Life transforms living transforms life

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TOPIC: TIME-BASED DWELLING

Abstract:
Life transforms living transforms life.
Current innovative housing projects reflect, in a certain way, the
strong interdependence between types of dwelling and the way
people live. In transition toward an information society, the general
conditions of living have decisively changed. Social and economic
change, altering time structures and increasing flexibility at work
have contributed to more heterogeneity, uncertainty and dynamic in
professional and private life, resulting in heterogeneous and transi-
tional living standards.
Today, the key impulse behind the new housing concepts evolves
rather from these social processes than from technical innovations.
Flexible and adaptable types of housing play a dominant role in the
built solutions. These concepts of housing offer a multitude of co-
existing options „as well as“ replacing the predetermined mutually
exclusive alternatives „either/or“ industrial society used to provide.
But the projects also show new ways of connecting factors of in-
determinateness with factors of determinateness: in the important
relationship between humans and their environment, anchorage is
provided through orientation and foundation in housing.

Key words:
“Determined indeterminateness”, Flexibility, Adaptability, Social
change, Individualization, Diversification, Orientation, Identification
**Intro**

The subject of dwelling is time-based as living needs change over time. In the wake of transition to an information society, the growing dynamics in living and working conditions intensify and accelerate this process of change in housing. In this context, flexibility concepts that open up individual options of use and cater to the growing diversity of user demands, gain in importance.

**Housing flexibility in the 20th century**

During the 20th century, flexibility concepts have been a periodically recurring influence for the production of housing in Europe. Thus, a wealth of experience is available today. Essential flexibility concepts had already been developed by the avant-garde of Classical Modernism. They were economically motivated and tried to apply the dynamic principle to housing. The idea of flexibility served primarily as a means to “liberate living” from outdated patterns of the bourgeois tradition. Yet, the avant-garde ideas about “individual development within the private sphere” only played a marginal role in the “mainstream” housing production of European industrial societies. Based on the ideas of the housing reformers of the Weimar Republic, housing for the masses became more and more associated with standardized family housing and floor plan patterns that strictly predetermined the specific function of each room.

The idea of flexibility was particularly contradictory to the political goals of homogeneity and stability, since living was seen as a dynamic process and, above all, aimed at opening up options for deviant and individual practice. Thus, not only were flexibility concepts not reflected in postindustrial society’s ideal patterns of housing and lifestyle, but they also contradicted the social ideals of an aspiring working and middle class until the 1960s.

Only as the postwar housing shortage had slowly decreased in the 1960s and brought forward a growing criticism towards the one-dimensional utilitarianism was the idea of flexibility as a counter-concept to predetermined housing rediscovered and reinterpreted in various ways.

Among a wide variety of conceptual approaches to flexibility, most of the projects that were actually built during the 1960s and 70s focused on innovations in structural design and on testing new types of production. This emphasis also becomes visible in the project mega city Wulfen (1974, architect Richard Dietrich) that was actually implemented. It was the only “framework of life” – as the numerous utopian flexible urban structures of that time were later called¹. (Picture 1) The design was based on industrially prefabricated modules that added up to an urban structure, where each type of module was regarded sufficient for every kind of urban function. During this period, subjective user demands and aspects of appropriation through architectural expression, were often neglected.

This is also true of many buildings that resulted from prominent German architectural competitions of the 1970s, such as “Elementa 72”, “Flexible Wohngrundrisse” and “Integra”. In 1977, Gunter Behnisch accordingly criticized the nondescript architectural appearance of many flexibility projects of the 1970s:

> It is remarkable that, at a point in time when all the talk in building is about flexibility and variability, the architectural expression is predominantly rigid. (…) Annoying design features are uniformity, ruthlessness, lack of imagination and individuality, immoderateness, caginess (…) Delightful are: individualism, sense of proportion, vitality, openness, smallness.²

In addition to occurring technical and market-related difficulties, the lack of complexity in the design concepts and the neglect of aesthetic dimensions finally led to severe criticism. The demolition of metacity Wulfen in 1988 became a...
symbol for the failure of technocratic flexibility approaches of the 1960s and 70s in Germany. After initial euphoria about the future perspectives of adaptable housing projects, users and planners had become noticeably disillusioned by the middle of the 1970s.

