The changing meaning, uses and values of housing over time

Potentials and problems of Swiss residential housing estates with regard
to their cultural and social sustainability

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This article discusses a new way of illustrating the different viewpoints of quality of housing formulated by different groups of residents, owners and the public attention over time. It sets these in a historical and cultural context as narrations of the complex history of residential spaces. In Switzerland and other West European countries, one of the key issues of the 21st century will be the definition of strategies for dealing with the existing building stock. The majority of it is residential and is rented, as it is traditionally mostly the case in Switzerland. The article describes a new multidisciplinary research method developed during a research project at the ETH Wohnforum-ETH CASE to examine selected case studies of urban residential multifamily housing in Zurich with regard to their history of uses, their changes of meaning and values over time. Specifically it will discuss a highly valued, recently softly renovated residential settlement owned by the city of Zurich, managed by the non-profit Housing Administration City of Zurich (Liegenschaftenverwaltung). Following this example a new starting research project will be conducted on housing estates from the era 1960 – 1980 in the region of Zurich. Almost 60 % of the buildings have been built in the period of the "construction boom" from the 1950s until the end of the 1980s. The major part of Zurich's building stock is older than thirty years.² Two main strategies are in use: the destruction of the buildings and a complete new planning or the socalled "sanfte Renovation" (soft renovation). Zurich was chosen as exemplary city because of its

¹ The interdisciplinary SNF funded project "On the career of durability. The biographies of appreciated apartment houses from 1900 up to the present" was carried out by Marie Glaser, Anna Joss, Annelies Adam, and Sabine Herzog, in 2007 to 2010. The findings and documents of all case studies are available

on the projects` website www.hausbiografien.arch.ethz.ch ² Only 20 % of all apartments in Zurich have been built after 1970. See Facts on living in Zurich, in: Wohnen in Zürich. Programme, Reflexionen, Beispiele, ed. by the City of Zurich, Sulgen: Niggli 2006, p-187.

high percentage of cooperative and communal housing³, with regard to the fact that these groups build and invest with a high interest in long-term investments and in high quality of housing. The notion of durability over a whole lifecycle of a building comes into play when the research focuses on developing an integral and critical understanding of enduring residential building stock and its maintenance and to rethink factors and processes of appraisal and enrich the possible future strategies of action. Therefore the article concentrates on the notion of quality in a social and cultural dimension as a result from the newly developed method of House-biographies. It discusses first the theoretical background and the principle elements of this multidimensional approach. A particular House-biography of a Zurich case study, the Zurlinden settlement from 1919 illustrates the application. The article concludes with exemplary principles of quality in housing, drawn from the Zurlinden case study in Zurich.

Theoretical issues

Lawrence stated that, in general, the inter-relations between the architectural, cultural and societal dimensions of housing have been commonly overlooked in the architectural research (Lawrence 1992). Either the studies of historians have dealt with the history and the design of the building or the type of building in a classical way of art history. It has been common practice for economic and social historians to examine domestic buildings and residential quarters largely in terms of their layout and construction, or the development of building and domestic technologies. At the same time the material dimension of design and construction cannot be neglected as has been the case in most ethnographic and socio-economic studies on the subject of residential housing (e.g. Wiesmann-Baquero 2005). In order to acquire new knowledge about the inter-relation between quality concepts of residential buildings and the variable dimensions of these qualities, it is prerequisite to extend the technically oriented research perspective by adding a cultural and historical perspective through an ethnographic qualitative approach. The article shows that research on residential housing needs a more integrative approach to bring to light the interrelations between human ideas and values, the design and use of residential buildings. The House-biographies combine in an innovative way, ideally as thick descriptions (Geertz, 1973), the evaluation of residential buildings through the inhabitants on one hand and the owners on the other, and also look to the public perception over time. The history of repair and renovation of the building is connected with its history of appraisal and the history of its economic validation. It is to show that the narrative of acceptance is not always one of a steadily growing durable career, but a line of highs and peaks over the course of time. The purpose is neither to write a "pure construction history" or a socio-critical study. It is to demonstrate what happens in between, between the structures and the people who are

³ The share of non-profit housing (communal housing, cooperatives) in the city of Zurich is high with almost 25 %, see Statistics Zurich: http://www.stadt-zuerich.ch/prd/de/index/statistik/bauen_und_wohnen/gebaeude_und_wohnungen.html, on 2011/01/03

involved with them in the most diverse ways. The focus is on the "blind spot", as Bruno Latour names it, "the blind spot, in which society and material exchange their characteristics" (Latour 2000, S.232).

In order to guarantee a well-founded interdisciplinary synopsis of humanities and design approach, an interdisciplinary research team including at least an architect, a historian and a cultural anthropologist should carry out the House-Biographies.

The following explanations of the underlying concept of space make it clear to what extent this choice of perspectives is valuable for the study of qualities of long-lasting residential buildings. Within numerous developed theories and conceptions of space, the preoccupation with "built space" has tended to move into the background in favour of "social space" (Maresch/ Weber 2002, S.12). 4 One of the most respected German publications, which shift the focus to the "social developments" of spaces, is by sociologist Martina Löw (2001; Löw 2008). Löw's debate about the configuration process of spaces follows Giddens theory of structuration (Giddens 1984) and is fruitful for the chosen approach. According to Löw, spaces are structured relationally. Löw sees space not as a rigid structure but as a "relational arrangement" of bodies, which changes again and again during the course of time. Bodies can be repositioned and perceptions alter. Consequently, a space is relational and process-related. With respect to the constitution of space, Löw distinguishes analytically between two, generally mutually determining factors: "spacing" and "synthesis." Spacing refers to the act of placing or the state of being placed of social goods and people in places. Löw's spatial concept can be applied well to the examination of residential buildings that have endured for many years. The concept helps to direct ones view to the relations and processes, the changes and constants of a space over time and to understand the space as a conglomerate of various structures/bodies and processes of perception and memory.

As far as residential buildings are concerned, it makes sense not to use the general term "space" but instead to talk concretely of the "house" as a relational and processual space. The existing research on house and home has developed vast literature on the definition and discourse of these both terms. ⁵ In the specific context of the House-biographies, the unit "house"

⁴ I am thankful to Anna Joss and the discussions about Löws concept of space, see also: Anna Katharina Joss, Aus begrabenen Plänen gebaut: Kasernenanlage Zürich: ein terrain vague, Lizentiatsarbeit Zürich, 2007.

