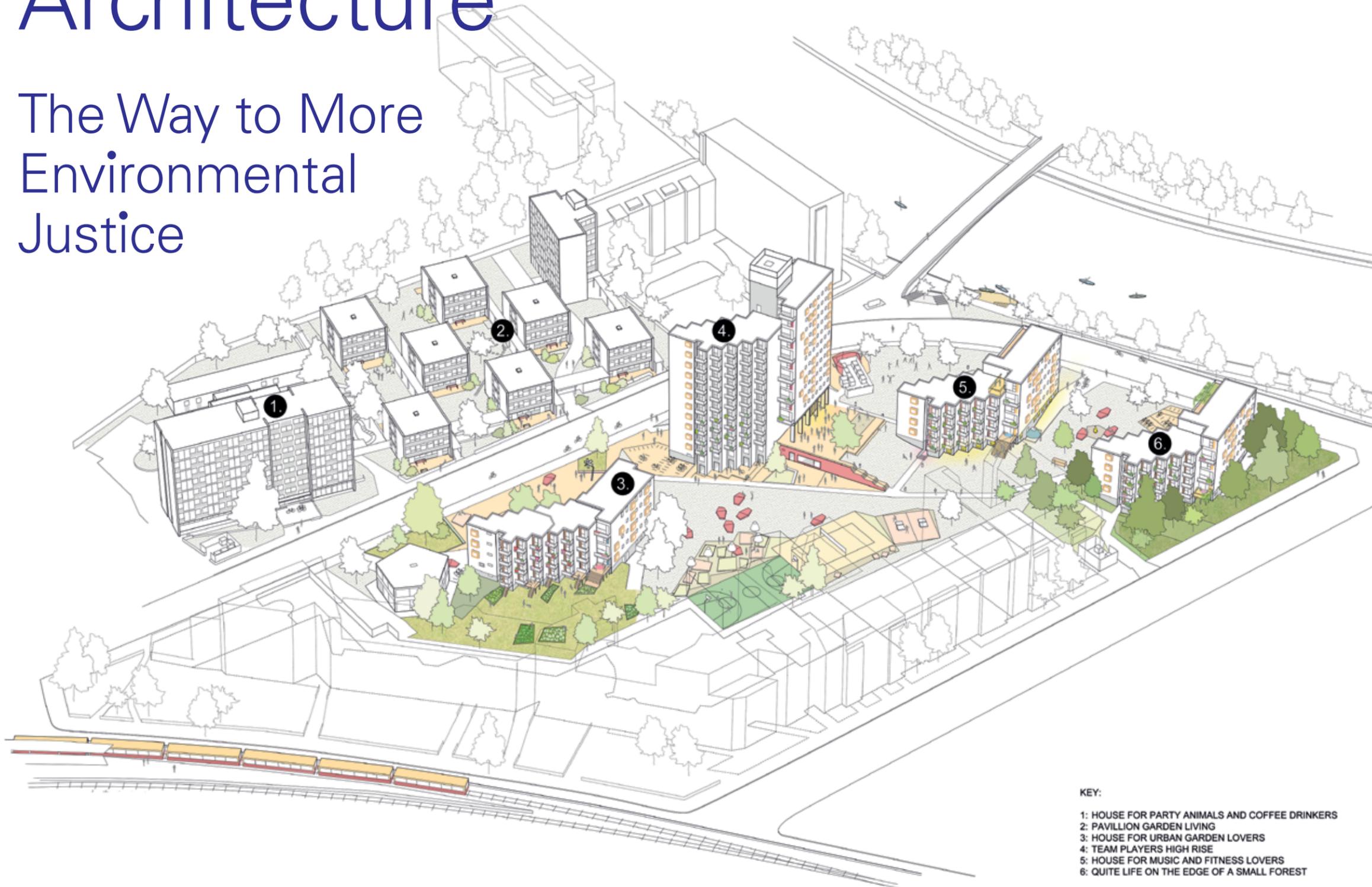


Participative Architecture

The Way to More Environmental Justice

Susanne Hofmann



STANDFIRSTTO COME:
Susanne Hofmann of Berlin-based architectural practice Die Baupiloten. Lorem ipsum dolor sit amet, an vis natum discere. No ridens inermis commune nam, nibh soleat viderer quo ei. No per graeci efficiantur, iuvaret dignissim liberavisse pro et, vel ut agam unum euripidis. Purto etiam invidunt cu usu, usu sumo cibo ex, ei iisque laoreet ius. Pri sensibus incorrupte ex, ex quo principes interpretaris, eos quem quaestio cu. Vel scaevola invidunt torquatos et, eam ut movet sanctus hendrerit.

