussion about the range of smaller residential units. However, particularly in the discussion about Microliving, there is an obvious concentration on young, professionally and financially well-off adults, whereby the focus is on the need for temporary accommodation for professional nomads in the digital age. Last but not least, these studies are commissioned by real estate companies who are keeping an eye on these target groups. The reduction in private living space goes hand in hand with a reduction in the above-mentioned diversity to a economically interesting target group. This is problematic in that it does not take the strain off the housing market – on the contrary. Here are a few examples:

Older singles often remain in the family home after the children have moved out or the death of their partner because there are a limited number of affordable small housing units in the familiar living environment. In the case of young adults, the above-mentioned extension to the post-adolescent phase also leads to a need for affordable small apartments. On the other hand, both young childless double earners (so-called dinks – double income no kids) and also couples with different addresses (living apart-together) often live in family apartments. In both cases, this shows that there is a lack of suitable small apartments, which subsequently has a negative impact on the availability of family apartments, since both groups are usually financially better off than traditional family households.

This means that there is an increasing number of potential tenants who are not looking for big or expensive apartments. However, the availability of small living units is actually trailing behind the diversity on the demand front. It would therefore be desirable for various institutional and non-profit making property developers to make this form of living accessible to broader sections of the population.

As different as the life stories of people living alone and couples can be, it can be seen that these target groups depend on a network that works well, both infrastructurally and socially. This applies to elderly people who prefer small apartments in a central location with easy access to shops, restaurants and medical care, but also to young adults known as “urbanites” who consciously reduce their private household to a minimum and prefer everyday public life in the city. Both groups are more interested in living in a district which works well from a social and infrastructure point of view rather than having big apartments.

---

<sup>2</sup> Hubeli, E. (2020). Die neue Krise der Städte: Zur Wohnungsfrage im 21. Jahrhundert. Zurich: Rotpunktverlag. P. 61



# “Small is Beautiful”: Yesterday and today

The term Microliving describes “living in a small area with a floor plan which provides everything that is necessary for independent living, such as a bedroom, kitchen or bathroom”<sup>1</sup> and appears relatively clear at first glance. However, the understanding of the so-called “small area” is relative, because firstly it always starts from a purely numerical average, and secondly it is interpreted differently in different countries. For example, in Switzerland an area of 30 square meters is still regarded as “Microliving”, based on an average space requirement of 46 square meters per inhabitant <sup>2</sup>. In Japan, on the other hand, where each person has an average of only 22.30 square meters of living space,<sup>3</sup> micro-apartments with just 5.78 square meters <sup>4</sup> are available. The range is therefore extensive, and orientation to arithmetic average values is only of limited help in the consideration of the possible meaning of this type of living.

This is also the case because the specific regional contexts are anything but constant. On the contrary, the social and economic framework conditions are changing all the time. These in turn have an effect on the forms of cohabitation, which always become apparent in changed spatial structures and situations. Examples include the development of real income, demographic developments and the changing relationship between living and working in the second half of the 20<sup>th</sup> century – framework conditions which drastically change the living requirements of households, and have resulted in the average living area per person in Switzerland almost tripling since the 1950s, among other things.

In recent years, however, some rethinking has taken place, because particularly ecological

---

<sup>1</sup> Breit, S. & Gürtler, D. (2018): Microliving. Urbanes Wohnen im 21. Jahrhundert. Rüslikon: GDI Gottlieb Duttweiler Institute. P. 9

<sup>2</sup> <https://www.bfs.admin.ch/bfs/de/home/statistiken/bauwohnungswesen/wohnungen/wohnverhaeltnisse/flaechenverbrauch.html>

<sup>3</sup> <https://resources.realestate.co.jp/living/how-much-living-space-does-the-average-household-have-in-japan/>

<sup>4</sup> <https://www.nzz.ch/gesellschaft/ein-monat-auf-578-quadratmetern-tokio-ld.1314878>

reasons and a lack of land make a reduction in the amount of private living area advisable. According to Hartmut Häussermann and Walter Siebel, changes to living culture always reflect social change.<sup>5</sup>

Living is also always specifically oriented to individual realities, which is why there is no such thing as “average living” – you are not living “micro” because you live in a micro-apartment. Living is something very personal. By making our living space our own in a diverse and individual way, our apartment becomes the place where we feel “at home”.<sup>6</sup> By using space and objects we create our own place that we put our stamp on. Quality of living is significantly influenced by how much room for maneuver the apartment provides. This room for maneuver is by no means proportional to the amount of living area or our own four walls. We also make our experiences outside, feel at home and in the best case leave our mark, which is why philosopher Ute Guzzoni also states: “We are not isolated points in a neutral space, but occupy places and locations, follow orientations and experience situations in a relationship structure that is defined by a multitude of lines of meaning, which we belong to because we inhabit it.”<sup>7</sup> In the best case, a reduction in private living space goes hand in hand with environmental diversity.

A look at history reveals that the organization of living space in a small area was already on the avant-garde agenda at the beginning of the 20<sup>th</sup> century, and already led to different typologies of small apartments with different usage concepts at the time. The motivations for this were different. Sometimes the focus was on optimizing area with regard to affordability, and sometimes it was about efficiently dealing with housework based on the division of labor in industrial society. The new micro-apartments should be affordable, yet still have all of the modern functions such as kitchen, bathroom and toilet. Movement sequences and minimum distances have been measured and optimized, new minimized floor plans have been developed, and industrial manufacturing methods have been tested in order to accommodate the entire program of living in an even more space-saving manner. In 1929, the Congrès Internationaux d'Architecture Moderne (CIAM) made “Living for the subsistence level” the main topic of the congress in Frankfurt. Gropius even mentioned in his 1929 lecture “The sociological foundations of the minimal dwelling”<sup>8</sup> that it was wrong to “see salvation in increasing the size of the rooms, on the contrary, the command was: increase the size of the windows and reduce the amount of living space”. The avant-garde were looking for their role models in ship’s cabins or train compartments, for example. In 1929, Le Corbusier proposed a reusable single-room concept measuring 49 square meters for a four-person household with