⁵ In recent years there has been aproliferation of writing on the meaning of house and /or home as a multidimensional concept. Environmental, social and ethnographical, psychological, philosophical as well as geographical studies are dealing with the concepts of House (and home). Refering to all of them is not possible, a helpful discussion of it give C. Despres (1991), 'The Meaning of home: literature review and directions for future research and theoretical development', Journal of architectural and Planning Research, 8 (2),p. 96–115; a good overview is also in Mallett, S. (2004), Understanding home: a critical review of the literature. The Sociological Review, 52, p. 62–89; For more discussion see R.J. Lawrence (1987), Housing, Dwellings and Homes: Design theory, Research and Practice, chapter 1, 2 and 3; A. Rapoport (1969), House form and culture, Englewood Cliffs, Prentice-Hall; Setha M. Low, E. Chambers (eds) (1989), Housing, culture, and design: a comparative perspective, Philadelphia, University of Pennsylvania Press; Lars Lerup (1977), Building the unfinished, Beverly Hills & London; also recently Henny Coolen (2009),

defines, following the German cultural historian Karl Schlögel, the "small unit [...] in the middle between the large space: street, neighbourhood, town, countryside and the smaller unit: flat, room, interior" (Schlögel 2009, S. 314). House refers not only to the "built space", the material and construction of the structure, but also to the cultural and historical dimension of the "lived space". The latter includes the way that people treat the built space: use, appropriation, relocation, modification, the tactile and optical perception, the appreciation and emotions, the conceptual and planning-related discussions. The spatial term "house" does not just comprise the incidents within the property lines where a residential building has been erected. The residential environment with its infrastructure and its social and spatial aspects, with which the residential building and its residents are in a relationship, is part of this. Dealing with the longevity of residential buildings consequently means researching the lived and built spaces of houses with their changes and constants during the course of time (see also Lawrence 1992). As a consequence, recent housing research integrates the "living" house into its views. The standard-setting study of the House-biography of the "Berliner Mietshaus", the Berlin rented residential building in the 19th and 20th century, by architect and theoretician Johann Friedrich Geist dealt for the first time in construction research with the inhabitants living in the houses in relation with the history of the building as well as the context of cultural and social history (Geist, 1980-1989). For the House-biographies undertaken in Zurich, this study represents a fundamental methodical basis. Since it has proven difficult to work with purely historical sources, such as contemporary witness reports, because recordings made by former tenants hardly existed, Geist's method has been supplemented by an empirical approach. Where Geist remains historically oriented on account of the lack of people to discuss with, the opportunity arises here to establish contact with long time residents and to explore their uses and experience of the house, the closer surrounding and the apartments (Glaser, Joss et. al.; 2010). Houses that have been in existence for a long period are occupied differently over the course of time. What guarantees that a building endures are its dynamics and its ability to change and it not being limited to one kind of use. For each respective use, rooms are designed or adapted or new rooms are added to them. The most diverse kinds of exchange process take place between the buildings and their users. The residents enter into a relationship with the living space, possibly identify with it and end the relationship at a later point in time. Simultaneously, the constants remain: building elements, spatial structures or usages and functions, which remain the same over the course of time. Peoples' lives leave traces in the house over the years. These traces of usage can provide important information about the prerequisites and conditions for the

House, home and dwelling, In M. Lux, L.Sýkora a. O Poláková (Eds.), Changing Housing Markets: Integration and Segmentation, Prague, p. 1-12.

⁶ In this much noted work, Schlögel sets out to break down the conventional chronological approach to history and to add to it a perspective of place and the aspect of synchrony. It is not, after all, only chronicles and books that serve as sources of history, but also, for example, timetables, address books, maps or buildings. They bear witness to civilisation and make history tangible in the truest sense of the word, becoming in themselves a part of historiography.

longevity of a house. In his "Kunstwerk" essay, Benjamin considers the double reception of buildings to be of significance.

"Buildings are received doubly: by usage and by perception. Or better said: tactilely and optically. (...) There is namely no counterpart on the tactile side, which is contemplation on the optical side. Tactile perception occurs not only through attentiveness but also through habit. As far as architecture is concerned, this latter aspect even determines optical perception. This too occurs generally less via concentrated attention to something rather more via incidentally noticing it" (Benjamin; 2008). These traces are to be found in plans, building files, correspondence in the archives, in press reports and in conversations and interviews as well as in the buildings themselves (Schlögel, 2009). Their perception by the public is reflected in public records, newspaper reports and publications. They give an insight into social and cultural meanings and values.

Methodological issues: doing House Biographies

In order to address the principles outlined above, and to enrich our understanding of qualities of enduring residential buildings, it is instructive to develop and apply a multidimensional approach including case studies of residential buildings, analysis of texts and archival records, analysis of turnover of tenants in selected addresses, video-documented fieldwork with interviews, and supporting economic analysis of the change of economic value of the building over time. First, fieldwork included the personal inspection of the chosen houses and a written phenomenological description of the space's atmosphere, always following the same dramaturgy from the surrounding to the building, from outside to the inside. Second, qualitative semistructured interviews about the history of use of the apartment and the house as well as the qualities were carried out with residents and professionally filmed on video as well as the interviewees were asked to give a tour through their apartments/house and outdoor area. Semistructured interviews with owners and/or administrators were carried out.

