The spectacular demonstrations held against the renovation project for the Stuttgart Central Station “Stuttgart 21” weren’t the first time in Germany it became clear that people not only want to have a say in the design of their built environment, but that they want to participate in it as well. Our democracy is experiencing change. Established political decision-making structures are being questioned, new participation processes in the design of public buildings are being tested, and a new design planning culture is being demanded. What does this mean for city planning, urban development, and architecture?

How should planners and architects respond to these challenges? What do they mean for the architect’s understanding of their professional role? Architects can no longer ignore these questions without being accused of arrogance. Whether or not they open up to a participatory process has become an existential question, because users’ knowledge about the use and experience of spaces offers fundamental insight for architects throughout the design process.

*But what does participation mean precisely? Does it waste or save time? Does it cost or save money? How does participation work? Where and when is the user involved? How do the desires of users become built spaces? What effect does participation have? Does it create user identification with the architecture? Does it create social cohesion? Who is afraid of participation?*

**ARCHITECTURE IS PARTICIPATION** gives possible answers to these questions. The book is divided into three parts: the introduction gives an overview of historical and current participative design strategies. Next, the design methods of Die Baupiloten architectural office are explained in the form of method modules presented as a kind of game manual. These modules cover a wide range of participation possibilities, which above all consist of communication about and through atmospheres. Finally, the international projects designed and built by Die Baupiloten office using these methods are presented. They show how sophisticated architecture, which is highly regarded by its users, can emerge through participation.

**ARCHITECTURE IS PARTICIPATION** addresses everyone who is situated in a democratic design and build culture and wants to know exactly what participation in architectural design and planning is all about.

Prof. Dr.-Ing. Susanne Hofmann,
Berlin, 2014
PARTICIPATION AND ARCHITECTURE
THE POTENTIAL OF A PARTICIPATORY DESIGN PROCESS

Democratic societies, which consist more and more of emancipated people, strongly demand participation in the design of their built environment. Participation is becoming increasingly relevant for the architectural design process, while at the same time, the role of the architect as an expert is being called into question. Architects frequently have to contend with allegations that their work is too detached from client and user expectations, and only follows their own principles. Whether architects isolate and thus expose themselves to accusations of arrogance and self-indulgence, or whether they open up to users in a participatory design process has become an existential question. For it is assumed that the quality of architecture is evaluated based on its sustainable usability and the degree of the user’s identification with the building, then high priority must be given to users’ participation in the design of their environment. Laypeople’s understanding of the use and experience of space presents the architect with a foundation of knowledge for the architectural design process. Therefore, the process should be built upon a viable communication between architect and users.

In the general practice of an architectural firm, working with users should be considered an essential part of the design investigations, and thus an extension of the architectural sphere of activity. Because this is not stipulated in the German Fee Structure for Architects and Engineers (HOAI), it is not accordingly remunerated, and must therefore be negotiated separately with the client. The German Federal Building Code only requires that people be informed about the project (Building Code § 3.1), but does not stipulate or plan for their participation. As a result, participation as a potential for better and more appropriate architecture is seldom used, or is performed in a casual and poorly planned manner, which only confirms prejudices regarding its ineffectiveness. Token participation, participation as an end in itself, participation not being economically viable—these are just some of the concerns surrounding participation processes. Not only do increasing protests against construction projects call for early user involvement, but well-planned participation can also contribute significantly to a high-quality built environment. Not only do increasing protests against construction projects call for early user involvement, but well-planned participation can also contribute significantly to a high-quality built environment.

User participation should be understood as part of the foundation of a design proposal, not as an irritation or “dilution” of the “pure” idea. It provides a robust foundation leading to a design that is highly relevant in terms of use, and to an increased sense of belonging. Significant conflicts that otherwise wouldn’t arise until construction or after completion of the building can be identified during the design stage. A key element is the established trust between user, client, and architect—whose relationships with each other should be evenly balanced, as in an equilateral triangle. A basic requirement here is the willingness of the client, the responsible body, or simply the investor to engage in participatory methods and consider user participation worthwhile. At the same time, users also need to believe in their own self-efficacy. Only when these conditions are met can the collaboration between the architect, user, and client be productive.