<sup>5</sup> Häussermann, H. & Siebel, W. (2000): Soziologie des Wohnens. Eine Einführung in Wandel und Ausdifferenzierung des Wohnens. Weinheim/Munich: Juventa Verlag. P. 55

<sup>6</sup> Guzzoni, U. (2017): Wohnen und Wandern. Munich: Verlag Karl Alber. P. 29

<sup>7</sup> Ebd. P. 119

<sup>8</sup> Gropius, W. (1930): Summary of lecture “Die soziologischen Grundlagen der Minimalwohnung” [1929]. In: Die Wohnung für das Existenzminimum. Frankfurt: Englert & Schlosser. P. 17–19

the Maison Loucheur minimal apartment, which could be modified for night-time use thanks to sliding walls and integrated folding beds. However, Häussermann and Siebel also regard the contributions of the avant-garde architecture as a fateful “attempt to find a way out of the housing shortage by reducing the demands on the quality of the apartment”<sup>9</sup> by focusing almost exclusively on the affordable minimum and leaving little room for the new requirements of a modern and increasingly mobile individualized society.

However, when the housing issue was being dealt with, experiments were carried out with space-saving usage overlaps and flexibility concepts, not just for financial reasons. The focus was also on the right to individuality and a self-chosen community outside family structures. With the increasing acceptance of independent living alone, further development of the single-room apartment model commenced in the 1920s. Margarete Schütte-Lihotzky integrated the service areas and wall cabinets into the walls of the “single-room apartment for the working woman” for the first time in order to create space in the room. The various functions could be assigned to the room as required. The reduction in private living space went hand in hand with the outsourcing of the housework that was oriented to the classic family image. This was now offered as a residence-related service. The first apartment houses, single kitchen or collective apartment blocks provided partially or fully equipped small apartments, which were supplemented by shared rooms and service facilities. The Heimhof housing cooperative with its single-kitchen house of the same name in Vienna also pursued the idea of integrating individual small households into a large household with shared dining rooms, a canteen kitchen and other communal uses. Implemented by architect Otto Pollak-Hellwig in the 1920s, the entire building had approximately 264 single-room and two-room apartments without kitchens, which were mainly allocated to married couples and working women with and without children. In the regulations for the allocation of the apartments, it was stipulated that the apartments “are basically only allocated to families in which both spouses are working”. With the minimization of private living area in favor of bigger, collectively used areas, counter concepts for the bourgeois individual society were also always tried out.

Wells Coates explicitly called his Isokon Building, which was built in London in 1933/34, an “experiment for collective living”. Unlike the Viennese example, the reduction of the private household was not associated with the idea of a settlement community. It was more about supporting an individual lifestyle which unburdened people from housework, which was felt to be onerous, and provided sociable interaction with a desirable urban milieu. To make this interaction possible, the living concept also included a publicly accessible bar, which networked the individual small households with the urban public. Here, too, this experimental approach is not only reflected in clever use of compact space, but also in an ingenious range of services. As well thought-out as these living concepts were, they also had their pitfalls. Whereas some people saw it as an ideal form of living, others found life in apartments such

---

<sup>9</sup> Häussermann, H. & Siebel, W. (2000). P. 123

as these to be rationalized and cramped.

The fact that this type of living fulfilled a specific need beyond the pressure of ideological reform was confirmed by an apartment building designed for artists and intellectuals by Italian architect Luigi Piccinato in the early 1940s.<sup>10</sup> In her article “Casa e nuclei abitativi a Roma”<sup>11</sup> from 1943, architect Lina Bo Bardi recognized that the project fulfilled the “real and practical needs of contemporary life and not a propagandistic modernism of eccentric ideas”.<sup>12</sup> Here, too, the small residential units known as studios were supplemented by central service facilities, such as a restaurant, a bar and a communal kitchen, as well as a communal living room and a library. However, the housing units were not only inhabited by artists, but also by small families or workers, which in turn means that this type of housing was interesting for different types of household.

Last but not least, these ways of life which were organized in small households corresponded to an increased interaction between city and living. Conversely, particularly small residential units such as this in combination with classic family apartments create the heterogeneous population that is characteristic and existential for cities. An iconic example of this is Edifício Copan in the Brazilian metropolis of São Paulo, which was designed by Oscar Niemeyer and Carlos Lemos in the 1950s. A total of 1,160 housing units of different sizes were organized here over an area of 120,000 square meters. Almost half of the apartments consist of the smallest residential unit, the so-called kitchenette. The residents of the compact single-room apartment with an area of approx. 29 square meters not only benefit from a heterogeneous neighborhood, but also from a district that functions well from an infrastructure point of view. The Edifício Copan is still a building that is very closely connected to the city, and is used by the general public. The first floor of Edifício Copan is fully utilized for commercial purposes, accommodating more than 70 facilities such as restaurants, cafés, cinema, laundry service and hairdressers. The Edifício Copan (Fig.1) became one of the icons of the expansion and verticalization of the city of São Paulo. The success of this operating concept is based not least on the fact that the extensive range of uses on the first floor forms a close alliance with the city, and still corresponds to the diverse lifestyles of city-loving people. This openness to minor revolutions in everyday urban life is also evident in the diverse acquisition of small apartments, where users can apply the finishing touches. The limited amount of space stands opposite considerable openness of appropriation. In contrast to the examples mentioned at the beginning, where the rationalized small apartment could also be regarded as a functional paternalism, the apartments in the Edifício Copan almost encourage people to get the maximum out of the minimum by means of individual design measures. This potential between

<sup>10</sup> <http://www.archidiap.com/opera/casa-albergo/>

<sup>11</sup> Bo Bardi, L.. A moradia nos bairros habitacionais de Roma. In: B., Rubino, S., & Grinover, M. (2009). Lina por escrito. São Paulo, Brazil: Cosac Naify. (Originally published as: Bo, L. (1943). Casa a nuclei abitativi a Roma. Lo Stile, Milano, July (31), (P.15–20).