Third, the analysis of the municipal and private archival records has been carried out along a self-developed system based on selected categories of the Swiss Housing Evaluation System ("Wohnungsbewertungssystem") WBS implementing the analytic levels of location, estate and apartment.⁸ The findings have been transferred to a matrix and then published in the form of a

⁷ The use of video technique seems of high importance when dealing with residential spaces and buildings, because only visual documentation comes close to grasp the arrangement of the specific setting of the location as shows for example the documentary of Swiss filmmaker Fabienne Boesch on the high-rise settlement Lochergut in Zürich. Fabienne Boesch, Der Komplex, Documentary, 2002, Diplomafilm Zurich University of the Arts (ZhdK)

⁸ The Swiss Housing Evaluation System is an instrument to plan, assess and compare residential buildings. First published in 1975, it initially served to assess new-build applications in the context of the federal promotion of residential construction. In 2000, the WBS was adapted to new housing requirements, and its scope of application widened. It takes into account many diverse requirements for housing. According to WBS, residential buildings should distinguish themselves for their organisational flexibility and versatility. The practical value of a flat, residential building or residential estate is expressed in terms of utility value. The higher this value, the more versatile the use of a residential object. With regard to flats, the WBS emphasises criteria which address the flexibility of the floor plan, or the potential for al-

leporello for each case study, reporting the basic analysis (history of construction and of use; maintenance, repairs and changes; appraisal of experts, owners and residents) showing two representative time periods, construction year and today, with aerial view plans, photographs of the location, the estate, the apartment inside, floor plans. Out of this first analysis a selection from four case studies of different ownerships was made concerning their potential for an indepth research leading to a house-biography of their "career of durability" (Simons 2009). Selection criteria have been the appraisals, both interesting either diverging or unisono, the history of gentrification, the low fluctuation of residents.

Fourth, an analysis of the change in the buildings' economic values during their life cycle was done by an economic expert to find out more about the economic image of the constructional and social durability. Fifth, the in-depth analysis consisted in address book research in municipal records of the selected buildings to find out about the residential turnover rate. Sixth, research in press archives guides the discourse analysis of public expert and lay reception.

The in-depth analysis lead to create an original narrative for each case – the so called House-biography as a portrait of the particular house where to describe the elements and processes within the built space as well as the lived space that constitute the longevity. The uniqueness of each house distinguished it from the others and though a comparative perspective was possible.

The central themes of each case emerged from the material and differ from each other interestingly by means of their importance, following the basic idea of grounded theory. The narrative concept of the house biographies is in this respect surely not chronological but generates a new way of "reading" the spaces analytically, shaped by the specific viewpoints of the different groups which are revealed and give them value and meaning until today. The portraits describe the question regarding the quality of living over a long temporal axis from afresh, without simply adding up mere results or figures.

As the matrix illustrates, the structure of the house-biography concentrates on two analysis dimensions along three levels (according to the WBS the location, the estate and the apartment): first, with regard to the original quality concept and, second, with regard to the history

ternative placement of furniture; with regard to the residential building, emphasis is on communal areas; criteria regarding location place particular emphasis on easy access to services and facilities. See: Federal Office for Housing BWO (2000), Wohnbauten planen, beurteilen und vergleichen. Wohnungs-Bewertungs-System WBS" Schriftenreihe Wohnungswesen, Band 69.

⁹ We are thankful to Dr. Beat Salzmann for carrying out these analyses following his method in: B. Salzmann (2007), Der Wertveränderungsprozess von Immobilien: eine Theorie auf der Basis der Discounted-Cashflow-Methode (DCF-Methode), Zürich, ETH.

¹⁰ This approach follows the qualitative methodology of the "grounded theory" by Glaser and Strauss emphasizing generation of theory from data in the process of conducting research. See: Barney G. Glaser and Anselm L. Strauss (1974), The discovery of grounded theory: strategies for qualitative research, Chicago, Aldine Publishing Company.

of usage and appreciation via the different groups of owners, residents and the public (lay and expert).

The analytical categories have been for the initial quality concept (as constructed): the spatial structure, urban situation, materialisation, and supply/ infrastructure standard.

For the history of use and appraisal from the perspective of the residents, low turnover, low vacancy statistics, possible alterations to usage, social co-existing and development processes have been looked at. For the history of use and appraisal from the owner's perspective, maintenance and care, servicing costs, maintenance and/or renewal strategies, and adequate administration strategies have been examined. The analytical criteria for the public perception have awarding (expert), mentioning and discussion in the daily and professional press, the exemplary function, the status of being a popular address in the area, or an object of local memory.

A particular House-biography of an previous Zurich research case study, the Zurlinden settlement from 1919 illustrates here the application of theories and methods. It should show possibilities and limits of the instrument of a house-biography and serves now at this state of the research project as a model for analysing levels of post 1950ies buildings within the new starting research project.

It leads to principles of quality of housing drawn from this example.

Zurlinden communal housing estate, Zurich (1919)

The Zurlinden communal housing development was the first urban apartment building in Zurich that was built following a competition; Its type and style made it an exemplary character of housing construction. The constancy during all the changes in social living surroundings in the neighbourhood has produced a concentrated strategy of maintenance based on a simple standard of continuation and meticulous design. The low rent prices that this method has made possible guarantee living space for tenants who, to a large degree, identify with the neighbourhood and stand up for its issues, including decisions concerning overall renewal. The owner strategy of maintenance and the active tenants who identify with the neighbourhood makes its mark on the built and the lived space in Zurlinden and contributes decisively to the way it is appreciated and to its longevity.

Alleviating the housing shortage

From 1914 onwards, the city of Zurich found it confronted with an increasing lack of affordable rented housing, since private construction activity had come to a standstill. The construction of communal residential buildings was in its early stages. A common initiative in housing construction, such as the building association for creating less expensive apartments, was just

starting to form.¹¹ In the middle of the second decade, the town attempted in vain to stimulate private residential construction activity. In the case of the Zurlinden residential estate, there was strong pressure to act for the local authorities by alleviating the housing shortage.

Construction concept with relevance to the location

At the time around the turn of the century, Wiedikon was a rapidly growing urban neighbourhood whose population was a mixture of workers and employees from the lower middle classes. The building laws of 1893 introduced compulsory town plans and allowed dense fencing to appear. The task was so meaningful that the municipal council decided to organise a competition in order to obtain good solutions. Bischoff und Weideli¹² won the competition, their construction concept related to the monumental axis of Sihlfeld cemetery's gate and adopted the perimeter block structure, which was and is still typical of the neighbourhood. The present City housing administrator sees this ability in the housing estate still, today: "If one enters [the estate] from the outside, it is clearly evident that it possesses its own identity through its size alone". If the estate is a significant content is a significant content in the content in the content is a significant content in the conte

Solid basic material with a straightforward building standard

The housing development was constructed for worker families in an inexpensive, simple standard with shared bathrooms in the basement of each house, a drying room in the attic and usual "wooden crates". The choice of materials for interior decorating went to materials that were typical of the period such as wooden and/or parquet flooring in the rooms, ceramic flooring in the kitchens as well as panels along the walls. As early as in 2006, the architects commissioned to renew the buildings made the following statement regarding the still existing original interior design: "The apartments displayed a simple but very meticulous design." Considering the fact that today these features of very simple standard in houses built in the early 20th century, are interpreted as defects because they no longer meet the actual standards in floor area, domestic equipment and amenities, and insulation (Lawrence 1987), the Zurlinden renovation was exemplary because it was carried out in a soft way. Substandard conditions have been upgraded but still on a moderate and therefore affordable level.