**New user demands in housing**

After a period of latency, the role of flexibility within innovative housing concepts has regained importance since the end of the 1980s. In contrast to the concepts of the 60s and 70s, the new models are strongly interrelated with the social, cultural and economic changes in postindustrial society. Growing prosperity, individualization and distinction of lifestyles due to the change in values, modified household and population structures as well as the changing world of employment, have all contributed to a qualitative shift in housing requirements. The trend is moving away from the conformity in housing and living patterns of an industrial society towards greater heterogeneity and instability in living arrangements.

The role model of social life, that determined how to live one's own life according to the preset specifications of traditional blueprints, is becoming obsolete.

Hence, new specific demands for adaptability in housing is developing within a broader class of the population, considerably broadening the range of already known adaptability motives (family cycle, economy, participation). Four main aspects of social change seem to particularly stimulate the evolution of new flexibility demands in housing. (Picture 2)

**Individualization and diversification**

The theorists of reflexive Modernism directly link the cultural turmoil of the 1960s, and with this the weakened importance of the categories of class, family and gender, to society's strive for individualization and diversification, processes that paved the way toward diversification in living arrangements and lifestyles. The discontinuity in the course of people's lives forms part of these developments. Nowadays, the course of life no longer follow a predictable line of development but are merely “patchworks” of different phases of education, employment, parental leave and domestic work, directly affecting housing and living needs. In addition, various research show that residents develop a growing desire for appropriation of space, self-representation and identification. The significance of housing then shifts from the realm of satisfying needs to an area for individual self-actualization. Furthermore, these developments are associated with processes of “de-sensualization of work and everyday life”. This means that, to a large extent, future spheres of living will have to compensate for the anonymity and the lack of public interaction in the world of employment. According to research results, providing options for identity formation, distinction and individual appropriation will become more relevant in the private sphere.

**New household arrangements**

The self-contained living pattern of nuclear families that served as the housing ideal of modern industrial societies is gradually losing importance. Household and living arrangements are fundamentally changing and diversifying. In addition, family households, singles, DINKS, single-parents and apartment shares play a major role. (Picture 3) Today, households are also subject to accelerated internal change that is reflected in the high divorce rates (36 % in Germany as of today). It directly influences the sphere of living. Moreover, household members live alongside each other rather than with each other in many cases:

Far more families are falling apart than the growing number of single households shown in the statistics. They even fall apart although their organizational form is still intact. The families of today are predominantly alliances of single dwellers. As soon as children learn how life functions today, they start to become their own focus of living.
Demographic change
Because of the predicted demographic development with a growing proportion of older people, providing housing for the elderly will become an important sector in housing. Due to varying experiences and ways of life as well as demands, future housing for older people will require multifarious sophisticated approaches. Thus, the specific demands in planning for older people can not easily be grasped and appear to extend beyond the political goals of functional improvement by making buildings handicapped accessible (DIN 18025) or of providing more care. The majority of people older than 65 years – more than 93% – still lives in their own “normal” apartment and wants to remain there. But most of these apartments may not be adequately adaptable to changes in household size or composition (family cycle, need for care, death of spouse). The consequences are financial burdens and difficulties in providing maintenance and care. Flexibility concepts for dividable apartments seem reasonable here. Another characteristic change when people become older is that the apartment becomes more important for the individual, particularly if health problems limit the scope of activity. Similar to extended intervals of unemployment, life for many older people narrows down to living. Multifunctional and alterable spatial configurations may help inhabitants to become more active and to avoid passive patterns of behavior. Apart from functional improvements, flexibility widens the resident’s imaginary living space and thus can counterwork the feeling of being trapped that often accompanies physical impairment in old age.

Changing world of employment
In the context of globalization of national economies, Germany and Europe is transforming into information and services societies with far-reaching consequences for private and public life. Existing labor conditions with predominantly full-time work prevalent in industrial society are being replaced by new job profiles and modified forms of employment. The introduction of “flexibility” to the labor market is characterized by the departure from “standard employment conditions” as well as “standard working hours”.

