performance of it. This includes considering narrative temporalities, fictional spaces, and creative constraints as basic features of performing design, and looking at characteristics of staging design events. We suggest an interventionist, participative and experiential understanding of design as purposeful staging and accomplishing of events.

Chapter 7 In which space does design take place? In this chapter, we propose particular notions of place and landscape to explain how the design environment is performed in the work of designers and how a situational ground is enacted and transformed as design artifacts emerge. We suggest the concept of an "emerging landscape" as an alternative to the notion of an abstract design space, an experienced landscape in which the designer journeys and dwells.

Chapter 8 How does design relate to use? How can users participate in design? How can designers participate in use? In this chapter we elaborate on the notion of design projects as *things*, as potentially controversial assemblies of humans and artifacts, and the interplay between design and use. We suggest the concept of "design games," aligning design and use, and relate it to concepts like "boundary objects" and "infrastructuring." Using these concepts, we go on to explore strategies for designing use before use (participatory design) and for designing design after design (meta-design).

Chapter 9 Where will the design studio of the future be situated, who will participate, and what kind of "design games" will they play? Is there a new role for the professional designer to play that takes place "outside the box," by participating in controversial public events? In the final chapter we reflect on such issues of design "outside the box," extending design into political processes, public debates, and possibly even subversive but creative misuse. In doing so we reflect on values that guide such design and we look into a few controversial issues, such as: Are designers the enemy of design?

2 Design at Work

We start our conceptual journey by reflecting on our common theoretical groundings. Our approach to studying design is guided by an interest in design as involvement in practical action in the world, in "design practice" (in contrast to, e.g., "cognition") and is grounded in theories of situated activity. Instead of focusing on the individual designer, we focus on the collective dimension, paying attention to the material aspect of design practice in its ability to engage all our senses, to designers' interactions with the physical environment, and to the collective emergence of creativity in design. Apart from revisiting our own intellectual history as researchers and designers, we provide a reflective account of examples of professional design practice, based on several years of participatory observation in an architectural office, which illustrates the notion of "open planning" that has been formative in some of our thinking. The chapter ends with a reflection on learning as legitimate peripheral participation.

Common Grounds

Donald Schön, through his books on *the reflective practitioner* (Schön 1983, 1987), has probably offered the most influential account of design practice. Classical are his descriptions of how designers learn and conduct professional artistry through processes of *reflection-in-action*, in which knowing and doing are inseparable, and he delineates how these are carried out in *on-the-spot experiments* where the materials of the situation (models, sketches, drawings) at hand "talk back," often in surprising ways, and where the *naming and framing* of the specific problematic or puzzling design *situation* are important activities. In engaging in reflection-in-action the professional designer uses a broad repertoire of images, contexts, actions, and cases, sometimes also referred to as a *repertoire of exemplars*. Of special relevance to our context of creative design practice are his studies of the architectural studio as an educational model for this kind of reflection-in-action, and the observation of such a *reflective practicum* as characterized by learning-by-doing, coaching rather than teaching, and a dialogue of reciprocal reflection-in-action between teacher and student.

Jean Lave puts forward a similar view, arguing that whereas "traditional cognitive theory is 'distanced from experience' and divides the learning mind from the world, theories of situated activity do not separate action, thought, feeling, and value and their collective, cultural-historical forms of located, interested, conflictual, meaningful activity" (1993, 5). Practice in this perspective is situated doing; and people's undergoing experiences and expressing themselves as they engage in practical action, often together with others. An important characteristic of such situated doing, and of the knowing that is constructed and transformed in activity, is that it is open ended. Lave considers doing and knowing as "inventive" in the sense of that they are "open-ended processes of improvisation with the social, material, and experiential resources at hand" (ibid., 13).

This perspective resonates with the phenomenological tradition, which focuses on the phenomenon of *human perception* as construed in Merleau-Ponty's reading, as active, embodied, and always generative of meaning. This reasoning also forms the background of the concept of *embodied interaction*, which has been introduced by Paul Dourish (2001). The notion of embodied interaction addresses how a situation must be considered as a whole. Meaning is created in the use of shared objects, and social interaction is related to how we engage in spaces and with artifacts. In this interplay the body plays a central role; in many ways, the body can be seen as the necessary medium for "having a world." This notion has stimulated research on the relationship between the use of things and the role of our haptic and kinesthetic senses. Drawing on the phenomenology of Merleau-Ponty (1962), Larssen, Robertson, and Edwards (2007) explore how technologies might *feel* to use and provide a framework for conceptualizing body-thing relations: when we interact with artifacts, "sensing and motor skills are in constant dialogue, performing in concert" (2007, 272). "Attending to the thing" and acting on and through it is basic to design practice. A perspective on embodied interaction requires focusing on the "temporally fine-grained coordination between the mobilization of multimodal resources (talk, facial expressions, gestures, glances, bodily postures, objects manipulations, etc.), the timed use of artifacts and technologies, the constant rearrangement of participant frameworks and the changing foci of attention" (Mondada 2008, 30).