¹¹ Quartierspiegel Sihlfeld 2006, p. 25

Robert Bischoff (1876-1920) and Hermann Weideli (1877-1964) owned a well lead office and were responsible for building the Café Odeon at Bellevue, among other things.

¹³ Interview Housing Administration der City of Zurich 2008, p.2.

¹⁴ Setting up common baths was common practice at the time in housing construction that was kept as low-priced as possible c/f, the original construction standard of the settlement industry I (BEP) as well as the Limmat I municipal housing development.

¹⁵ Housing politics of the City of Zurich 1957, p.53

¹⁶ c/f. Documentation, Zurlinden residential development, Stücheli Architects, Bauherrschaft City of Zurich, LV, Construction project, 17.5.2006, in: File, LV, p.6

Low rents

It was possible to take the lowest incomes into account when rent prices were calculated. "When splitting up the rent between the individual apartments, consideration was given to the fact that the less desirable apartments on the ground floors as well as those with less sunlight or space or accessories should be less expensive than the other apartments"¹⁷ The installation of baths in the apartments as well as the first major renovation only in 1962 led to an increase in building costs. Moderate rent increases were the consequence.

Extended cycles of renewal –long-time planning for a timeless, sturdy old building

The Zurlinden housing development only experienced very few interventions to renew the buildings in the 1960s before the first major maintenance work was carried out. From today's point of view, earlier practice was "rather more reserved with maintenance. Maintenance was oriented more to individual components or individual measures rather than to the whole package." The materials, which were initially chosen, proved to be sturdy. After forty years, in the years between 1959 and 1962, the first renovation of the façade was carried out as a result of "normal signs of wear and tear". "Further major expenditure" was then expected for subsequent years, and this became necessary as early as a year later: economically modernising the kitchens that were still in a simple style, by installing new kitchen cupboards as well as baths and new fireplaces had become unavoidable, since the communal baths were only seldom used by the tenants on account of their poor condition. The kitchen windows were to be fitted with double-glazing. The topic of balcony railing was mentioned for the first of many times in the administration's files as it had been described by the tenants as being too clear. Coverings were discussed.

In the period between 1960 and 2006 it was possible to reduce the regular renewal cycles²¹ without any serious consequences for the building materials, low costs for maintenance and repair made it possible to keep the unchanged rent low. In 1986 the building was added to the inventory of artistic and culturally historical objects to be protected of communal importance. The "gentle renewal, but nevertheless maintenance work" emerged as a strategy in these years.²² The survey of the situation after 80 years in 1996 confirmed "very sturdy basic material, well-preserved roofs but in need of renewal. The pipe work was in need of renewal.²³ The aim of

¹⁷ c/f AStRP (1906), 27.11.1918, in: city council resolutions, LV.

¹⁸ "The reserves have not been as rosy (...) as it actually could have been because of the housing development's age. The reason for this is that maintenance work or repair work used to only be carried out on an individual measure." c/f Interview Housing Administration City of Zurich o8.04.2009, p..6.

¹⁹ c/f AStRP (1004), 16.5.1952, Housing colony Zurlinden, housing renovation, in: City council resolutions, LV.

²⁰ c/f AStRP (1317), Housing colony Zurlinden, façade renovation block III, 19.5.1961, in: city council resolutions, LV; c/f. further 2931) façade renovation of blocks II [...], 5.11.1965, in: city council resolutions, LV.

²¹ 1977/79: Replacement of windows (without those in the stairwells)

²² c/f Interview Housing Administration City of Zurich o8.04.2009, p.5.

²³ c/f residential development Zurlindenstrasse, 10.1.1996, in: description of housing development, LV.

present attempts to renew the buildings is to generally bring together the life cycles of various components to an ideal point in time for repair without allowing high costs to incur when doing so. The Housing Administration City of Zurich works on the basis of long-term planning. It analyses which buildings are to be renewed in the future and which parts of the building can have their life cycle extended and be replaced at a later date during a comprehensive renewal process, if necessary. For Zurlinden it was: structural upgrading in 2006 to 2007 meant that central heating was installed in all apartments. The entire piping system was renewed. Apartments were combined in order to create 5 ½-room apartments. Converting apartments created four-room apartments. In addition, 15 apartments for people with disabilities were installed and linked to a lift. Maintaining the sturdy basic material and the straightforward design in favour of unchanged rent prices remain higher priority in the next decades even after the renewal than achieving a high level of upgrading.²⁴

Public participation in housing renewal and upgrading

A factor that is to be emphasised when assessing the longevity of the Zurlinden housing estate is the way in which the tenants' interests have been taken into consideration during renewal work.²⁵ This is surely a fact that is due to the situation that the administration is a non-profit working local authority, which integrated the involvement of the residents after the initiative of the tenants. The fact that the building administration treats the tenants with a deliberate sense of benevolence is an important component in the quality of the housing.²⁶ Offering the tenants the opportunity to become actively involved in designing his/her own living space increases his/her ties with the house, promotes identification and leads to the house being treated with care.²⁷ In between 1962 and 2006, only few necessary improvements were carried out

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²⁴ c/f Interview Housing Administration City of Zurich 08.04.2009, p.5-6. A three room apartment with approximately 70 square metres of living space cost on average 600 CHF before the renewal and 940 Swiss Francs afterwards. This is still well below the average monthly rent in Zurich with 1'236 CHF in 2006.

²⁵ This cooperation started with the initiative of the tenants who in an early stage started to communicate actively with the Housing Administration City of Zurich after the first official information. This action was seized by the administration and the communication process was structured and partly designed participatory: negotiation was possible in the case of the joining of apartments and the new furnishing of the kitchen.