The precise exploration of users’ needs and ideas regarding the use of buildings, as well as effectual communication between laypeople and architects are important foundations for the design quality and sustainable use of buildings, which is expressed by the satisfaction of their users. The increased identification with the building contributes to a sense of well-being, which in the example of schools and kindergartens, results in an added pedagogical value. Identifying with the building can also improve social relations—for example, in housing. Through the increased user satisfaction with a building that responds to their demands, it can potentially lead to a more careful use of the space and thereby reduce repair and renovation costs. Hence, participation also has an economically relevant added value. Whether architects isolate and thus expose themselves to accusations of arrogance or whether they open up to users in a participatory design process may demand new production methods and new building aesthetics. In return, we can expect an architecture corresponding more to usage processes they participate in, and who is actually defined as a user determines the intensity and quality of the participation process. Several groups may use a public building in different ways, but they should all have a say when it comes to the future of their built environment. People’s often implicit knowledge about spatial qualities and their demands on the use and the experience of space is a social potential that must be taken into account in architecture. Participation is also a challenge for architects and their designs, because potential conflicts between stakeholders and their differing needs entail risk and uncertainty. Therefore, consensus—and the question of whether it is achievable or desirable—is a key issue in participation theories. The role the architect plays in a participatory design process is at issue, like that of the future user, because participation is still perceived by many architects and clients to be disruptive as well as too time-consuming and costly.

Consequently, participation is not least a challenge to the self-image of architects, because a participatory design and building process may demand new production methods and new building aesthetics. In return, we can expect an architecture corresponding more to usage requirements than conventional approaches based frequently on assumptions of usage. Even if the intention of the latter may seem considerate, the problem with this approach—apart from the danger of not considering the actual users’ interests—is that to the users it is always somewhat overbearing and confining, sometimes even aggressive. Essential here is a transparent and well-mediated design approach that makes the importance of the “people” (in the sense of the Austrian sociologist Helga Nowotny) visible in the design process.[2]
To discuss this in more detail, a glimpse into the history of participation and its potential is presented below, and the question of specific user and architectural knowledge and what successful communication in a participatory process looks like is examined more closely. In addition, the potential of a successful participatory process is presented in reference to Die Baupiloten’s method and realized projects, which works by employing communication about and through atmospheres.

PARTICIPATION IN THE ARCHITECTURAL DESIGN PROCESS
—A REVIEW

"The authority and the elitist status of the architect" are not going to last any longer. Already in the nineteen-sixties, this statement attested to a mindset that vehemently abandoned "aesthetic expert knowledge" and, among other things, led sociologist Lucius Burkhardt to call for the inclusion of the user in the planning processes.[4] In this context, some forty years later, British architect and author Jeremy Till talks about users’ desires encroaching upon the comfort zone of architects.[5] That they would adhere to an idealized—one might even say narrowed—idea of the principles of durability, utility, and beauty established by Vitruvius, which would be challenged in its purity by a participatory process. The principle of usefulness, at any rate, is undermined when the communication process between architect and client or users is dysfunctional, and architects believe they know what users need better than the users themselves. Therefore, Till calls for a credible integration of users’ requirements and their concerns.[6]