The development of the labor market is becoming more divided into seminal lines of business on the one hand and leading to a simultaneous reduction of jobs in industry and manufacturing on the other hand. Even though national productivity is increasing, less employees directly account for it. It is estimated that in 21st century Germany, it would be possible to maintain today’s national standard of economic productivity with only twenty per cent of the current work force.  

New conditions for living and housing arise due to the growth in unemployment (5 million or 12.1% as of January 2005) and an increase in the proportion of part-time jobs (14% in 1991 to 23% in 2004) – the amount of free time that individuals have at their disposal augments.

Being unemployed means that life involuntarily consists of living. The living space – hitherto a container filled with projections – suddenly appears as the confined, overly well-known space that life narrows down to. The entire range of personal demands of life have to be met within this space – the apartment becomes a prison for living expectations. 

In this context, new concepts of housing flexibility emerge. Particularly in phases of involuntary (partial) unemployment, apartments that can be subdivided into smaller units (cost reduction) can be crucial to prevent social isolation. But also new forms of working at home, such as long-distance learning, moonlighting, sporadic freelancing and a growing – cost-related – demand for home care call for new adaptable spatial solutions.

Furthermore, the increasing importance of home-telecommuting and phases of life-long-learning connect the private and professional sphere through new forms of spatiotemporal overlapping.

In Germany, 16.6% of all employees telecommuted in 2002, putting Germany in the upper intermediate position in the rankings within the EU. Information and communication technology (ICT) can meanwhile be considered as mass technology that is taken for granted within private living spaces. Adaptable structures are needed that respond to these new conditions and allow for combination and alternation of working and living.

New flexibility concepts

In this brief delineation of essential development tendencies, the wide variety and enormous potential for change in housing and living becomes visible. The new conditions and user demands are a challenge for today’s planning and extend the options for individual practices.

Due to the individual values of users, an increasing desire for personal influence and identification within the living sphere becomes evident. Contrary to the period of the 1960s and 70s, the present flexibility approaches acknowl-
edge these tendencies of individualization by following design approaches that focus on creating identity but also by carefully and precisely profiling the user's needs. In contrast to the idea of structural flexibility in the 1960s with its neutral frameworks or modules that provided an all-purpose structure for all kinds of uses, the new concepts focus on customization. Spatial openness and indeterminateness are combined with distinct profiling of specific functional and subjective user demands.

In the following, some examples of recent flexibility projects from German-speaking countries will be introduced. Even though the conceptual approaches differ, predominant tendencies in the development of flexible housing become visible.

Yet, the flexibility strategies applied here are in no case totally new. The projects show further developments and reinterpretations of flexibility concepts, most of which having already been developed during the Classical Modernism. The projects presented may be classified by the following scheme of methods of adaptability:

1. Internal adaptation

1.1 interpretable and sub dividable loft space
(Koelner Brett, Estradenhaeuser, Sargfabrik)
1.2 neutral-use spaces
(Hellmutstrasse, Vogelbach, projects of H. Wimmer)
1.3 modifiable interior walls
(Ingolstadt)
1.4 movable screens / partition wall
/projects of Helmut Wimmer, Estradenhauser
1.5 mobile fittings and multifunctional furniture
(Estradenhaus Nr. 55)
1.6 multifunctional threshold spaces
(Estradenhauser, Vogelbach)

2. External adaptation

2.1 combining and separating horizontal and vertical
(Hellmutstrasse)
2.2 adjustable floor plan size and extension
2.3 individual completion of the interior

Koelner Brett, b&k+ (Brandlhuber & Kniess), Cologne, Germany, 1999

Whereas during the 1960s and 70s Aldo Rossi theoretically argued that in the long run specific-use typologies are still open for various uses – a monastery for example can later accommodate a school or a hotel – the notion of “hybrid typology” is vastly different, as could be seen in the more recent projects. For instance, instead of converting office space into housing, living may look like working and working may even assume the character of living.