The ethnographic orientation in our own research has enabled us to build insights into the situated, embodied, and collective nature of design work. However, the kind of multimodal analysis required to arrive at a deeper understanding of how bodies come into dialogue with the people and things around them is still in its infancy. In a recent project on supporting participatory creativity in urban planning projects, supported by mixed-reality technologies and a tangible user interface housed in a tent on the site of the project, we have started analyzing the language of body, imagery, and sound, which participants use for creating and debating urban scenes. In this exploratory study we have seen that although talk and dialogue are essential elements of design work, the language of body posture, gestures, gaze, and movement, of

This perspective on design is heavily influenced by the pragmatist philosophy of John Dewey, a general epistemology of creative and investigative processes, where *experience*, seen as growing out of encounters with real-life situations, is taken to be fundamental to understanding. In his theory of inquiry, as expressed in his main work on research philosophy *Logic: The Theory of Inquiry* (1938) and his specific work on aesthetics, *Art as Experience* (1934/1980), creative processes include everyday practical reflections as well as artistic production and scientific research. According to Dewey, all creative activities show a pattern of controlled inquiry: framing situations, searching, experimenting, and experiencing, where both the development of hypothesis and the judgment of experienced aesthetic qualities are important aspects within this process. The main difference between doing scientific research and making art is that the former aims at the production of theories whereas the latter concerns inquiries into materials used in the production of artworks.

Hence, for Dewey, aesthetics is not limited to fine art theory, and the concept of *aesthetic experience* is not limited to art. Instead, aesthetics is a more general human predicament: every human is potentially able to acquire aesthetic judgmental skills and to participate in creative practices (cf. Aristotle on the intellectual virtue of *phronesis*, the faculty to make wise judgments). Östman (2005) has developed an interesting Deweyan-pragmatist theory of design (also inspired by later pragmatist philosophers such as Richard Buchanan, Richard Shusterman, Richard Rorty, and Frank Jackson). In this tradition, aesthetics is not a question of turning our attention to idealized, remote values of abstract beauty or the beauty in nature, but a matter of recognizing aesthetic experiences in everyday life situations. Experiences occur all the time in the creative and investigative process, but when reinforced by emotion and reflection, they can grow into aesthetic experiences. Aesthetic experiences, as opposed to ordinary experiences, are characterized by being unified and growing toward a state of fulfillment. This includes a kind of organizing energy and a human interaction with the situation, both of which render a degree of felt wholeness and *aesthetic quality*. An aesthetic quality is something we experience, it is bodily and anchored in the senses. Aesthetic experiences are not, however, instances of sheer pleasurable perception; rather, they develop in the creative process over time and are both intellectual and emotional. As for art-centered experiences, these do not differ fundamentally from other aesthetic experiences, but are more intense and provide us with the means to grasp the liberating energy of aesthetic experiences.

A fundamental aspect of a pragmatist view of design (and art) is the inseparability of doing and experiencing. Dewey writes:

It is not possible to divide in a vital experience the practical, emotional, and intellectual from one another and to set the properties of one over against the characteristics of the others. The emotional phase binds parts together into a single whole; "intellectual" simply names the fact that the experience has meaning; "practical" indicates that the organism is interacting with events and objects which surround it. (Dewey 1934/1980, 55)

Figure 2.1
Participatory creativity: coconstructing and exploring audiovisual scenes in an urban project (source: IST-4-27571 IPCity).

(visual) artifacts and sound all interact together in intricate ways. It is their multiplicity and multimodality, together with a large freedom in how to make use of them, that foster participants' creativity (Wagner et al. 2009; figure 2.1).

Our perspective on design practice is guided by this attention to the body, artifacts, spatial relations, and their interplay as an aesthetic experience and a source of creativity.