DESIGN TRANSPARENCY

The “Design Methods Movement” represents an important attempt to integrate participation in a systematic planning process. Founded in the US during the early nineteen-sixties in Berkeley, California—by the British and US-American architects Christopher Alexander, Bruce Archer, John Chris Jones, and German design theorist Horst Rittel, among others—the Design Methods Movement embraced the desire to integrate users’ needs in the design, and to make them transparent in a participatory process. Generally, the British—but also the German debate in the late nineteen-sixties and the early nineteen-seventies—was driven by the question of how a design methodology could be made accessible to laypeople through a process of systematization. The aim of a design striving for objectivity and high rationality of thought presented an opportunity to defy subjective, emotional, and intuitive factors in order to make the design process comprehensible to outsiders—in other words, the users. The representatives of the Design Methods Movement agreed that the opacity of the design process prevented participation. It was thought that using computers could give a larger group of participants direct influence on the design of their environment, or even enable them to design entire buildings. Till criticizes the approach of the Design Methods Movement, because he sees a fundamental contradiction between the seemingly authoritarian aesthetics and high economic and technical expense on the one hand, and the social reality on the other.[7] A transparent design process alone was not enough to enable laypeople or users to participate, since the drawings and technical information produced in a streamlined planning process are ultimately

In the current German debate, the participation of architectural laypeople in shaping their built environment is still limited to citizen participation in urban regeneration and development processes, such as public hearings.[3] Participation in the architectural design of their immediate environment often remains ignored. Architects barely participate in these debates, frequently retreating with their design expertise and limiting themselves to the moderation or organization of architectural processes and related decisions. Hence, design is often considered a field of subordinate aesthetic choices. But how can we design and build architecture that fulfills the Vitruvian principles of durability, utility, and beauty? A utility that is not only measured in terms of functionality, but also in terms of enhancing atmospheric qualities that support the use and give users the opportunity to identify with the architecture?

All of these issues raise specific questions for the design process:

1. How can the insights gained from user participation be integrated profitably in the architectural design process?
2. What form should the communication take between users, clients, and architects, so that this process is a productive one and architecture laypeople feel they can participate on equal terms?
3. And how can the design be realized so that the users’ wishes are really fulfilled—without substantial curtailments and despite other parameters, such as low construction budgets, building regulations, and mandatory standards?

YONA FRIEDMAN, 1974 MY GUIDE: HOW CITY DWELLERS CAN PLAN THEIR BUILDINGS AND CITIES THEMSELVES
A. ANOTHER STORY OF THE RESIDENTS OF ANOTHER NEW DISTRICT, B. EACH OF US HAD AN IDEA OF OUR OWN HOME, C. BUT OUR ARCHITECT DIDN’T EVEN LISTEN TO US, HE HAD STUDIED HOW THE “AVERAGE MAN” BEHAVES

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The workshops that take place at the beginning of the participatory design process use atmosphere to create a common language between the users and architect, and hence build trust and openness between them. Working with atmospheric representations (collages, models) and the verbal exchange regarding them, circumvents the established architectural codes of communication through technical drawings, plans, and models. Thus, it is possible to communicate more directly about architecture and its real and desired qualities. Using images and imagination, ideas about such qualities can be developed further, and eventually form the basis for a viable design concept that the user can identify with.

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Different tools may be used to attune users to the participatory design process. For example, in the first workshop, the atmosphere of the location and perception of spatial qualities without involving specific design decisions. It’s about the impression of locations, how they are perceived or the memory of them, with the aim of gathering users’ first impressions, facilitating communication between them and the architect, and above all, creating a foundation of trust.

USERS’ EVERYDAY LIFE METHOD MODULES

The observation, or rather, monitoring and documenting of the users’ daily routines, forms the second important category of method modules for the participatory design process. One option, for instance, is to accompany the users in their everyday life, and to record different events in order to draw conclusions with reference to the architecture. This might entail moving into a residential complex that is to be renovated, or long-term monitoring of a group of users’ everyday lives, by presenting and documenting their favorite locations and meeting places themselves. Another method is to not only accompany or interview the users, but also invite them to reflect on their everyday life, by presenting and documenting their favorite locations and meeting places themselves.