²⁶ "We are a fairer landlord, as a local authority. For example, it takes a lot for a tenant to be evicted. More than with a private landlord." c/f Interview Housing Administration City of Zurich o8.04.2009, p. 12.

²⁷ Lawrence showed that there are factors which impinge upon daily life of residents, like the layout of rooms and the materials of furnishing, which can easily be overlooked by architects, planners and housing managers. Tenants cooperation and involvement in housing upgrading and renewal supports the long-time acceptance and appraisal of buildings (Lawrence 1987, chapter 8). For further information see the well known German handbook on participation in housing: K. Freisitzer, R.Koch, O. Uhl (1987), Mitbestimmung im Wohnbau: ein Handbuch, Wien: Picus. See also concepts of public participation in sustainable development of housing and/or in housing renovation which count residents` participation as a factor of successful action on the social level. c/f M. Hugentobler, M. Brändle-Ströh, Sustainable Urban Development: A conceptual Framework and its Application, Journal of Urban Technology, Vol 4, Nr. 2, 1997, S.85-99 bzw. M. Hugentobler, S. Gysi, Sustainable Urban Development – Learning from successful

as far as maintaining the apartments was concerned. There was potential for tenants to carry out adaptation work to the apartments themselves. The old building standard and rent prices, which remained low, compensated many tenants for having invested their own funds into the apartment.

The tenants' interest in maintaining the buildings was that high that a comprehensive and expensive plan to join more apartments together was rejected because of fear of increase of rents. Even in the early stages of the renewal project, the active tenants took the initiative to communicate between the administration and the tenants about the measures planned, so that it was in fact possible to carry out alterations to a certain extent to guarantee the costs, e.g. when converting the rooms in the corner flats or equipping the apartments with new kitchen furniture – a measure that surely satisfied both parties for a long period. The tenants did, not accept a new kitchen module developed by architects with a built-in refrigerator that was to be fitted into every kitchen in return for a small rent increase. For cost reasons and because the appearance did not appeal to them, the tenants decided not to accept the furniture offered, much to the astonishment of the administration. The administration presumed that the tenants identified so strongly with the "old" house and displayed resistance to the new kitchen furniture.

Maintaining the original material

Maintaining the original material had to be accounted for on the occasion of the last major renewal work in 2006.³¹ The winning architects intended to improve the floor plan in a way that was easy to implement and to add an element to accommodate all installations and electrical leads in a space-saving way between the kitchen and bathroom. In this way it was possible to bring the almost ninety-year-old housing development to an up-to-date technical level. The building material was hardly changed; the original building elements such as doors to rooms, wood wall panelling and certain flooring (parquet, stone) were maintained. Original details such as the small windows within a window³² in the kitchen or the two-tone paint on the kitch-

projects, in: Luise Nyström (ed.), City and Culture, Cultural Processes and Urban Sustainability, The Swedish Urban Environment Council, 1999.

²⁸ c/f Interview Housing Administration City of Zurich .04.2009, p.7.

²⁹ ibidem, p.4

³⁰ c/f dazu Ansätze der nachhaltigen Quartierentwicklung, die Partizipation und Mitwirken als einen Faktor für den Erfolg auf sozialer Ebene fassen. c/f Margrit Hugentobler, M. Brändle-Ströh, Sustainable Urban Development: A conceptual Framework and its Application, Journal of Urban Technology, Vol 4, Nr. 2, 1997, S.85-99 bzw. M. Hugentobler, S. Gysi, Sustainable Urban Development – Learning from successful projects, in: Luise Nyström (ed.), City and Culture, Cultural Processes and Urban Sustainability, The Swedish Urban Environment Council, 1999.

³¹In order to adhere to the characteristics of listed properties, no wooden court balconies were erected. c/f Mehr als Wohnen 2007, p. 52.

³² Läufterli, Swiss German for "small window in a window".

en walls were reconstructed.³³ However, signs of wear and tear on the floors had to be deliberately tolerated by the residents.

Limiting measures to what was absolutely vital

"Using the right amounts of the right materials (...), using necessary materials of good quality and not using anything that is unnecessary. That was the motto when the building took place. Limiting measures to what was absolutely vital." Limiting measures to what is absolutely vital was also the predominant principle in the renewal work that has taken place during the course of time. It was again the predominant principle when the last renewal work was carried out in 2006 – the housing development has come to be greatly appreciated, as the administration confirms: "The housing development is one of our top housing developments, due to the quality of living, the central urban position and the floor plans. And there is a high degree of appreciation at the moment since housing of 100 years ago is still quite popular, with fully wooden parquet flooring, built-in cupboards, both of which give the housing a certain standard." It is housing in a municipal older building in a perimeter block, with furnishings that correspond to today's comfort, even if kept simple, that is popular among tenants. This combination of typology, volume, flexible floor plans, materialisation, equipment and a location all create a "charisma" that such older buildings possess. It represents "a good address" for the administrator, which is to say also a good economic value.

Renting affordable apartments for different social groups

A change took place in the tenants' social status from the original group of worker families to the present group, which consists of freelance craftsmen, employees, students and workers. The proportion of families remained constantly high over the years. The interest in the apartments as well as in the whole estate have remained and have even increased with the development of the neighbourhood into an urban lifestyle neighbourhood for young families: "People have always been interested in these apartments. They are affordable. The rooms are well planned, the position is good, the apartments are family-friendly; they are surrounded by a park." Due to the fact that the landlord is the city, it acts in accordance with the costs-rent model; the rent prices of the apartments remain comparatively inexpensive. In the highly competitive Zurich housing market, the local authority plays an important balancing role, by

³³ c/f Documentation Zurlinden, Stücheli Architects, Bauherrschaft City of Zurich, Building project,

³⁴ c/f Interview Housing Administration City of Zurich o8.04.2009, p.1.

³⁵ "The charisma is probably more of the classically conservative nature", after the Administration, see Interview Housing Administration City of Zurich o8.04.2009, p.1.