<sup>12</sup> B., Rubino, S., & Grinover, M. (2009). P. 42 (own translation from the Portuguese)



**1**  
Edifício Copan,  
São Paulo.  
  
Project:  
Oscar Niemeyer  
and Carlos Lemos.  
  
Photo:  
Fernando  
Stankuns,  
São Paulo.

efficiency and room for maneuver is the real challenge of Microliving.

The question is not so much about how many square meters are sufficient, but how much room for maneuver there is beyond the number of square meters. It's therefore not about how small a kitchen is or how big a sleeping alcove is, but what they can also be beyond their intended function. Against the background of the differentiation of lifestyles that has already been mentioned, the question of room for unexpected use and unpredictable events is all the more important.

Among other things, that which can give small apartments real size is room for maneuver for appropriation. The small apartments which have been currently realized are characterized by a high degree of programmatic and aesthetic assertiveness. Is there still room for individual interpretation? When are micro-apartments “small and beautiful”? How can small-scale structures correspond to the realities of life of the residents in a better way, and therefore also make a contribution to higher identification?

The answer is simple and complex at the same time. It is essential to take up the contradictory and changeable needs of the residents in a creative and exciting way, and also provide living space which can be used in a versatile way, even in small-scale structures, which expands the options of the residents in different phases of their lives. This living space is not reduced to “your own four walls”, but extends to other living spaces: the house community, the neighborhood, the district, the outdoor space and the entire city. Microliving therefore also has an urban dimension: In Microliving, the city and what it has to offer must be taken into consideration. Conversely, the possible use and appropriation of urban space and its infrastructures should be considered in Microliving. So who actually uses which urban spaces

and facilities? And how can micro-apartments contribute to the social make-up of the city by providing affordable housing in attractive locations, for example?

The needs of different lifestyles and types of household want to be taken into account, and require different spatial and programmatic reactions. Living is a basic need that is only insufficiently covered for many people, even now. The high level of demand, particularly for affordable compact living space, can be seen as an opportunity and a challenge for rethinking living in order to better fulfil the wishes and needs of the residents and find a sustainable way of using existing resources. Based on these considerations, five points are suggested below that can provide a creative impulse in dealing with Microliving.



# Spaciousness on a small scale: Five points

Microliving is rarely a question of personal preferences, but a question of necessity for the majority of people. It is precisely for this reason that it is important to imaginatively explore possibilities that can give Microliving added value, and bring back a new wealth to individual everyday living, i.e. provide a wide range of interpretations and usage options with different rooms, spaces and usage values.<sup>1</sup> Because as described above, the living requirements are so different and changeable that there cannot be an all-in-one solution for Microliving. On the contrary, strategies are needed that can deal with “life-world situations and the possibilities of change”<sup>2</sup>.

In this sense, the five points mentioned below can be regarded as a creative impulse rather than a program. For each of the five points, several architectural solutions are introduced that we consider to be interesting for apartments with a reduced area. The projects that are introduced are not always micro-apartments, but they can provide inspiration for this type of living space.

---

<sup>1</sup> See Hubeli, E. & Koch, M. (2006). Reflexionen über Innovationen im Wohnungsbau. Materialien und Positionen für eine Debatte. Retrieved from <https://www.aramis.admin.ch/Default.aspx?DocumentID=130&Load=true> (Retrieval date: 08.06.2020)

<sup>2</sup> Jonas, W. (2014): Research for Uncertainty. Überlegungen zur Forschung durch Design. In: Buchert, M. (Publisher). Reflexives Entwerfen. Reflexive Design. Berlin: Jovis. P. 75

# Networking

*“Living is the production of threads that constitute the networks, fabrics and textures of living – and therefore the world as an inhabited one.”<sup>1</sup>*

With the aid of clever networking, living space can grow in accordance with requirements, although the walls remain – be it by providing additional rooms within the settlement, such as work and craft rooms, spare rooms or a recreation room for a bigger event. Living is also continued on the scale of the city quarter, starting with the café around the corner to the library and the communal garden, or the reading bench in the city park. The radius of our living environment always extends beyond our own four walls. We network our apartment in accordance with our everyday activities and habits.

In the current discourse on Microliving, it is rightly pointed out time and time again that the success of these types of living essentially depends on additional provisions: What options does the apartment offer, and what takes place outside the apartment? At best, it is a mutually enriching interplay. Against this background, Microliving in particular is promoted as a type of living that is linked to the city. However, trends can be identified here which are contradictory in some cases: Because if urbanity is equated with social and cultural diversity, this form of living would have to be affordable for a broader group of users. Only people who spend less on rent actually have more opportunities for initiative and participation in a diverse urban life. Paradoxically, however, quite a few Microliving projects are more likely to contribute to a loss of precisely this urban diversity, which would be so important for cross-apartment networking, by focusing on high-earning working people in certain sectors. It would therefore be desirable to address different lifestyles with a more differentiated range of housing and network with the city in terms of infrastructure. This is the only way for Microliving to deliver on its promise to make new use of space in order to save it in an intelligent way, question conventions and create other kinds of added value.

The Brahmschhof estate in Zurich, which was designed by architect Walter Fischer, is an example of how Microliving is not isolated, but embedded within a wide range of apartments.

---

<sup>1</sup> Guzzoni, U. (2017). P. 35



A surrounding arcade (Figs. 2 and 3) networks the small apartments with a colorfully mixed neighborhood of different household sizes in the truest sense of the word. Numerous additional provisions such as guest rooms that can be rented separately, a neighborhood bistro, craft rooms, offices and commercial premises and a neighborhood that works well from a social and infrastructure point of view, are a self-evident constituent of the apartment.