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WUNSCHFORSCHUNG METHOD MODULES

The Wunschforschung method modules in the participatory design process aim at collectively developing a story—a narrative that acts as the conceptual basis of the architecture. The workshops on users’ desires or needs offer a multitude of options regarding media and method, and can be employed early in the design process, at the feedback stage, or as last-minute workshops. The aim is to learn more about the desires of users regarding their future living, learning, or working environment. The wishes are conveyed by means of creative processes, and are less concerned with requirements reduced purely to function, but instead focus on the atmospheric qualities. For many of these workshops, specific games are created, with which the users’ wishes for certain atmospheres are developed, collated, and spatially assigned.
ARCHITECTURE IS PARTICIPATION — CONCLUSION

The perception of spatial atmospheres and their analysis and communication, are closely interrelated. At times, we only become aware of them when we try to identify and communicate them, in other words, when we talk or write about them, or convey them through other media. Architects can take advantage of this by consciously employing atmospheres in the design process, by defining the existing atmospheres in the places and spaces which they design for, and by being aware of what atmospheric changes they plan to implement in their projects. Atmospheres can be formulated, designed, and created. We were able to try out and redevelop different methods in numerous participatory design processes, which function at various levels of communication—from pure text and images, to atmospherically tangible environments. The experience of spatial atmospheres does not happen only in physical spaces, or architecture; it can also be created in our imagination with the aid of words, pictures, music, models, and spatial installations. This is essential to the work of architects, who can use the ability to design and build atmospheric spaces. But they are not the only ones who possess, or are able to develop, this type of imaginativeness. In this respect, they are thinking ahead; they are “pre-sensors” for the use of spaces in place of the user, who not only has to take possession of the product, but also empathize and identify with it. In the words of Walter Benjamin, “buildings are appropriated in a twofold manner: by use and perception—or rather by touch and sight.”[69]

Users are experts in this sense. Even if they haven’t studied architecture and aren’t immediately aware of it, they understand which kind of environments they need in life in its various facets; during work, school, kindergarten, and in other circumstances. They are well-equipped to formulate ideas about a desirable world, determine its atmosphere, and exchange ideas, in particular with an architect. The architect can use this to their advantage, by developing a system of communication built on the comparison of different atmospheres.

The age of users, their social status and cultural background only play a role in how the method modules are set and differentiated. The methods must be adapted to the specific situation; any attempt to develop a panacea will fail. Important elements of this communication are, on the one hand, the abstraction of imagined atmospheric worlds, and, on the other hand, specific desires related to atmospheres. A narrative is compiled, leading to the development of an architectural concept: form follows fiction. From this, the architects are able to arrive at complex and detailed resolutions from which programmatic requirements can be integrated into the project. The fiction developed with the users—with the narratives based on their desires condensed within—as well as the resulting concept, form the backbone of the design which, in consequence, is able to adapt to new requirements without disappointing the users. Feedback and evaluations of various projects have confirmed the success of this method: the users’ degree of identification with the finished building is high.

In the context of my professional practice and recently concluded study reform project Die Baupiloten, I have developed a participatory design process that gives the user and the client the opportunity to develop and communicate their own ideas about the future architecture and, in particular, about its atmospheres. Imaginary worlds are invented in a deliberately playful manner; they transcend everyday life and the actual situation, and they are recorded in various collages, models, narratives, or three-dimensional installations. It is a sensitive dialogue between the users and the architect; the latter’s response based on their expertise and competence in spatial design on an atmospheric level. A prerequisite for a constructive dialogue of this kind is a foundation of trust between the two, where each respects the others particular knowledge, expertise, and respective roles. Atmosphere as a participatory design strategy is not a nightmare, it has incredible potential for the productive and meaningful participation of everyone involved.

Posters with concept designs for different locations in Brunnenkiez were put up for discussion during a walking tour of the neighborhood. This enabled the students to see how each concept was received by the residents.
METHODS AND INSTRUCTIONS

The method modules presented here—each of which is coupled with an example workshop carried out by Die Bauplotten—are divided into four areas that build on or complement each other:

A1 – A5 ATMOSPHERES
U1 – U5 USERS’ EVERYDAY LIFE
W1 – W9 WUNSCHFORSCHUNG
F1 – F8 FEEDBACK

Their overriding importance for the design process is described in detail in the first part of the book. They can be combined, and some can also be easily modified for use in other stages. The workshops can be carried out in several small groups or rounds. In most cases, the architect acts as the moderator, who actively gathers the emerging suggestions and ideas, and feeds them back into the process. It is also important that they carefully record the resulting ideas, expressed wishes, and developing stories in order to make as thorough an evaluation as possible. This can be done qualitatively and/or quantitatively. An interpretative-explicative evaluation by means of an exhibition can also be useful.