Die Baupiloten, Sigmunds Hof student residence remodelling, Tiergarten, Berlin, begun 2007

Engaged to reimagine the site's masterplan and existing buildings, which date back to 1961, Die Baupiloten carried out an extensive participation exercise with Berlin students entitled 'Moving In Together', to understand their varying accommodation preferences. The results of the workshops were mapped and examined in order to develop new student housing typologies. The project is due for completion in 2020.

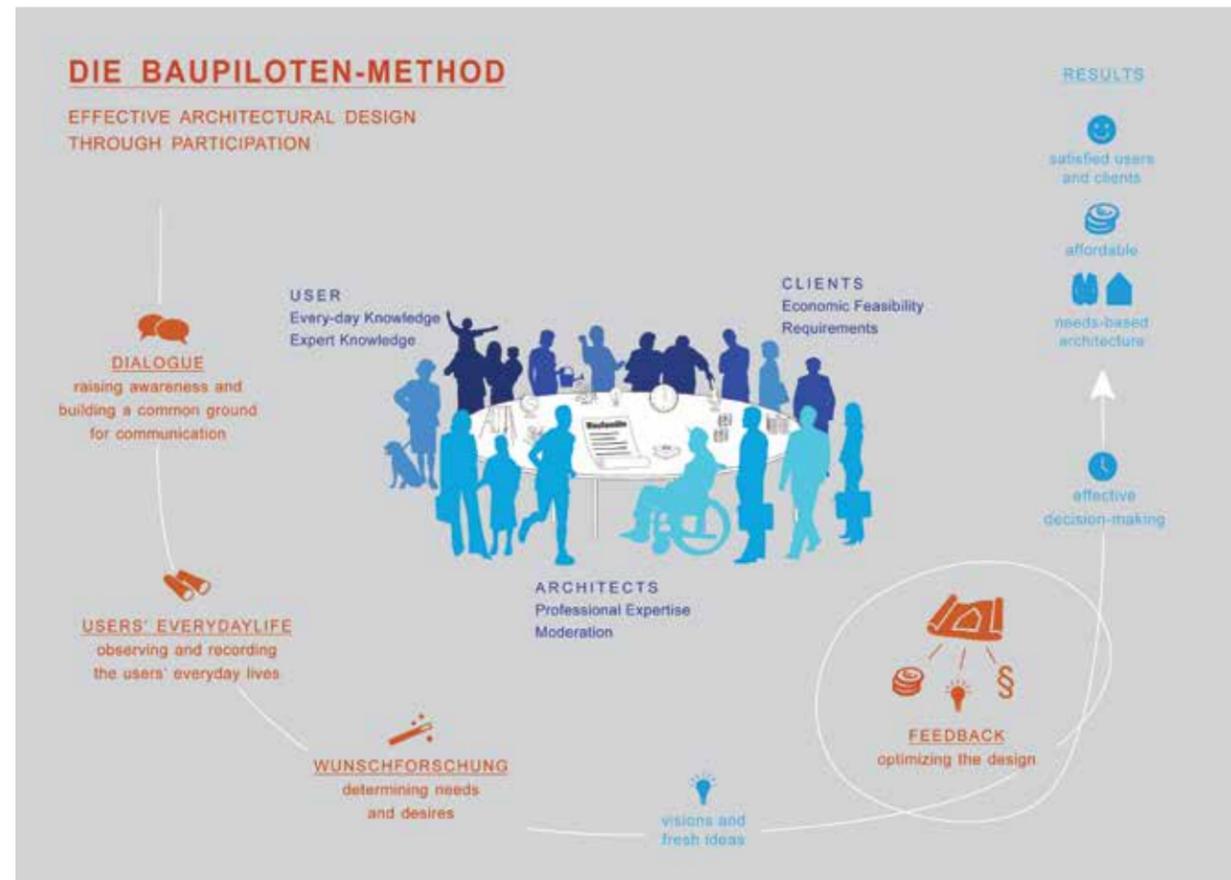
The modern city is a conjunction of the most diverse forces and interests, often conflicting with each other. To create an environment that is comfortable for everyone, one must be capable of negotiating and finding common ground. How, then, can communication between citizens, architects, authorities, business, social movements – everyone – be facilitated without a loss of quality?