Analogies to this point of view can be found in the multifunctional loft building “Koelner Brett” in Cologne planned by b&k+ architekten in 1999. (Picture 6, 7)

The heterogeneous surroundings, a former commercial area in the district of Ehrenfeld, provided room for experimentation. Twelve nested housing and working units can be accessed directly on the ground floor and via two access balconies on the upper floors. The units are multifunctional and may accommodate living, working and recreational uses in various combinations. The two-storey units have been pre-equipped for the integration of a gallery. Living and working may take place on two different levels, either
separated or overlapping. The interior was only partially completed in order to leave room for individual preferences of residents but also to save costs. This concept aimed at applying quality features of old lofts on a new building.

In addition to the idea of hybrid typology, the housing units also reflect the idea of the “Einraumwohnung” (studio). This housing concept has archaic roots, but its dimensions of freedom and openness have been rediscovered during Modernism. Apart from the aesthetic and spatial aspects (“Raumplan”), the Einraumwohnung served as testing ground for compact overlapping of uses. It has to be stressed that the Einraumwohnung concept was thoroughly conceived for singles, a new modernist type of city dweller. In this spirit, Grete Schuette-Lihotzky developed a 27 square meter autonomous “housing unit for working women” that was presented during the Munich exhibition “Heim und Technik” in 1928. (Picture 8) The housing unit is walled by a layer of secondary functions that may alternately “invade” the center. During Modernism, the Einraumwohnung concept emphasized three main aspects: aesthetic, functional (overlap of uses), and social (small household sizes) considerations.


All of these aspects can also be found in the two one-room units that architect Wolfram Popp built in Berlin in 1998 and 2002 (Chorinerstrasse 55 and 56). (Picture 9, 10, 11, 12) Unlike the Koelner Brett, the two residential buildings are situated in the vivid urban neighborhood “Prenzlauer Berg”. On the project’s five upper floors, living spaces for singles, single-parent households, and couples are provided. This is a response to the German development of decreasing
household sizes. But even though the proportion of small households is growing (about 70% single/two-persons households as of today), the demand for small apartments is not necessarily boosting as well.17 Likewise, the project does not aim for minimization à la Grete Schuette-Lihotzky as the units with 79 and 108 square meters are rather spacious (in house number 56). Nevertheless, the concept of flexibility is based on the same principle: a linear zone of secondary functions that could be connected to the neutral central space of the unit. Both buildings are based on the concept of spatial interplay between primary and secondary functions. The overlap of functions is organized by a flexible wall with gill-like panels that could be rotated and moved (in house number 56). In the second part of the project, additional partition elements were introduced, serving as storage elements that allow for a short-term or long-term division of space.

In front of the glass façades, space is also zoned by two platforms that are connected with a balcony. These slightly elevated areas (36 cm) provide structure without interfering with the freedom of use. On the contrary, the architecture’s stimulative nature becomes most apparent in these threshold spaces. Nothing is predetermined or statically fixed. Spatial functions are defined through activity taking place. Threshold spaces allow for greater freedom of use and interpretation. Not only the threshold spaces but also the open central space of the two buildings features the stimulative nature, intensified by the size and proportion of the room. This space is only defined by the spatial use and overlapping of the secondary functions. With this new buildings, Wolfram Popp succeeds in introducing usage as a space-shaping factor into architecture; a quality that commonly prevails in old lofts. This principle of structuring space as an open field for individual practice and activity is a complete departure from predetermining housing design based on furniture footprints and movement patterns.

**Wohnbebauung Vogelbach, Michael Alder, Riehen, Switzerland, 1992**

The design of an “architecture of usage” is not confined to small households, as the three following examples from other German-speaking countries will demonstrate:

In order to increase flexibility, Michael Alder also introduced a threshold space into the collaboratively initiated housing concept “Wohnbebauung Vogelbach” of 1992. (Picture 13) Alder’s typological notion seems akin to Aldo Rossi’s concept of multifunctional adaptable typologies. Whereas Aldo Rossi solely applies the “neutrality of use” of ancient designs to his residential building “Gallaratese” (Milan 1970), Michael Alder’s new approach to housing actually makes use of entire ancient typologies.