The “Atmosphere as a Participatory Design Strategy” method modules are varied and diverse, because different kinds of participation are suitable for different users, different locations, and different projects. The type of materials and means used and produced (collages, movies, pictures, games, etc.) must also be adapted to suit the participants and the project. The choice of method modules also depends on the pre-determined time frame and the available budget.

The pictograms to the right clearly illustrate for which participants and target group the workshops are recommended, and which material should be used or prepared. For some workshops, “Wunschpostkarten” A5, questionnaires F6, or planning games W7–W9, F7 were developed, and their production is explained in the conclusion of this methods chapter. The pictograms provide information on the occupational structure of the workshops, such as their recommended size, their possible linkage with a design stage according to the German fee structure for architects (HÖM), and their average duration.

The method modules are to be understood as suggestions, which can be adapted and further developed as you wish for your own projects.

Have fun and gain lots of insight!

| ADULTS | Many of the workshops developed for young people are suitable for adults. It should be established beforehand if the participants are interested in craft/creative workshops, or whether a more reserved, challenging alternative is preferred. |
| YOUNG PEOPLE | In projects with youth, implementation as part of a live project at a university is very valuable. Students are at a similar age, and thus share similar experiences. |
| CHILDREN FROM 4Y, 6Y, 8Y | The workshops are differentiated according to age groups: from four, six, and eight years old. In order to express themselves, some young children prefer having somebody they know present, as this gives them a feeling of security. |
| NOTEPAPER, PEN | Taking notes during the workshops is recommended. Just as interesting as the individual work results are the many comments and stories that are provided or told during the process. |
| CAMERA | Like the written record, the photographic documentation is very insightful and important for the evaluation. The results from the planning games should always be photographed from above, from the bird’s-eye view, so to speak. |
| VISUAL MATERIAL | Images with strong spatial effects thematically appropriate to the workshops and from the non-architectural world, preferably in A4 size. Good sources are nature magazines or the Internet. |
| MATERIALS | Ordinary materials such as glue, scissors and cardboard. Simple modeling materials such as colored or reflective acrylic, sponges, wooden sticks, cotton balls, string, and beads. Found materials, such as bottle caps, corks, fabric, scraps, etc. |
| SPECIAL MATERIALS | Materials that have to be prepared or may need to be customized—such as scale figures, architectural models and modules, specific (model) building materials—or things that have to be specially obtained (e.g., postcards). |
| GAME SET | The production of the game sets is described on p. 110. The game sets can be specified according to the project and the location. Custom developed and produced games can be ordered from Die Bauplotten. |
| DIE BAUPLOTE STUDY REFORM PROJECT, TU BERN | The number of students involved in a study project, in which more aspects of the design can be explored in a large-scale needs and devises research project and therefore more expressions can be collected and more insight gained. Brackets indicate cooperation with a university other than the TU Berlin. |
| GROUP SIZE | A lot of individual work can also be carried out diacronically in pairs. For the planning games and some of the workshops, specific group sizes per moderator are recommended. In larger groups, more rounds and/or necessary more game sets should be made available. |
| MODERATOR/ARCHITECT | The moderator is usually the project architect. Through the participation, they get a very good feeling for the project user group, and thus important insight for a holistic design process. |
| MAXIMUM NUMBER OF PARTICIPANTS | Workshops ranging in size from twelve to twenty people have proved to be very feasible. With more than twenty people, a second moderator is usually recommended. Planning games are most productive with one moderator per team of about six participants. |
| DESIGN STAGE ACCORDING TO HOAI | The workshop modules are assigned a specific design stage, and within these stages the different modules can be combined. In addition, some can be lightly modified for use in other stages. |
| TIME FRAME | All time designations recommend an average time frame in a group of a maximum of twenty participants with no preparation time. This includes the entire course of the workshop, which can be spread over several days as individual steps if required. |
MOVE IN