³⁶ c/f Interview Housing Administration City of Zurich 08.04.2009, p.1

³⁷ ibidem, p.9

³⁸ The Zurich apartment vacancy rate was 0.07 % in 2010.

providing affordable living space. Property is rented out as per guidelines, which demand an occupation by a mixture of tenants from different social groups creating "coherence".39 In the municipally administrated housing estates this principle also lead to a change from the original majority of Swiss families, even into the 1960s, to an increased proportion of non-Swiss residents.⁴⁰ This development was in line with the general changes in the neighbourhood, where an increasing number of immigrant families were settling. It was precisely the tenants who had been living in the Zurlinden housing development for many years who have noticed this increase. A new group of tenants moved in during the 1990s after a period of high fluctuation, possibly caused by the simple standards and the fact that the buildings were in need of being renewed. Young, single, well-educated, childless freelance people and artists started to become increasingly interested in the traditional worker and family neighbourhood and the affordable apartments. The administration ascertained a further anticipated stage in the change in tenants during the complete renewal in 2006. The administration made it possible for the residents to remain in the building during the upgrading period. New tenants, predominantly young Swiss and foreign families, moved in. The rent conditions in the housing development are fundamentally unchanged and are viewed as an expression of appreciation by the tenants.⁴¹ During the analysis it became noticeable there were some very long tenancies, which had endured for 50 years or longer.

Needed adaptation strategies: consideration, community, creativity and flexibility Due to the fact that the flooring and wall surfaces and the doors were deliberately kept and the original coats of paint were maintained in the kitchen, the character of the old building remains constantly present as a framework in the life of the residents. The tenants' opinions as regards the present materialisation differ however. The simplicity and the high degree of sturdiness and durability of the materials used was the predominant principle governing the administration's selection. The age of the building material called for tenants to exercise a degree of creativity and tolerance when adapting to their apartments. Materialisation has an influence on living: The wall covering influences the way in which the individual rooms are furnished and also makes certain styles of furnishing or using the rooms impossible. All the tenants that were questioned reported that there are defects that need this tolerance, e.g. cracks in the flooring despite abrasion or noise being heard from other apartments. For example, the transmission of sound through the flooring is still a problem mentioned by tenants and administration, even after the renewal work. The wooden flooring as well as the floor coverings do not absorb sound adequately, which calls for the tenants to take appropriate measures. Two women whose apartments are situated one above the other have come to an agreement as far as the use of

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³⁹ c/f Interview Housing Administration City of Zurich o8.04.2009, p.10.

⁴⁰ ibidem , p. 10.

⁴¹ c/f Interview Housing Administration City of Zurich 08.04.2009,S. 11

the bedrooms is concerned: "I simply thought that when C. sleeps upstairs and I sleep down-stairs it is probably better because every footstep can be heard. Then C. from upstairs told me that her bedroom was back there and I thought I would have my bedroom under her bedroom." If the social network functions well, it is possible to develop bottom up adaptation strategies within the community of tenants. In this example it happened without any interference of the administration. The sense of good neighbourly relations within the house and the flexibility of individuals made it possible for the tenants to find joint solutions in a synchronised style of living.

The kitchen – simple but spacious heart of the apartment

When the tenants of many years were questioned the way that the spacious kitchen could be used, a kitchen-cum-living room was the most frequently mentioned feature of living quality in the past as well as today. 42 With an area of 11 sqm, these kitchens can be used in a variety of ways. According to the tenants questioned, the kitchens have become the place, which is mostly used for working and retreat; above all they often contain the favourite place, namely the kitchen table. The spatial structure of the room allows furnish the room in a flexible way. The kitchens receive light from the window and balcony door facing the street. The standard of kitchen and bathrooms remained simple; in the 1960s it was brought up to date accordingly, but continued to remain simple in comparison with the standard of private or cooperative housing developments. The kitchens were fitted with an old cooker, the sink, a draining board and merely a cupboard. Since only individual measures, for example replacing the antiquated kitchen cupboards or renewing the gas stoves and sinks had been carried out between 1962 and 1996, adapting the conditions to the present situation became urgent.⁴³ The poor heat given by the stoves was considered to be a compromise to living quality and it had to be compensated for by additional oil heaters or a more efficient heater at the tenants' own expense. After the renovation in 2006, this problem ceased to exist, much to the tenants' satisfaction.

Flexibility of use and personalisation of spaces

In the context of renovation of old housing stock, the sustained potential of the apartments is their inherent adaptability (Lawrence, 1987; Pikusa 1983) due to the arrangement of the rooms and the floor plan. ⁴⁴The dimensions and arrangement of the rooms allow using them in differ-

⁴² Interview II 2008, 00:06:49.02

⁴³ c/f Interview Housing Administration City of Zurich 08.04.2009,S.3 and Interview I 2008, 00:00:51.00 ⁴⁴ Old buildings from before the 1960ies often possess inherent adaptability. The apartment contains rooms, halls and passageways that can accommodate multipurpose domestic activities. The change of uses is possible. As Pikusa (1983, p. 62) states, "the inherent adaptability is built into the initial design, giving the occupant the choice through intentional ambiguity, within fixed physical constraints of a given plan...The plan characteristics make a wide range of interpretations possible and there is a minimum of design features that would inhibit particular choices of use."

ent ways. The living space can be used very flexibly because the living room and bedroom have the same area (approx. 16 sqm) and both look over the quiet inner courtyard. What was originally a child's bedroom, for example, became a spare room after the children had moved out, then a storage room. The bedroom and living room can be swapped round which means that the cumbersome furniture can be moved. Also the additional surfaces in the room, on which private objects can be placed, are another important spatial feature often mentioned by tenants. They are one feature to support the personalisation of spaces in the homes of the tenants. It is a specific to support the personalisation of spaces in the wooden windowsills.

Usable spatial structure: Size means sufficient space and storage space

The generous dimensions of the rooms and the well thought out floor plans still provide a high standard of living today. The quality is due to the size of the rooms – 14 to 16 sqm –, which allows them to be used flexibly. The most frequent types of apartment are 3-room apartments. Originally one room was equipped with a built-in cupboard, which was removed by the tenants in many apartments themselves, in order to e.g. create room for another child's bed. The 4-room apartments had a permanent built-in cupboard in the hallway. Families particularly appreciated the additional storage space.