We develop our buildings by looking back and capturing the essence of the typology.” The typology “allows for a series of metamorphosis following predetermined rules.18

Michael Alder’s concept of “traditional typologies” most visibly materializes in the floor plans of the project. His “map of typologies” is based on anonymous regional building types from Switzerland and Italy. The floor plans of the Vogelbach project are based on the abstracted ideal type of a rural, stretched-out “corridor house”. The floor plan con-

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17 [Picture 11. Stefan Meyer Architekturfotografie. c/o Siebzehn 04, Brunnenstr. 181, 10119 Berlin, stefan.meyer@archkom.net](http://www.archkom.net)

18 [Picture 12. Ibidem](http://www.archkom.net)

sists of a sequence of several neutral-use rooms along an exceptionally capacious threshold space that also functions as a hall. Due to its robustness, this building type principally qualifies in accommodating many different uses, ranging from family housing to apartment share, or office use to medical practice, as well as for various combinations. Yet, most of the units of the co-operative housing project are occupied by families today. The multifunctional hub space is variably used for working, playing and living.

**Subsidized housing projects, Helmut Wimmer, Vienna, Austria 1998**

Whereas Michael Alder’s design foresees neutral-use but spatially defined “permanent” structures, Helmut Wimmer clearly chose a different strategy for flexibility and short-term adaptability in his subsidized housing project Donaufelderstrasse Vienna, 1998 (Picture 14). Almost 1000 housing units have already been constructed. They contain flexible partitions that respond to various household arrangements and individual demands of household members, whether during the course of the day or for long-term modifications. Furthermore, a lot of Wimmer’s projects allow for individual adaptation of the façade, such as the 1996 project Grieshofgasse 12 in Vienna-Meidling.

Flexibility – namely permanent, useful flexibility – to us is a question of equivalence of rooms (in the sense of multifarious "connectivity") and a question of “wall” construction (in the sense of easy changeability).19

The flexibility concept of the different projects leads back to the same, extreme, underlying principle. The spatial setting may be modified by room-high movable screens; complete opening or partitioning of individual rooms is possible. Service units form the fixed elements of the floor plan. In contrast to Alder’s clear and stable spatial composition, these configurations resulting from the mutability of the basic element have an extraordinarily dynamic appearance. One may criticize the limited usability of the project’s individual zones: Extensive spaces have to be kept free of furniture, otherwise the flexible elements can not be altered.

**Hellmutstrasse, ADP, Zurich, Switzerland, 1991**

Whereas these two projects implement the concept of flexibility within the limit of floor plan borders, younger innovations focus on adjustable floor plan sizes. A sophisticated solution is the 1991 combination concept by the Architekten ADP for the Hellmutstrasse in Zurich. (Picture 15)

This adaptability model promotes, above all, external changes in apartment size by the alteration of apartment floor plans within the building. The sizes of the neutral-use housing units may be modified through bi-directional combination and partition of spaces. Thus, the structure allows for adaptation to the dynamic changes of household arrangements. However, this type of system only works well to a limited extent, since the change of one apartment has to correspond – conversely - to the neighbor’s demand. According to the architects, this problem can be mitigated by a close exchange of information within the housing cooperation, so that, for example, apartment exchange within the block could be organized.20
Likewise, the integrative housing project Miss Sargfabrik by BKK 3 Architekten (Vienna, 2000) was collaboratively initiated and implemented (responsible body: Verein fuer integrative Lebensgestaltung, Vienna). It comprises 39 housing units with 50 to 60 square meters and offers a variety of high quality community spaces. (Picture 16, 17)

Even though the housing units are rather small, they have been detailed as neutral-use, habitable sculptures. Differing spatial proportions, varying ceiling heights from 2.26 to 3.12 meters, and gradual levels of openness and privacy in relation to the southward access balcony all provide spatial structure, yet leave room for individual interpretation. The concept of movement was introduced into the architectural design and replaces traditional space-shaping factors. The spatial configuration is based on a choreographic diagram rather than on a static definition of path and space – a housing sculpture that stimulates activities and events. Its sculptural character evokes Claude Parent’s search for “vitalization of spaces”, which he saw created by the principle of slopes.

Slopes make a path an adventure trail. Architecture becomes the supporting ground for movement; movement is liberated from following fixed tracks; the choice of way is open. It is not a matter of channeling, but of distribution; not a matter of control, but of taking space.21 (Picture 18)
The expressive sculptural character of the project seems rather confined to exclusive villas.