SLIP INTO THE ROLE OF THE USER AND EXPERIENCE THEIR EVERYDAY LIFE

MOVE IN is the architect’s experience of the users’ everyday lives, which is more in-depth than a mere observation. The aim is to develop personal perceptions of the users’ everyday life and activities, and to identify, set aside, or prevent stereotypes from emerging in the first place.

PREPARE: Select an appropriate residence.

SLIP INTO THE ROLE OF THE USER: For one day and one night, move into the residence to be examined, and live according to the everyday rituals of the user: use all areas and test desired activities such as cooking, relaxing, working, et cetera. If roommates share the living space, then in the ideal situation they will be present.

RECORD EXPERIENCE: The entire daily routine should be logged with a written and photographic record: where does one linger with others and where are the private areas? Which activities does one choose for which location? How does one move through the building? Record other spatial and building relevant use criteria, strengths and weaknesses.

CREATE RESIDENCE DIARY: Compile the experiences on several notecards. You should categorize the information. For example: 1. objective data such as size, rooms, and number of residents; 2. daily routine and noteworthy events; 3. description of strengths and weaknesses, sketches, and photographs.

The architect can better comprehend the user’s way of life and specific appropriation of space than with a mere observation or through hypothetical considerations about functional processes. Different activities as yet unknown to the architect are revealed and can be considered in the planning, just as incorrect usage assumptions can be revised in a timely manner.

STUDENT RESIDENCE SIEGMUNDS HOF As part of the design seminar “Move in Together 2010,” the Die Baupiloten students lived for a weekend in different student residences around Berlin and recorded their experiences in the form of notecards with photos of special moments. The so-called residence diary clearly visualized the character, strengths, and weaknesses of the residence and sharpened the design decisions (J. Lehrer).
NEGOTIATE DREAM SPACE

NEGOTIATE DREAM SPACE is a board game with activity and atmosphere cards. The aim is to determine the user groups’ desires, needs, and functional requirements for the design process.

PREPARE: Create or order the Negotiate Dream Space Game Set (P. 115). Produce and distribute promotional material (invitation, flyers or posters) and organize game evenings.

INTRODUCE: Introduce the context of the project and yourself. Explain the rules of the game.

DETERMINE ACTIVITIES AND ATMOSPHERES: Select a maximum of fifteen activity cards and place them on the game board. The more the activities have to do with each other, the closer they are placed to each other, or connect to form activity islands. Choose desirable atmosphere cards for the activity islands and arrange them on the game board. If necessary, label and add a blank card with an additional desired activity and/or atmosphere.

SET SPATIAL RELATIONSHIPS: Test and discuss different combinations and arrangements of activity islands. Activity islands that are placed directly next to each other have a direct spatial relationship. Bridges express an indirect spatial relationship.

PROGRAM USER REQUIREMENTS: Add specific requirements to the activity island if necessary—e.g., accessibility or, for a school, ‘chalk and talk’ as opposed to “individualized learning.” Determine spatial hierarchies with the priority discs. If needed, it can be helpful to specify certain times of the day or year for the scenarios.

REVIEW DREAM SPACE MAP: Are spatial programmatic relationships and the atmospheric qualities as desired?Was the negotiation successful and do the players identify with the results? Do not accept compromises.

NAME DREAM SPACE MAP: Find a descriptive, stimulating title for the negotiated space.

PHOTOGRAPH DREAM SPACE MAP: Photograph the completed board game from an aerial perspective.

DISCUSS: Comparatively discuss the different resulting game boards and debate their strengths and weaknesses.

TIP: Depending on the building typology—e.g., residential buildings—it may be useful to let the users play alone in the first round, in order to gain a more nuanced desire and needs spectrum.