The Project Yokohama Apartments by architecture office On Design Partners in Kanagawa (Japan) shows how space-expanding networking of small apartments with the surroundings can be achieved by means of open space with a wide variety of uses. Four micro-apartments under one roof are networked via a shared, covered open space that is also a kitchen, playground, work room, garden and relaxation area for everyone. Privacy and publicity are not a question of “either – or”, but can be redesigned in various ways. In this way, the house becomes an active urban building block that also stimulates the richness of relationships and networking beyond your own four walls.

**2 – 3**  
Brahmshof estate,  
Zurich.

Project:  
Walter Fischer  
Kuhn Fischer  
Partner Architects,  
Zurich.

Photos:  
Andréa Zemp  
Nascimento

# Improvisation

*“The modern house is intended to give its occupants maximum freedom, i.e. sufficient for them not to be forced into a constrained lifestyle.”<sup>1</sup>*

The term “improvisation” comes from the Italian word ‘improvviso’ and means something like immediate, unforeseen or unexpected. In art, unprepared and spontaneous representations are referred to as improvisations. Improvisations are also always a challenge to individual interpretation capability, and are closely linked to the personality and creative will of the artist: Each artist interprets and improvises at the same time and explores his or her individual room for maneuver by means of free, not externally directed, but self-determined improvisation. Living is also about the extent to which “unknown and unpredictable space can be found”<sup>2</sup> and how room for maneuver for the use and individual interpretation of spaces is made possible. It is still normal to guarantee the usability of small apartments with the most efficient spatial zoning. However, this is often accompanied by a reduction in diversity and a repression of adaptability. So the question of how much room for maneuver remains with so much efficiency is asked time and time again. It is known from architectural psychology that the feeling for available space does not primarily depend on living space, but rather on the possibility of appropriating this space. That would mean that small living spaces in particular benefit not so much from efficiency, but from room for maneuver and redundancies.

Efficiency should not be at the expense of equivocality and diversity, particularly in a small apartment. Improvisation is an important tool for coping with our everyday life. The question that is specifically aimed at the end of the plan is therefore not so much how to optimize small spaces, but where to offer which scope for improvisation. Scope means incorporating surpluses that can not only be in the apartment itself, but also in intermediate and access areas close to the apartment and that allow individual boundary shifts between indoors and outdoors. Such alleged waste of space is extremely valuable in everyday life. Optimizing does not mean configuring the room as efficiently as possible, but providing the maximum number of options.

---

<sup>1</sup> Spalt, J. & Czech, H. (1981). Josef Frank. 1885–1967. Möbel, Geräte und Theoretisches. Vienna: Löcker Verlag. P. 162

<sup>2</sup> Hubeli, E. (2020). P. 163



**4**  
Sargfabrik, Vienna.

Project:  
BKK-3 Architects,  
Vienna – Hamburg.

Photo:  
Hertha Hurnaus,  
Vienna.

The living cells in the famous Nakagin Capsule Tower, which was designed by Kisho Kurokawa in 1972, show how “tailor-made” optimization leads to a loss of equivocation and diversity. Ernst Hubeli sums up the importance of individual improvisation and appropriation possibilities very well when he demands the following for living in the 21<sup>st</sup> century: “Give me a wealth of possibilities and I will do the rest myself!”<sup>3</sup> With this demand, Hubeli also highlights major potential which has often been neglected in the past which should certainly be given space in Microliving: the imagination, resourcefulness and ingenuity of the residents.

The “Sargfabrik” project in Vienna, which was implemented by BKK-3 Architects in 2000, takes up this idea as an example. The compact residential units are designed as open-space sculptures with different room proportions and varying room heights of between 2.26 meters and 3.12 meters (Fig.4). There are no clear room function provisions, and the plasticity of the rooms challenges the residents' ability to improvise and be resourceful.

---

<sup>3</sup> Ebd. P. 86

# Uniqueness

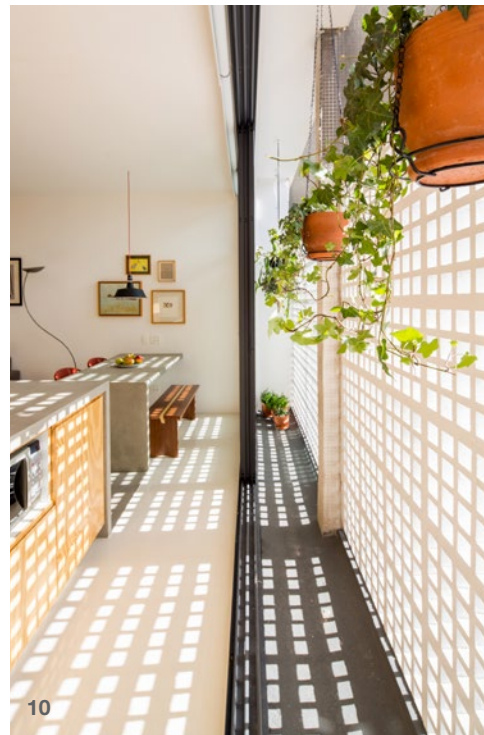
*“The supposedly useless space is valuable. Possibilities and symbolic surpluses are inscribed in it – an enriched complexity that anticipates the unknown.”<sup>1</sup>*

Quality of living is not simply proportional to living area, but is particularly also determined by the big and small joys of everyday life: a particularly diverse development situation in which the daily journey to your own apartment becomes a small experience, a special structural and spatial detail such as a seating niche in a deep window reveal, a surprising room height or a different handling of floor levels. Properties such as this can give a small apartment a unique character. A little detail can sometimes make the difference in the overall quality of the room.