A good participatory design strategy never encompasses merely an information campaign to appease potential opponents, but is instead a process of effective user participation. People themselves are experts on the worlds in which they live. They often know pretty well what they want or expect from their built environment. Architects must take this socially robust knowledge into account if a stronger identification of end users with their buildings and environment is to be achieved.¹ Furthermore, participatory design strategies and structures of open thinking support the realisation of innovative and economic solutions in all planning phases.

Die Baupiloten,
Die Baupiloten-Method - illustration
of participation methodology,
2016

Die Baupiloten have developed a design method that includes the participation and involvement of end users and other stakeholders in the process of design and planning. In order to engage with them in a dialogue, a common ground for communication is achieved through the discussion and definition of desired atmospheres.

Berlin-based architecture office Die Baupiloten has developed a wide range of participatory methods and tools for the involvement of users in order to develop effective, needs-oriented architecture. For each project the studio works on, its members engage in a dialogue with the client in a specific process which is roughly structured as: (1) team building; (2) end users' everyday life; (3) *Wunschforschung* (research of needs and desires); and (4) feedback. A careful balance of top-down and bottom-up strategies is always needed for the process to remain open and unbiased while at the same time target-oriented. The best scenario is when end users' and other stakeholders' involvement starts before the actual architectural design. It is crucial to bring together a 'project family' – a diverse range of stakeholders in which all the relevant groups are represented, from political groups and local authorities to future users. Die Baupiloten's methods encompass raising awareness and building a common ground for communication, observing and recording details of the eventual users' everyday lives, determining stakeholders' desires, needs and requirements, and finally ensuring their application. In this way the studio enters into a positive dialogue, thinking on equal terms and getting excited about new ideas together. The stakeholders gain empathy and understanding of each other and trust in the process. From there the studio can delve into developing the architectural concept.



Participation Triggers Invention

Die Baupiloten works with communities to develop briefs regarding desired spatial qualities and arrangements. The generic School Vision Game tool – which the practice devised in cooperation with the Hans Sauer Foundation, Munich – enables a school community to explore their complex and divergent needs and creatively negotiate and develop a shared pedagogical-spatial scenario, in 17 steps and 90 minutes. The participants are guided through the game with the assistance of action cards. This focuses the discussion on the essentials. Prejudice can be dissolved, and seeming discrepancies and conflicts transformed into synergetic potential. The results of the game offer an effective analysis of the future building's spatial organisation, including its atmospheric qualities.

By using the School Vision Game, Die Baupiloten were able to gain valuable insights for the Martin-Buber-Schule in Frankfurt am Main – a 1st- to 4th-grade elementary school. The school is to be extended to four forms for each grade and to all-day education. In 2017 the practice was asked to support the school community to develop their vision of their future school.

Three distinct groups were identified: teachers, parents and authorities. They worked closely and energetically in creating their 'perfect' learning landscape. The resulting discussion among all the stakeholders and later evaluation established their desired spatial-pedagogical scenario – that the school should be made of: a welcoming central meeting place; areas for contemplation and workshops; a versatile learning laboratory; a lively 'learning from each other' island; a creative crafting oasis; a tranquillity island; and a colourful wild meadow. These atmospheric-programmatic specifications are the basis for the next negotiating game, where the stakeholders decide on the kinds of spaces and their spatial relationship for the different grades. The school community was at first very surprised about their own innovative spatial-pedagogical outcome: 'Slowly but sustainably growing independently'.² Only the four groups of 1st grades keep the traditional protected environment of classrooms. The older the pupils get, the more their learning environment opens up. At 4th grade they will enjoy one big, carefully differentiated learning landscape with smaller protected retreats.

Participation Saves Time, Money and Nerves

The pedagogical-spatial concept was enriched by spatial qualities from further workshops with the stakeholders including also the pupils. Finally, the studio rearranged the requirements of the school's standard space programme to establish the 'perfect' learning landscape for the future school to be built or transformed. The results of this playful participatory process formed the basis of a detailed brief and associated spatial qualities requirements. The more precisely the school community can formulate their vision for the new school, the more precise the brief, the easier it is for the architects to design and plan, and for more accurate costs and timeframes to be estimated to create the desired learning environment.



Die Baupiloten,
School Vision Game,
2017

Since 2002 Die Baupiloten have developed participatory processes which avoid the need for the standard architectural drawings that laymen often struggle to understand. They involve workshops that use stories, collages, films, images, games and other media, with the architect functioning largely as a moderator, providing hints and ideas to engage with participants.