The resulting dream space maps represent the spatial relationship between activities (at certain times of the day or year) superimposed with atmospheric spatial qualities. Thus, they offer an in-depth spatial needs analysis, which combines the atmospheric desires of the user with functions and can be used for decision-making in the design process.

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DISCUSS, NEGOTIATE AND DEVELOP DREAM SPACES AND THE ATMOSPHERES, SPATIAL RELATIONSHIPS AND SHARING OF ACTIVITIES, USING THE NEGOTIATE DREAM SPACE BOARD GAME

LIVING AND RESIDING AS SENIORS IN RURAL AREAS in the board game, each of the three stakeholders negotiated a future life in the country. Initially, each player developed a vision for their personal area, and then they negotiated the communal facilities. For all of them, there was both a great need for privacy, as well as a willingness for neighborly interaction—such as through the connection of two units by a common area for communal cooking and eating.
TEST SCENARIOS

USE ARCHITECTURAL MODELS, GAME MODULES, AND SCALE FIGURES TO CREATE AND REVIEW DIFFERENT SCENARIOS FOR THE DESIGN PROPOSAL

**TEST SCENARIOS** is an exploration (building) game that uses spatial game modules in a specific architectural scale. The aim is to enable users to adjust their needs and desires within the future built environment, using these building blocks, which transfer easily into the design process because of their scale.

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**INTRO**

PREPARE: Architectural model 1:20, game modules 1:20, model figures 1:20 (preferably, the participants themselves). For larger projects, however, a smaller scale may be used.

PRESENT MODEL: Present the architectural model and individual game modules in terms of their functional and atmospheric qualities. Spread out the scale figures and other model-building material (e.g., reflective materials, colored acetate, colored sponges).

EXPERIMENT WITH MODULES: Spin, turn upside down, exchange, supplement, or combine game modules in new ways; illuminate with different light sources and experiment with shadows, et cetera. They can be separated from the architectural model and arranged differently; additional game modules can be added.

ACT OUT SCENARIOS: Test and record quick variations for evaluation later; where is the atmospheric focus of the scenarios? Is there an inviting, cozy, and familiar mood created, or is the character of the scenario for example cool, minimal, or industrial?

INHABIT SCENARIOS: Place scale model figures in the composite model. How many fit? And during which activity? Act out usage processes.

REVIEW SCENARIOS: Do the main functions, activities, and atmospheric qualities work together? Are the proportions, sequencing, and zoning of the resulting spaces correct? Is the effect a desirable one? What is missing?

DESCRIBE AND NAME SCENARIOS: Put the alternative scenarios into words and identify their differences, similarities, and emphases; consider the extent to which the different model scenarios could be combined. Is there a hierarchy among the favorites? Should some be excluded? After that, find a stimulating title.

LINK STORIES: Think of some conceptual stories to link the favorite scenarios.

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**DESIGN**

The desires of the user and the concrete design model are synchronized, in order for the user’s needs to integrate better into the ongoing design process. In addition, the emphasized haptic qualities of the produced scenarios engage the user with the more physical and intuitive aspects of the design. Good guiding principles and character can be developed here for the design proposal.

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LE BUFFET KIDS RESTAURANT From the space modules with reflective elements, colored acetate, and material samples derived from their world of desires W2, the children assembled their own play area for the restaurant. They examined the potential of the modules and their physical and visual relationships with each other and then began to put it all together based on their own desires and imagination, experimenting with light and material. “We would like to look out from high above.” (Josefine, 7Y and Laura, 8Y)
The development of ten hectares of woodland close to the school, kindergarten, and sports facilities of the municipality Dötlingen will take local demographic changes into consideration: for neighborly coexistence with seniors, housing groups with different multigenerational residential typologies are being developed. The individual housing types will cover different housing needs—for example, “Family Combo,” “Mini Family,” “Senior Shared Apartment,” “Sole Compact,” and a “Couple Compact.” There will also be a neighborhood building with a nursing facility, a community kitchen, and cultural offers for the entire community, as well as common rooms, which are assigned to particular groups of houses (small workshop/studio, guest room, etc.).