Thus, BKK 3 succeeds in applying characteristic elements of modern villas to mass produced housing. In this way, the authentic design of the building and its sculptured spaces evoke the exclusive feel and the “landscape-like” spatial impression of a vanguard villa. The design guarantees a unique living experience for each resident. The building’s “branding” caters to the rising demand for identification and appropriation.

Summary

“Determined indeterminateness”

Even though the projects shown vary in concepts, they demonstrate predominant development tendencies and principles:

In recent housing innovations in German-speaking countries, openness, adaptability and individually interpretable spaces play an important role again – in spite of the failure of the models from the 1960s and 70s. In the wake of transition to an information society, the diversity, inconsistency, and dynamics of life are mirrored in concepts of housing that offer a multitude of coexisting options “as well as” replacing the predetermined mutually exclusive alternatives “either/or” industrial society used to provide. Yet, housing also acts as a calm and constant counterbalance to the external pressure to adjust to a more and more rapidly changing environment.

The projects show that in housing “determinateness” – anchorage in the close relationship between humans and their environment – can not only be achieved by persistent “familiar” designs but also in completely other ways. In the new concepts, the connection between factors of indeterminateness and factors of determinateness seems to contribute to the important orientation and foundation in housing.

subject – orientation and foundation within the group

One characteristic feature of the more recent flexibility concepts lies in their strong emphasis on specific lifestyles and user profiles that are interrelated with society’s tendencies toward individualization. Today, flexible spaces have developed away from the 1960s’ and 70s’ idea of one uniform and omnipotent module that fits all needs. Instead, sophisticated “profiling” for future residents has become an essential part of planning.

The special values and subjective needs of the users’ milieu respectively the collective become an essential parameter for planning. This growing interest in private joint building ventures is, to a certain extent, a reaction to the welfare state’s withdrawal from subsidizing housing. Indeed do the potential cost-saving effects make these models more and more popular. But above all, the option for individual influence on the apartment’s design, the housing environment and the mix of residents is appreciated. Flexibility projects such as the Hellmuthstrasse or the Sargfabrik would not function without the collaborative efforts of their residents. By targeting a specific group of users, the new models rely on the paradox of “customized flexibility”. The indeterminateness of the single housing units is not found within a random mix of residents within an “anonymous block of flats” but within a frame that is strongly determined by a certain milieu respectively the collective. This free choice of group membership can provide orientation and anchorage in housing without interfering too much with the individual’s living arrangements – each undetermined housing unit allows for very personal interpretation.

object – orientation through identification

In the Sargfabrik project, the collaborative background becomes most visible in the object’s design. The building is a materialized statement of the community spirit as well as a symbol for it.

Meanwhile, many other flexibility models also focus on overcoming much critised “uninspired design” of the models from the 1960s and 70s. Neutrality of use is no longer translated into facelessness.

The relationship between space and program regains its adequate complexity through the means of architecture. The new models embrace historic and imaginative dimensions; in the Sargfabrik project, the new spatial phenomenology even calls forth narrative potentials. The building’s defines an awareness for subjective experience, in which architectural expression is used to create identity. In this way, the design of the building stimulates the establishment of a relationship between user and object and thus provides foundation. But in spite of the determined overall building design, the single housing unit remains a flexible dynamic.
program – orientation through appropriation

Compared to earlier periods, the new concepts are based on a fundamental change of user perception. The user is stimulated to actively and individually conquer space instead of being conditioned in his behavior. Space is modulated to provide options for action and to encourage individual appropriation and spatial experience. In the relationship between subject, space and object, interaction and appropriation emerge, but are not predetermined by the built environment. Not only do the loft and cube like structures of the Estradenhauer and the “Koelner Brett” permit various options of action, they also offer enormous personal scope for the user. By individually shaping his environment, the user “takes possession” of it – personalization and appropriation are made possible.

Compared to many projects of the 1960s and 70s, the new projects reflect a more complex understanding of living as they combine multiple options of “determinateness” with “indeterminateness” of individual use.

translated from German by Karoline Brombach

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Notes
13 Bundesministerium für Wirtschaft und Technologie (Ed.): Informationsgesellschaft Deutschland. Innovation und Arbeitsplätze