The hallway: enough space for study plus boudoir

The small apartments with 2.5 rooms are entered through a hallway, which with its 9 sqm, has a sufficiently large area. This offers space for working and storage, receiving guests as well as providing space for relaxing. Along with the living room and kitchen, the "half-room" is very highly appreciated within the apartment. ⁴⁷ A window on the street side allows daylight to enter and looks out onto the quiet street. (picture 2) The direct adjacency to the semi-public space of the stairwell is not perceived as a disturbing or perturbing factor. A new robust apartment door with spy-hole that was installed after the renovation is a contributing factor to the feeling of security and privacy. It is to mention that on a social level, noise nuisances or safety worries are not relevant and are dealt with tolerance and trust within the group of residents who share the stairwell.

Doors and passageways in the apartment

Doors and passageways make it possible to connect rooms in many ways. The doors to the dayrooms tend to be left open to the hall and are even removed in the case of smaller rooms and

⁴⁵ Tour of apartment, I 2008, 00:07:41.01

⁴⁶ On the process of "home-making" has been carried out a high volume of research. For important literature see first of all Cooper Marcus, Clare (1995), House as a mirror of self: exploring the deeper meaning of home, Berkeley, Conari Press

⁴⁷ Interview I 2009, 00:24:39.03.

passageways.⁴⁸ The connecting doors from room to room are either completely closed or are used as a potential to create different uses of space during day and night.

The importance of semi-public spaces - Stairs and height

The fact that the apartments are not accessible by lift (with the only exception of ten wheel-chair-accessible apartments) was of no major consequence to the more elderly tenants. The distances from the entrance to the apartment compensate for the absence of this comfort. The stairs, as a semi-open collective space, are appreciated as a distance between the front door of the house and the private apartments. The stairwell provides a pleasant passageway abundant in daylight. An interesting feature is the way in which its open wooden staircase allows people to oversee the situation. The impression is striking: "Especially when you look upwards, this wood creates a warm feeling".⁴⁹ In the same way, many residents are prepared to accept using the stairs in return for being able to live high up and/or for being able to enjoy an unobstructed view from the window.⁵⁰ Particularly appreciated is the view over the trees, the street, as far as Idaplatz and the mountains.

Visual privacy - with a view

Pleasant views from the interior to the exterior are a joint factor in determining housing quality. The kitchens and balconies face the street and make it possible to look out. Living rooms and bedrooms are oriented towards the inner courtyard. Tenants prefer views out into the open, along the street and into the green area of the adjacent park since they can eliminate the proximity of the opposite side caused by living on a block. Where this does not succeed, for example in the part of the Zentralstrasse, it is seen as a drawback. Due to the fact that they face the street, the balconies do not offer sufficient protection of privacy. The complete renewal in 2006 did not bring any improvement here either. The problem of high visibility remained.

The socio-spatial relations - the block, the close surrounding and the green spaces At first sight, the Zurlinden housing estate gives the impression that it merges with the urban block structure. This interlocking of neighbourhood and building can also be analysed when the residents of the close neighbourhood likewise use the hidden inner courtyard of the housing estate as a green space and spend time there. Semi-public space and public space are limited – this not always without conflicts. The intrinsic perception of the housing estate knows the division of the social space into parts, i.e. it is not experienced as one integral unit, but rather as a perimeter block settlement with different entrances or even as a row of streets.

⁴⁸ Tour of apartment II 2009, 00:08:52.18.

⁴⁹ Tour of apartment I 2009, 00:39:46.02

⁵⁰ Interview I 2009, 00:06:22.23. and Interview II 2009, 00:34:34.16.

⁵¹ Interview I 2009, 00:27:08.22.

The neighbourly relations in the housing development were and are established when tenants move(d) in and usually continue for a long time. Most relations are established by way of the homogeneity of the domestic situation, e.g. families with kids. In this case, neighbourhoods extend beyond one's own block and house number or a shared stairwell 153. Until the 1980s, the mechanisms of inclusion into and exclusion from the socio-spatial structure of the Zurlinden housing estate were harsher than today. Up to this decade a homogenous group of residents consisting of predominantly Swiss families, mostly employed by the local authorities lived in the apartments. He was only after 1980s that new tenants with heterogenic lifestyles and household structures moved in.

Necessary changes in the use of the inner courtyards

As far as use of the interior courtyards is concerned, the change in which the exterior space is treated can be seen, when for example only a few years after the area had been created, playing football, and "mischief and all ways of using the courtyard areas that can lead to damage," were prohibited. As nearby Fritschiwiese did not offer any opportunities for games, children used the exterior spaces of the housing development intensively, until the ban was placed. Permission was given in 1957 and simple neighbourhood playgrounds were set up in the courtyards. In 1965, it was possible to carry out the first major renovation. The new landscaping work helped to significantly improve the barrack-like character of the outdoor areas of the housing estate. The measures included removing the spaces for hanging out washing, extending the lawn surfaces, transportable washing lines, asphalted paths and patches with small shrubs between the paths and the fronts of the buildings. The excavated material was used to create a green hill in the big courtyard; a sandpit, playing devices and benches were erected and form the simple equipment until today.

The immediate outdoor environment has a high impact on the quality of housing The intrinsic perception of the spatial structure of the residential surroundings and the housing development creates a differentiation in axes (the rows of streets) and areas (the public Fritschiwiese; the inner courtyards). According to their closeness to this axes and areas, different qualities in the blocks are perceived. "It is these classical borders; there are inner courtyards which emanate calmness and which form a contrast to the exterior. Nowadays too." But a location on the noisy street can be competed with by height.

Both central courtyards form the housing estate's semi-private exterior spaces, which are accessible to the local public, since the entrance gates are not locked during the day. They add to

⁵² The tenancies last on average 11 years and correspond to an average fluctuation rate of 0.075.

⁵³ Interview II 2009, 00:14:29.21.