CEO Jascha Rohr, Institute for Participatory Design: “After our development of an innovative concept for living as seniors, it was an important step for the group to develop and discuss—with the help of Die Baupiloten workshops—the atmosphere and actual life in the future buildings. That really inspired them and brought the planning process forward.”
The town square in front of the “House for Urban Garden Lovers” serves as a focal point for the complex, and opens up the residence to the rest of the city. “Scholle” seats invite visitors to linger and offer the potential to hold events in the central location. The outdoor living room and the sports court are located at the quiet rear of the building. Large, elongated “boulder” seating and wooden terraces are used by both sun worshippers and sports lovers. Oversized “living room” lamps give the exterior space the perfect ambience for a summer picnic at dusk. The ground floor is connected through the large communal terraces and herb gardens at the rear to the newly designed outdoor spaces, the town square, and the backyard. Here, students can plant and grow vegetables, and provide for themselves.
The new kindergarten for 100 children was designed so that the existing, dense population of mature trees remained largely intact, and varied playing areas with different sheltered places and courtyard situations were created. There is a synergy between architecture and education in the building in accordance with the Saxon education plan. Both in the interior and exterior spaces, different spatial experiences and learning environments were created with lots of opportunities for communication, visual references, and views through the building. The kindergarten is divided into three playhouses and is one to two stories. Pure circulation areas have been largely avoided in favor of an extended educational and social zone.

Councilor for Urban Development and Construction a.D., Prof. Dipl. Ing. Martin zur Nedden, City of Leipzig: “As a result of the exemplary character of this user participation model, and their increased identification with the kindergarten, the participants gained important educational value beyond the improvements in the quality of their environment.”
The conversion and expansion of the cafeteria, as well as the two-story atrium that serves as the central lounge and study area for the senior class, was the result of findings from participation workshops. The atrium was zoned into desired areas: the “marketplace” with its raised platform is a gathering place, and class results are presented on the leaf-like partitions in the group work area. Pupils can work together at a large table, while in the “Quiet Study Zone,” they can work alone on large cushions or relax. The “Homework Zone” is on the bridge. Part of the furniture, a meandering wooden ribbon, marks the classroom area. In the cafeteria, trapezoidal tables with 200 seats are freely arranged around orange amphitheater-like seating.

Pupil Darla Skoracki, 6th grade, Heinrich Nordhoff High School: “When you go to the cafeteria and the doors are open, it is pleasantly calm. The pupils sitting at the front are the ones who don’t necessarily have to study. But at the other tables people are studying. The A,C-Building needs a common area like this.”
The requirements for different activities and spatial qualities were developed with a project family of pupils, teachers, parents, and City of Wolfsburg representatives. The collage "The Calm Giant’s Meadow" by the pupil Rebecca Schrader represented the shared notion of the group very well: "On this meadow, one should feel comfortable and able to exchange ideas and communicate. One should be able to relax there (between classes). Furthermore, it should be a lounging meadow... There is a feeling of security given by the tall grass." The desired spatial zones were determined in the negotiating game and during the feedback rounds, the design ideas could be given a definite form with collages and models. The work on the cafeteria and classrooms was done in the same way.
THE ARCHITECTURE OFFICE DIE BAUPILOTEN BDA*

O: OFFICE / TR: TEACHING AND RESEARCH / A: AWARDS AND HONORS / TE: TEACHING

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Die Baupiloten was founded in 2003 as a study reform project, in cooperation between Susanne Hofmann Architekten and the Technical University Berlin. Architecture students were given the opportunity to work on real projects, within tight budgetary constraints, from conception to completion under professional guidance. The office assumed all liability and responsibility for the projects. Since the completion of the study reform project at the Technical University Berlin in 2014, Susanne Hofmann Architects has operated under the name "Die Baupiloten BDA.

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