The renovation project by the architect collective Grupo Garoa for a 35 square meter micro-apartment in the Edifício Copan in São Paulo shows how a spacious façade layer can generate uniqueness (Figs. 5 to 13). The façade of the building consists of two layers: Hollow concrete elements form the outermost layer, and filter the direct light (Fig. 7); the second layer behind it originally consisted of a closed window front made from glass (Fig. 13). The windows could only be opened at parapet height. This inaccessible space between the façades already gave the visual impression that the room was deeper. During the renovation, the architects used this potential of the space-containing façade layer by replacing the originally closed window front with large sliding glass doors (Fig. 8 to 10). In this way, they provided access to this space and created a unique situation of living outdoors, despite the shallow depth.

---

<sup>1</sup> Ebd. P. 166



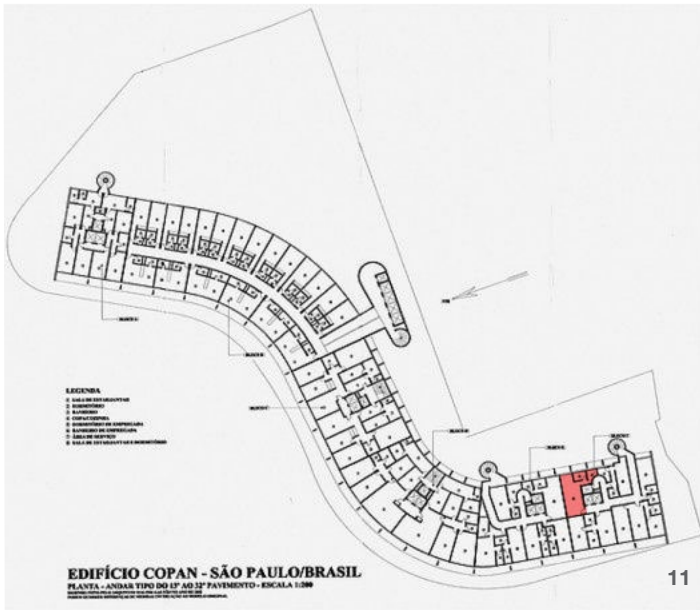
5,6, 8, 9, 10  
Kitnet  
Edifício Copan,  
São Paulo.

Project: Grupo  
Garoa Arquitetos,  
São Paulo.

Photos:  
Pedro Napolitano  
Prata, São Paulo.

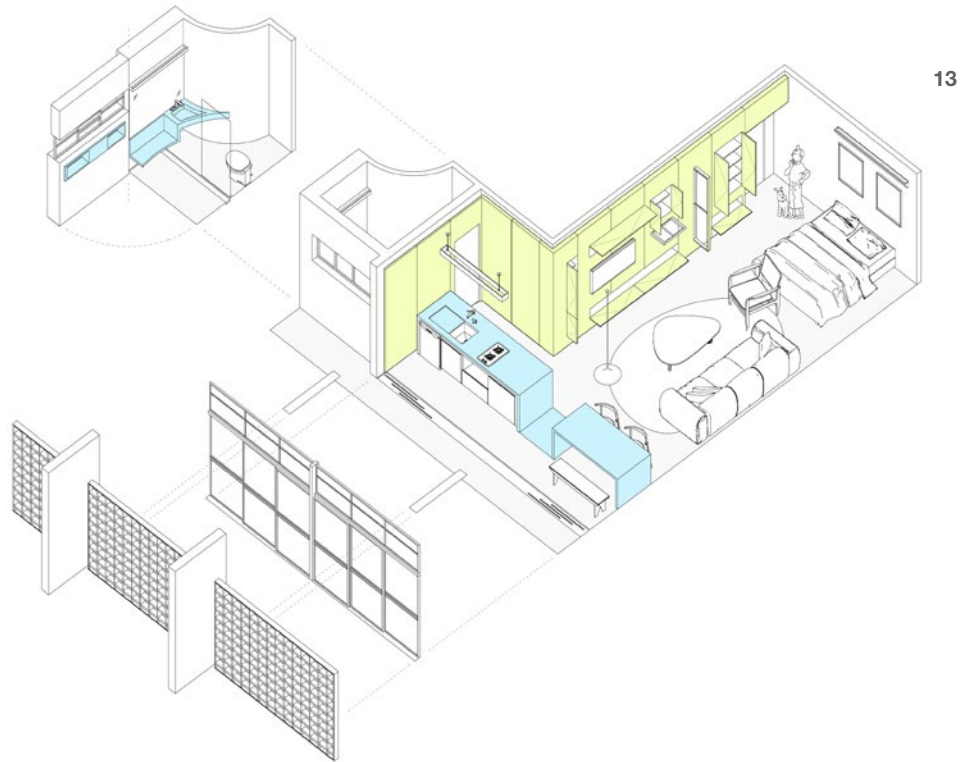
7  
Edifício Copan rear  
façade.

Photo:  
Fernando  
Stankuns,  
São Paulo.



**11**  
Floor plan  
Edifício Copan,  
São Paulo.

Source: Grupo  
Garoa Architetos,  
São Paulo.



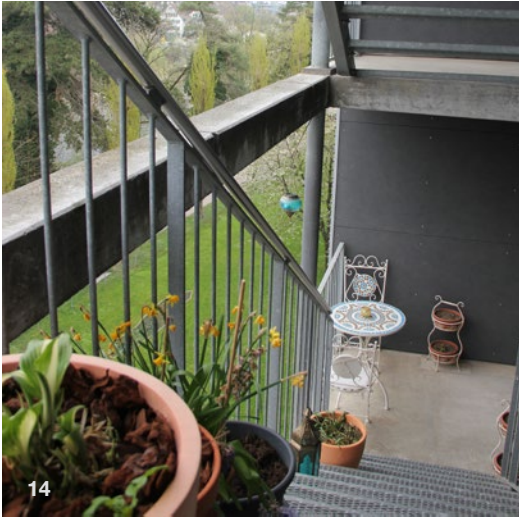
**12**  
Floor plan  
Kitnet Copan,  
São Paulo.