A View on Collaboration in Design

Another perspective we bring to understanding design practice is our focus on collaboration in design. Traditionally, studies of design look at it as an act of individual

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creation, with a focus on the designer's underlying cognitive processes and on design representations as "cognitive artifacts" (e.g., Purcell and Gero 1998). Researchers in this tradition tend to look at visual design thinking as a rational mode of reasoning (Goldschmidt 1994); they often focus on its early stages and on the role of design representations in the concept-formation and problem-solving phases of a project (e.g., Suwa and Tversky 1997; McGown, Green, and Rodgers 1998). Although many of these studies are inspired by Schön's (1983) work, they are rooted in cognitive psychology and in the tradition of laboratory studies.

Research on computer-supported cooperative work (CSCW) has produced detailed studies of work in a diversity of domains, among them also design work. CSCW is concerned with how understanding of material practices can inform design (Schmidt and Bannon 1992; Randall, Harper, and Rouncefield 2007). Many researchers have addressed the crucial role of inscription and material artifacts in cooperative work. It is typical of cooperative work in modern work settings that multiple actors interact "through" a collection of artifacts of various kinds. In our own research, we have studied a plethora of representational and coordinative artifacts that can be found in architectural offices, arguing that

Architectural work proceeds through the architects' producing successive objectifications of the design and interacting with them in a variety of ways, inspecting them, comparing them, assessing them, etc. That is, the conspicuous display of representational artifacts can be seen as the fundamental means of making the not-yet-existing and in-the-process-of-becoming field of work immediately visible, at-hand, tangible. (Schmidt and Wagner 2004, 363)

We have also pointed at the multiplicity, multimediality, multimodality, and openness of many of these design artifacts, and at their "boundary qualities." The concept of "boundary objects" (Star 1989) is used to denote artifacts that, at the boundary between different local practices, facilitate loosely coupled collaboration between these communities. In the words of Bowker and Star:

Boundary objects are those objects that both inhabit several communities of practice and satisfy the informational requirements of each of them. Boundary objects are thus both plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. They are weakly structured in common use and become strongly structured in individual-site use. (Bowker and Star 1999, 297–298)

The public availability of a "collaboratively organized world of artifacts and actions" (Suchman 1987, 50) is important, because it enables the "communicative potential of actions and artifacts within any shared environment" (Robertson 2002, 302).

This view on cooperation in design opens up another relevant connection with actor-network theory (ANT), with its focus on the object-in-design and the multiplicity of actors contributing to its emergence, but also with its interest in the semiotics of materiality (Law 1999, 4–14). ANT draws attention to the relational and nonsingular

aspects of objects. Properties and forms of entities (things, objects) are acquired in relation to other entities, human as well as nonhuman. If objects are seen as an effect of an array of relations, it follows that they do not exist in and of themselves; rather, they are performed and emerging. Law (1999) proposes the notion of *fractional objects*, using the metaphor of the fractal to find a definition that is neither singular nor plural. *Translation* is the term Latour (1999) uses for describing a drift or mediation in our intentionality in the process of designing, a shift that affects both the actors and the object they act upon (Latour 1999, 175–215). This line of thinking, which defies the simplicity of the singular, helps deepen our understanding of the object-in-design, its trajectory through multiple representations and their translations. Cooperation in design is not just something we can study observing designers' interactions with each other but something we can "read off" the artifacts they produce, their evolving and relational aspects.

Studying the trajectory of an object-in-design also draws attention to the temporal structuring of the design process, which is an important feature of the work. Time is rooted in the historical, material, and discursive practices through which it is measured (Latour 2005). In this sense, it would be more felicitous to talk of "timing," rather than time, as a practice. Typical of complex activities, such as design work, is a certain degree of uncertainty about how long they will take. At the same time, they are structured by "given" or socially negotiated urgencies, deadlines, and rhythms. Timing is crucial to understanding the engagement of multiple actors with the design process. Aspects come to the fore such as rhythm, the alternation between slow-paced, contemplative work and fast-paced work, between tension and relaxation. Designers alternate between activities such as browsing through material, traveling to other places such as the site of a project or event, free-floating thinking, and doing concentrated work under the pressure of deadlines, all while additional actors and actants are entering and exiting the design process.