Die Baupiloten,
Heinrich Nordhoff High School remodelling,
Wolfsburg,
Germany,
2014

A series of participatory workshops helped define the requirements for the conversion and expansion of this school's cafeteria, as well as the two-storey atrium that serves as the senior class's study area and central lounge. The desired spatial zones were determined through various exercises, and during the feedback rounds the design ideas were given definitive form through the development of collages and models.

Participation Encourages Social Cohesion

After years of developing participative architecture for kindergartens and schools, in 2014 Die Baupiloten started to transfer these methods to communal housing. The Living and Residing as Seniors in Rural Areas project in the German district of Dötlingen builds on the innovative concept for living as seniors developed by Die Baupiloten's colleagues the Institut für Partizipatives Gestalten (Institute for Participative Design) in Oldenburg. There, Die Baupiloten were not only asked to develop the architectural strategy but to design the neighbourhood and its spaces.

Die Baupiloten,
Inter-generational housing,
Dötlingen,
Germany,
2014

Entitled 'Living and Residing as Seniors in Rural Areas', the project envisions a new inter-generational housing typology that encourages interaction between the inhabitants. Participatory processes were utilised to develop the ideas and responses.

A group of activists shared the desire to create an attractive neighbourly coexistence with seniors. Collaboratively Die Baupiloten developed a vision for future differentiated multigenerational residential typologies in a two-stage participation process. In the first *Wunschforschung* workshops, the potentials of exchange and sharing among the future users, as well as their desires and needs, were notes. During the feedback workshops, the individual residential modules and common areas were correlated, grouped and negotiated, taking into account the costs and rural context.

The resulting typologies will cover different housing needs – for example, family combo, mini family, senior shared apartment, sole compact and couple compact. There will also be a community building, as well as a small workshop/studio, a guest room etc which are assigned to particular groups of houses. Co-housing or communal living can offer significant savings through the specifically defined sharing of land and resources, personal contributions and services. A housing cooperative was founded to implement the project.



Participation Generates Architectural Quality

Die Baupiloten's extensive energy-efficient renovation of the listed Siegmunds Hof student housing in Berlin – built in 1961 to the designs of architects Peter Poelzig and Klaus Ernst – put the office in a position to implement user participation at the levels of urban and architectural as well as interior design. The design is driven by the students' visions of a healthy, environmentally conscious and at the same time vibrant cohabitation. It was informed by a preceding multifaceted participation process to research the students' housing requirements, including conducting 275 interviews, playing the planning game 'Negotiate Dream Space' but also spending an entire weekend in some of the existing Berlin student residences to thoroughly understand the strengths and weaknesses of student housing.

To ensure that the designs would correspond to the desires of the large representative user group, the proposals were presented in exhibits and game rooms were organised for feedback. Based on the resulting findings, the practice developed an environmentally conscious and communicative landscape with individual lifestyles which have been implemented gradually since 2007. Now the students enjoy planting and growing vegetables in the House for Urban Garden Lovers, and their kitchens are expanded as the 'heart' of the community's everyday life. Meanwhile, other students prefer the shared accommodation of the Quiet Life at the Edge of a Small Forest building for its tranquil architectural and surrounding atmosphere.

Participation is Architecture

Die Baupiloten have concluded from their various projects that the inclusion of the end user in the design process does not disturb their work as architects. On the contrary: the designer can acquire valuable local knowledge and a keen understanding of users' vision of how they want to live.

The architect's role must not be reduced to moderating or organising end users' wishes. Instead, architects need to augment their core competence – the production of space – with thorough assessment of needs and desires, and effective communication, to create high-quality architecture. ▽

Notes

1. On socially robust knowledge, see Helga Nowotny, Peter Scott and Michael Gibbons, *Re-Thinking Science: Knowledge and the Public in an Age of Uncertainty*, Polity (Cambridge), 2001.
2. Result of negotiation game, participatory process at Martin-Buber-Schule, Frankfurt am Main, 28 June 2017.

Die Baupiloten,
Siegmunds Hof student residence remodelling,
Tiergarten,
Berlin,
begun 2007

As part of their 2012 masterplan for the Siegmunds Hof student residence, Die Baupiloten coined the term 'Eco-pop' to refer to ecologically sustainable and energy-sound architecture which is neither boring nor reserved. The outdoor areas here are as important as the buildings themselves, providing a space for residents to socialise and linger, whether by playing sport, using the outdoor living room or engaging in gardening.