Project:  
Grupo Garoa  
Architetos,  
São Paulo.

**13**  
Perspective  
Kitnet Copan,  
São Paulo.

Project:  
Grupo Garoa  
Architetos,  
São Paulo.





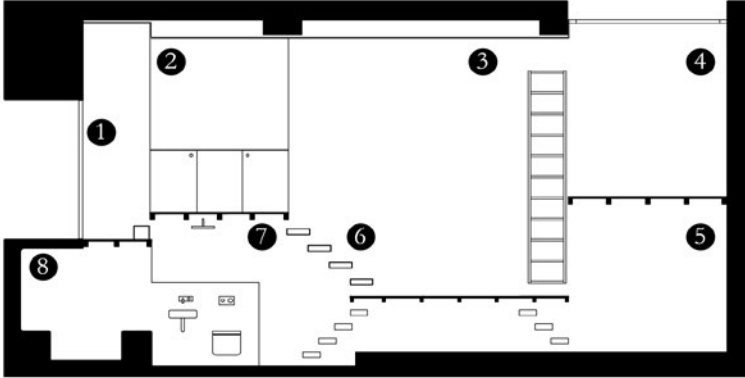
Why does the stairwell always have to be closed? In the Limmatwest development in Zurich by architect Walter Fischer, open stairwells with a view of the river create an extraordinary outdoor space that can be used as an extension to an apartment in addition to its access function. This room is given its homely atmosphere by the private seating and the private potted plants (Figs. 14 and 15), which literally monopolize the room. This unique situation at your own front door is made possible not least by room-expanding house rules.

The architects from MYCC prove that there is potential for uniqueness in unusual space proportions. In their project for a single apartment in Madrid with a floor space of just 20 square meters, they used the generous room height of 5 meters to organize a spatially varied living landscape on different platforms (Figs. 16 and 18). The individual levels are arranged so that use is made of the entire height of the room. The height effect is enhanced by a large skylight (Fig. 16 and 17), and the unobstructed view of the sky expands the room and creates a unique lighting atmosphere.

**14 – 15**  
Limmatwest  
estate, Zurich.

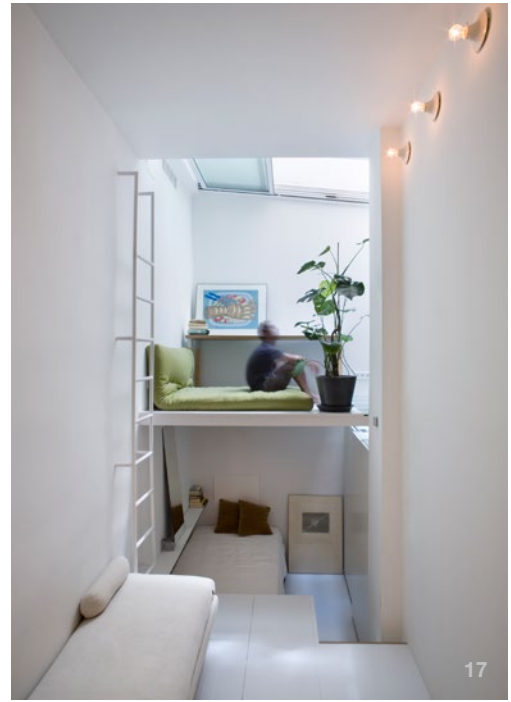
Project:  
Walter Fischer  
Kuhn Fischer  
Partner Architects,  
Zurich.

Photos:  
Richard Zemp



1.access high; 2.walk-through kitchen; 3.kind of living; 4.light chill-out  
5.office bedroom 6.contemplative stands; 7.xl bathroom; 8.hammam

16



17

**16; 18**  
Section and perspective of the apartment 100m<sup>3</sup>, Madrid.

Project:  
MYCC architects,  
Madrid.

**17**  
Apartment 100m<sup>3</sup>

Project:  
MYCC architects,  
Madrid.

Photo:  
Elena Almagro,  
Madrid.



18

*“What else could a wall be? (...) The name comes from the Old High German uonedh, which means mesh covered with clay. This is interesting; contrary to what we think today, the wall was something made from textile, a mesh, a fabric; (...). In all cases, the living space is not something static, but something mobile and flexible that adapts to its surroundings, a house that is halfway to being a tent.”<sup>1</sup>*

An important strategy in small apartments is that of temporal and non-local functional separation. Activities are therefore not assigned to different room units, but are contained as options within a single variable room. If we stop thinking about the space-forming elements as being static, but flexible, the same space can be “re-programmed” and re-dimensioned time and time again. In this way, it develops a wide variety of uses. Walls and fixtures are movable or can be folded in or out in accordance with the “pocket knife” principle.

In the All I Own House, the architects from PKMN from Madrid (currently Enorme Studio and EEEstudio) organize four different room configurations in a small space, each with different usage options. This is made possible by a sophisticated rail system on the ceiling, from which mobile room dividers are suspended. The inspiration for this may have come from the suspended shelves that are used in many libraries and archives. These free-moving, space-controlling elements make additional furniture unnecessary (Fig. 19 and 20). Sometimes they form a bedroom with a folding bed (Fig. 21), sometimes they are used as a lounge or work area with a blackboard and bookshelf (Fig. 22), sometimes as a dining area with a folding table (Fig. 23), and sometimes as a dressing room next to the bathroom. Integrating all of the functions in this convertible room layer frees up the adjacent area, and also provides a room full of options.

Although there is a lack of permanent spatial separation between the individual usage areas, it is not removed. On the contrary, the space requirement can be metered, and the apartment is in a continuous state of motion. For example, the kitchen can be reduced in size after lunch in favor of the study.