Finally, the designer must consider the relationship between time and place. Time has to be read from somewhere; process is embedded in place. What is present is located somewhere, and a trajectory in time is often one that connects different locales. Also, what is present (in a particular place at a particular time) is always mediated by what is absent, each temporal location "elucidating the dense, complex and multi-layered connections between people who are not copresent in time and/or space" (Gregory 1994, 117). Michel de Certeau includes the dimension of time in his definition of space:

A space exists when one takes into consideration vectors of direction, velocities, and time variables. Thus space is composed of intersections of mobile elements. It is in a sense actuated by the ensemble of movements within it. Space occurs as the effect produced by the operations that orient it, situate it, temporalize it, and make it function in a polyvalent unity of conflictual programs or contractual proximities. (de Certeau 1984, 117)

What we propose is to extend our view on design practice from the individual to the design team and their engagement with materials, and from understanding how this supports their "thinking the design" to understanding the rhythms and place-making activities, in which collectives of actors and actants contribute to the object-in-design. Place is constitutive of social practice, and, as we will see, designing involves traveling between places that are both present and absent, and thus envisioning the future.

A Glimpse at Professional Design Work

Most of our earlier research during more than twenty years has been concerned with actually doing design work and reflecting on the process and products of our own design activities, rather than studying other designers' work from a distance. For the most part this has been done as action research (Bjerknes, Ehn, and Kyng 1987) and in the tradition known as participatory or collaborative design (Greenbaum and Kyng 1991), with users as codesigners in multidisciplinary design teams. Many of these projects have been concerned with the computer in the workplace—with design at work. Apart from our engagement in design, we also have performed extensive ethnographic fieldwork studying design practice. Several years of such fieldwork in an architectural office helped us gain a deeper understanding of the creative aspects of design work but also of the coordinative effort that aligning the perspectives and knowledge of a large network of specialists and stakeholders requires (Wagner 2004; Schmidt and Wagner 2004). Case studies at several other studios as well as a series of interviews with Austrian and French architects complement these rich data.[1] They corroborate that, with some variation, the practices we observed are common. As part of this research we also engaged in joint creative writing about architectural projects, developing a conceptual approach to design practice. To paraphrase Schön, we have been working as "reflective practitioners."

One of the main insights from these studies was that design work consists of producing design representations in different modalities, scales, and materials, in a constantly transforming process of ongoing refinement and increased specificity. To be able to work in this way, designers typically have to mobilize resources from a diversity of disciplines and to enlist the cooperation of experts of all sorts. This view of "design as transforming," as well as multidisciplinary and cooperative, has led us to look at *multiplicity* and *openness* as main characteristics of design work (Lainer and Wagner 1998b). On the level of method, openness requires organizing work as an informal, fluent process. On the conceptual level, the focus is on fuzzy concepts, preliminary specifications, and working with contradictions and constraints. There are some good reasons for maintaining openness in a design project: the designers naturally want to see things differently, and to keep a

complex and dense" (interview by I.W. with Rüdiger Lainer, January 6, 1999), and that there are additional problems of accessing, corners, edges, and so forth. The model (in white, without color to indicate material) can be presented for the competition by a endoscope. This facilitates the presentation of the spatial situation within the building, in particular for those technical consultants who need a good understanding of the characteristics of the interior space.

In further work on the design concept, a series of *themes* emerges. Themes express with analogies, metaphors, and themes. They define the basic points of view to be taken when working on specific tasks. Most design decisions have an element of ambiguity, as there is rarely one best solution. Themes serve as guidelines for considering different options, their advantages and disadvantages. As such, they simultaneously shape the structure of the object-to-be-built and structure project planning. One theme is the building's skin as supporting the floating character of the building and as a transformation layer that uses texture and light for mediating between interior and exterior spaces, with light seen as flooding and radiating; another theme is the notion of the interior as one monolithic space with stacks of containers; still another is the dramaturgy of space, produced by the combination of materials and light, on the one hand, and the design of foyers, staircases, and gangways as in-between spaces, on the other hand. One of the main problems here is to find an adequate language for communicating such qualities. Such a language differs from the one required for technical detail. It is rich with imagery and metaphors and grounded in (haptic as well as visual) experience and context. Qualities such as distance ("barely touching"), density and compactness (the interior space as "monolithic" and "hermetic"), and texture (the skin as a "fabric" rather than a smooth glass surface) require the construction of rich narratives if they are to be grasped by others who can then fill in their own particular ideas. Metaphors and visualizations (sketches, models, and images) play a large role here; often rather spontaneous forms of communicating are used.