⁵⁴ Interview II 2009, 00:04:11.14.

the high living quality in the housing development and "have the character of an oasis". 55 A nursery school and the crèche use the large children's playground in the courtyard. Residents in the adjacent block use the large courtyard in their leisure time, above all in the evening and in summer.⁵⁶ The public park of Fritschiwiese, which used to be an important place of relaxation outside the residents' own apartments and a substitute for absent private space outside, has now, along with the inner courtyards, become also a meeting place for many of the neighbourhood's residents. The interviewees feel the loss of the private intimacy of this space. They judge not only negatively. These changes bring also new cross-cultural encounters with them. Many of the elderly residents consider the Fritschiwiese now to be an "area for foreigners" and avoid it completely, in contrast to former times. One reason for this is the way that the social structure of the housing development's immediate environment has altered and this is viewed to be having become increasingly problematic since the 1990s.⁵⁷ A lot of measures have been carried out to make the immediate exterior areas offered up-to-date and attractive. Originally, residents only to walk along paths and sit on some of the benches used the Fritschiwiese. In 1962, a children's play ground was erected in the park and the slow transformation into a meeting place that was not only popular even beyond the neighbourhood, but also a "social burning point" began. The Fritschiwiese belongs to the Sihlfeld neighbourhood, which was declared an "improvement area" by the City of Zurich in 2003. A self-organised café as a youth club was a pilot project, which contributes to an improved social situation. It provides the only alternative to the missing communal space in the Zurlinden housing estate. A "scene café" opened in 2009 during the renovation and this café managed to attract clientele from nearby gentrified areas around Idaplatz.

Although some residents feel a strong sense of identification with the housing estate even as soon as they see the facades along the street, there are others (living in apartment to the noisy street) who need to leave the street and house behind them in order to feel at home in their flat.⁵⁸ The interviewees to describe the surrounding area used the term "Rural": "This is a proper residential neighbourhood. And the people in the street say "Hello" to each other like in the country side." The surrounding situation is appreciated as "urban". Few shopping facilities, restaurants and childcare facilities and schools always have been there within walking distance. In recent years the range of services increased, but frequently changed too.

Expert opinions and public esteem: exemplary function for housing construction

As far as style and type were concerned, the housing development was groundbreaking in the field of housing construction for the whole of the 1920s. In residential buildings built at a much

⁵⁸ Interview II 2009, 00:26:11.03.

⁵⁵ c/f Documentation of the municipal Zurlinden housing development, hg.v. LV der City of Zurich 2008 ⁵⁶ Interview II 2009, 00:13:26.02.

⁵⁷ "There are a great deal of unsavoury characters in Fritschistrasse, groups of youths and the likes. It has been bad in the last ten years". Interview II 2009, 00:06:00.03

later date, characteristic elements of the façade and floor plan are evident again. Apartment types have been copied frequently. The basic model of the Zurlinden estate is the four-storey semi-detached house with eight three-room apartments. A central hallway links all the rooms in these apartments; they were partly directly connected with each other for heating purposes. The stairwells are situated on the street side of the building, whereas the majority of the living rooms look over the inner courtyards. Noticeable characteristics are the front gardens and the fact that the buildings are not as deep as the neighbouring buildings. With its inclusion into communal property, the housing development achieved general public esteem. The appearance of the housing development was successfully improved thanks to renewal works. Consequently public perception returned.

Lessons to be learnt

The preceding paragraphs have examined exemplary the constructional and social conditions which contribute to enduring quality of a municipal rental multifamily housing estate in Zurich from post First world war period. The spatial, societal and temporal perspective presented enables us to deduct a series of key concepts when it comes to plan or renew housing units. As such key concepts for further planning of successful and affordable housing can be named the following, on three different levels of construction, management and the social level of community life within the house:

On the Construction level:

An architectural and constructional concept sensitive to the urban location;

A choice of solid materials of good quality and a simple but accurate standard;

The spatial organisation of apartments should allow flexibility of use through the concepts of adaptability⁶⁰

Size defined as sufficient space not sheer floor area;

Kitchen-cum-Living rooms are the heart of the apartment;

Storage space and additional deposit spaces;

Multiple connectivity with doors and passageways inside the apartment;

Good quality of semi-public spaces (e.g. sunlight in the stairwell, visual connectivity in the stairwell);

Construction and floor plan sensitive to visual and aural privacy;

Clear defined private, semi-public and public spaces in the immediate outdoor environment for multiple uses;

On the Management level following concepts have been found as crucial:

⁵⁹ c/f documentation of municipal residential housing stock, Zurlinden, ed. by Housing Administration City of Zurich 2008

⁶⁰ see design details also in Lawrence 1987; Hertzberger 1977; Henz 1995; Beisi 1994

A practice of renting out, which differentiates according to the qualities of the apartments; Renting out to different social groups;

Long-time planning strategies for repair and renovation by the management;

Client-oriented communication with the residents;

Personal contact with the residents in case of problems e.g. through a concierge on-site.

On the social level:

Tenants` participation in housing renewal;

Possibilities for tenants to personalize their home interiors when doing personal upgrading works; Enhancing social adaptation strategies to an old building: communication of neighbours, creativity and flexibility of use.

As the comparative view with other case studies in the mentioned research project shows, these key concepts can work as constant concepts that support a long time appraisal of the buildings. This could be of interest for those decision makers in the housing sector who have interest in long-term investment and long-term quality of their objects- in durability. Either non-profit investors like local authorities or housing cooperatives or even profit-oriented investors, like pension funds e.g., may consider these findings when deciding about destruction or renewal of some buildings. The perspective of the users is still one often to be forgotten in the process of decision- though it could paint a clearer picture of the social value of the housing estate, as we see is the case with neighbourly networks and arrangements for dealing with defects.

Conclusion

At the beginning of the new century we require new strategies of dealing with the buildings of the last hundred years. The buildings erected in the years of the post-war period are now being renewed and require new up-to-date measures. The problem cannot be solved by a policy of replacing buildings with new ones, even if in doing so ecological construction methods are used. It is still erecting buildings that consume the lion's share of resources worldwide: Sixty percent of the entire energy requirement is used to construct buildings. It is up to us to find strategies such as the intelligent use of resources, i.e. long-term continued use or reuse of existing buildings during a life cycle. The House-biographies generally could provide new insights into the different qualities that constitute existing (long-lasting) everyday-architecture housing. By exploring the user perspective in combination with the expert view and the public discourse, the aim of the now started new research project is to "de-ideologize" and rather point to specific potentials and problematic of large Swiss housing estates of the time period from 1950 to 1980.

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