---

<sup>1</sup> Maak, N. (2014). P. 105



**19 – 23**  
Project:  
PKMN (current  
Enorme Studio and  
EEEstudio)  
Madrid

Photos:  
Javier de Paz García  
[www.estudioballoon.es](http://www.estudioballoon.es)  
Instagram:  
[@javierdepazgarcia](https://www.instagram.com/javierdepazgarcia)



In several renovation projects of Madrid micro-apartments, Madrid architect's office Elii shows how the widest variety of possible uses can be developed from a small area in a fun way. Their folding and sliding room elements turn out to be real room playthings during use.

For example, the screen (biombo in Spanish) plays an important role in the Biombombastic project. The 25 square meter one-room apartment can be divided up using a single three-part sliding and folding screen (Fig. 24 to 26). The upper part of the screen is made of polycarbonate so that the light can pass through into the divided-off areas, whereas the lower part is opaque. Its appearance resembles the typical walls made from translucent paper in Japanese houses. It runs on wooden tracks in the floor that indicate the possible divisions, and give the project a playful expression at the same time, if only because they are not orthogonal. A folding bed (Fig. 27) and a folding table are also part of the project.

**24 – 27**  
Biombombastic  
apartment,  
Madrid.

Project:  
Architect's office  
Elii, Madrid.

Photos:  
ImagenSubliminal  
Miguel de Guzmán  
+ Rocío Romero,  
Madrid.

# Equivocality

*“(...) a shape that can be used for different purposes without having to change itself, so that an optimum solution can be achieved with minimal flexibility.”<sup>1</sup>*

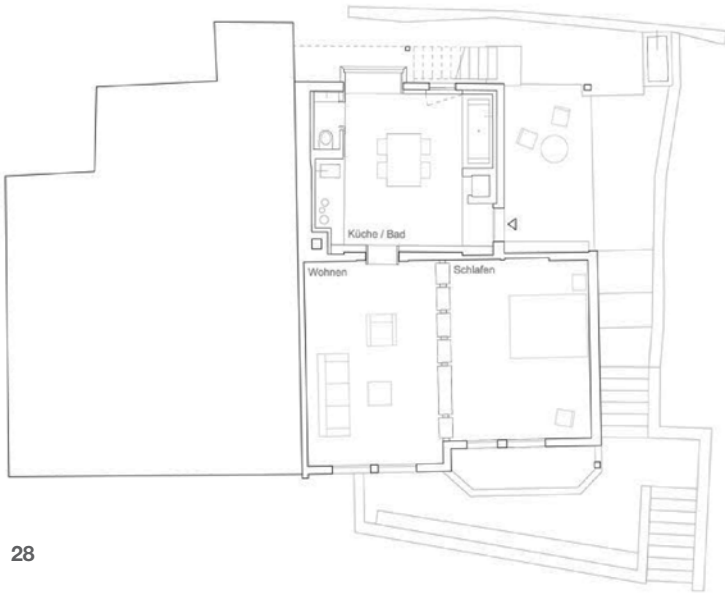
An important means of creating space for different activities in a small space is equivocality. By not clearly assigning functions to certain rooms and objects, different activities can take place in the same room – even simultaneously in some cases. The design of a small apartment does not only provide the opportunity to question conventional floor plan zoning, but also the possibility of expanding the design repertoire.

Do bathing and cooking require two separate rooms, or can they both share a bigger room? This consideration prompted the architects of the Lilitt Bollinger Studio and Alma Maki offices to reinterpret the traditional bathroom in the kitchen in their Ebligen in Oberried (Switzerland) conversion project (Fig. 28 – see kitchen/bathroom). The result is an equivocal space that avoids having a clear use attributed to it.

Slovenian Kombinat Arhitekti office implemented a similar concept with the Apartment AB project in Vienna. Cooking, living, eating and working can all take place in a single room. A long row of furniture that extends like a window ledge along the outside wall of the apartment creates precisely this equivocality: It is a kitchen (Fig. 30 and 31), desk, sitting area and storage area at the same time (Fig. 29 and 31). It is a kind of chameleon that captures the mood of the residents at will and shows its colors.

---

<sup>1</sup> Hertzberger, H. (1999). *Lições de Arquitetura* (2nd ed.). São Paulo, Brazil: Martins Fontes. (own translation from the Portuguese) P. 147



28

**28**  
Holiday apartment  
Conversion,  
Eblingen

Project:  
Lilitt Bollinger  
Studio &  
Alma Maki



**29 – 30**  
Apartment AB,  
Vienna.

Project:  
Kombinat  
Arhitekti  
Ljubljana, Slovenia.

Photos:  
Janez Marolt



**31**  
Apartment AB,  
Vienna.  
Detail from the  
floor plan.

Project:  
Kombinat  
Arhitekti  
Ljubljana, Slovenia.

# Literature

Bo Bardi, L. A moradia nos bairros habitacionais de Roma. In: B., Rubino, S., & Grinover, M. (2009). Lina por escrito. São Paulo, Brazil: Cosac Naify. (Originally published as: Bo, L. (1943). Casa a nuclei abitativi a Roma. Lo Stile, Milano, July (31), (P. 15–20).

Breit, S. & Gürtler, D. (2018). Microliving. Urbanes Wohnen im 21. Jahrhundert. Published by the Gottlieb Duttweiler Institute. Retrieved from <https://www.gdi.ch/de/publikationen/studienbuecher/microliving> (Retrieval date: 11.06.2020)

Fuhrhop, D. (2019). Einfach anders wohnen. Weinheim: Beltz Verlag

Gropius, W. (1930). Summary of lecture “Die soziologischen Grundlagen der Minimalwohnung” [1929]. In: “Die Wohnung für das Existenzminimum”. Frankfurt: Englert & Schlosser. P.17–19

Guzzoni, U. (2017). Wohnen und Wandern. Munich: Verlag Karl Alber

Häussermann, H. & Siebel, W. (1996). Soziologie des Wohnens. Weinheim: Beltz Verlag

Hertzberger, H. (1999). Lições de Arquitetura (2nd ed.). São Paulo, Brazil: Martins Fontes. (own translation from the Portuguese)

How much living space does the average household have in Japan? (12.08.2017). Retrieved from <https://resources.realestate.co.jp/living/how-much-living-space-does-the-average-household-have-in-japan/> (retrieval date: 11.06.2020)

Hubeli, E. (2020). Die neue Krise der Städte. Zur Wohnungsfrage im 21. Jahrhundert. Zurich: Rotpunktverlag

Hubeli, E. & Koch, M. (2006). Reflexionen über Innovationen im Wohnungsbau. Materialien und Positionen für eine Debatte. Retrieved from <https://www.aramis.admin.ch/Default.aspx?DocumentID=130&Load=true> (Retrieval date: 08.06.2020)

Jonas, W. (2014). Research for Uncertainty. Überlegungen zur Forschung durch Design. In: Buchert, M. (Publisher). Reflexives Entwerfen. Reflexive Design. Berlin: Jovis. P. 72 – 104



Juppieri, A. & Zemp, R. (2019). Vokabular des Zwischenraums. Gestaltungsmöglichkeiten von Rückzug und Interaktion in dichten Wohngebieten. Published by the Lucerne University of Applied Sciences, Institute for Architecture (IAR) and the Competence Center Typology & Planning in Architecture (CCTP) Zurich: Park Books

Maak, N. (2014). Wohnkomplex. Munich: Carl Hanser Verlag.

Schnabl, L. (2017). Leben auf 5,78 Quadratmetern. In: Neue Zürcher Zeitung of 27.09.2017. Retrieved from <https://www.nzz.ch/gesellschaft/ein-monat-auf-578-quadratmetern-tokio-id.1314878> (Retrieval date: 11.06.2020)

Schweizerische Eidgenossenschaft, Bundesamt für Statistik (Publisher). Szenarien zur Entwicklung der Haushalte 2017–2045. (Corrected version, 24.11.2017). Retrieved from <https://www.bfs.admin.ch/bfs/de/home/statistiken/bevoelkerung/zukuenftige-entwicklung/haushaltsszenarien.assetdetail.3682859.html> (Retrieval date: 11.06.2020)

Spalt, J. & Czech, H. (1981). Josef Frank. 1885–1967. Möbel, Geräte und Theoretisches. Vienna: Löcker Verlag.

Yudina, A. & Krabbe, W. (2018). Homeoffice. 120 kreative Lösungen für das Arbeiten zuhause. Munich: Deutsche Verlags-Anstalt / Random House GmbH.

Zemp, R., Juppieri, A. & Winterberger, F. (2019). Innovative Wohnformen. Kontext, Typologien und Konsequenzen. Published by Lucerne University of Applied Sciences – Technology & Architecture – Competence Center Typology & Planning in Architecture (CCTP) & Housing Cooperatives Switzerland – Regional Association Zurich. <https://doi.org/10.5281/zenodo.3518153> (Retrieval date: 11.06.2020)

# Authors

ANGELIKA JUPPIEN (1963) is a freelance architect and co-founder and partner in the **kollektivort – Architecture | Spatial research | Photography**, Zurich. She studied architecture at the RWTH in Aachen. Since 2003 she has been a professor of design and construction in the Bachelor's degree program at the Institute for Architecture (IAR) at Lucerne University of Applied Sciences (HSLU), and has been project manager at the Competence Center for Typology & Planning in Architecture (CCTP) at the Lucerne University of Applied Sciences since 2015. Angelika Jupprien is co-author of the book "Das Vokabular des Zwischenraums – Gestaltungsmöglichkeiten von Rückzug und Interaktion in dichten Wohngebieten" Park Books: Zurich 2019.

ANDRÉA ZEMP NASCIMENTO (1982) is a freelance architect and art and cultural mediator, as well as a co-founder and partner in **kollektivort – Architecture | Spatial research | Photography**, Zurich. She studied architecture and urban planning at the FAU-USP in São Paulo, where she obtained a master's degree. She studied art and culture education (MAS) at the ZHdK in Zurich, and completed further training courses in photography at the F+F. Andréa Zemp Nascimento has been a lecturer in the CAS Planning and Building at the Lucerne University of Applied Sciences (HSLU) – Technology and Architecture since 2016. She is the author of the book "A criança e o arquiteto: quem aprende com quem?" (in English "The child and the architect: who learns from whom?") Annablume, FAPESP: São Paulo, 2019.

RICHARD ZEMP (1980) is a freelance architect and co-founder and partner in **kollektivort – Architecture | Spatial research | Photography**, Zurich. He studied architecture and urban planning at the ZHAW in Winterthur and at the FAU-USP in São Paulo, as well as the history and theory of architecture at the ETH in Zurich. Richard Zemp has written articles and short prose works for various magazines, and has been employed at the Lucerne University of Applied Sciences – Technology & Architecture since 2015, where he works as a scientific project manager and holds individual teaching positions. He is the co-author of the book "Das Vokabular des Zwischenraums – Gestaltungsmöglichkeiten von Rückzug und Interaktion in dichten Wohngebieten" Park Books: Zurich, 2019 and author of the book "Bauen als freie Arbeit", Dom Publishers: Berlin, 2020 (in print).

© Angelika Juppieri, Andréa Zemp Nascimento, Richard Zemp  
kollektivort – Architecture | Spatial research | Photography

**Issued by**

Hawa Sliding Solutions AG  
Untere Fischbachstrasse 4  
8932 Mettmenstetten  
Switzerland

Tel. +41 44 787 17 17  
Fax +41 44 787 17 18  
E-mail: [info@hawa.com](mailto:info@hawa.com)

&

kollektivort  
Architecture | Spatial Research | Photography  
Brauerstrasse 51  
8004 Zurich  
E-mail: [kollektivort@gmail.com](mailto:kollektivort@gmail.com)