At times, the architects' work is quite experimental, as can be seen in another project, where the architect systematically sought to widen the solution space for a building that is based on the idea of a "generously spacious" and flowing structure covered by a skin and containing an "organized labyrinth" of interior spaces. In this project, the architect worked with a large number of inspirational materials: images of landscapes (prints from books, memories from particular movies) and of landscape-like structures for dwelling; images of abstract structural systems and path systems, self-generating systems (linear, grid, net), as well as compositional strategies (labyrinth); examples of figure-ground plans; and so forth. Reconstructing how the design concept took shape, the image of Gaelic broths (ditches) together with some visualizations of path systems (direct or minimal) influenced the idea of the interior space as an organized labyrinth, with the path system forming its "spine" (figure 2.2). Combined with the image of earth-sheltered Tunisian houses, this gave some notion
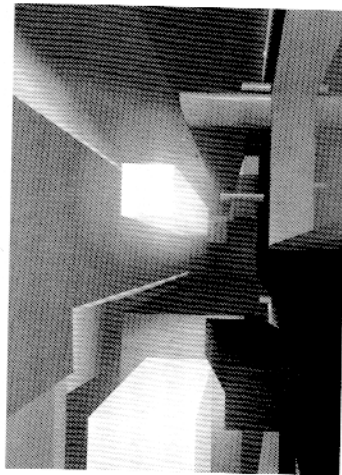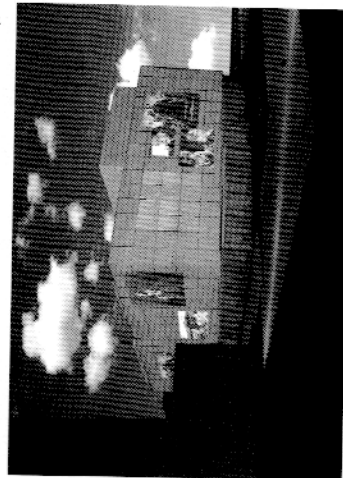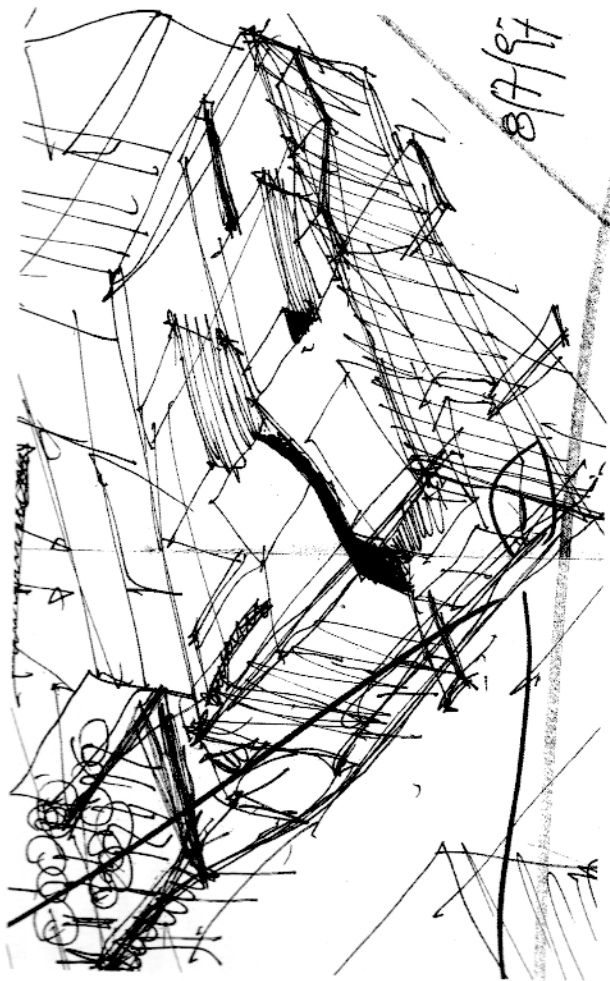
design open to novel and surprising solutions; at its core, design work is about cooperating with others, and mobilizing one's and others' imaginations; and designs are often complex, which makes it difficult to define and fix the details of a design in a simple, linear process (Wagner and Lainer 2002).

Our emphasis on openness as a main characteristic of professional design work is anchored in detailed observations of several architectural design projects. The particular practice we describe here builds on mobilizing inspirational resources; working with analogies, metaphors, and themes; and taking an experimental approach, based on fuzzy concepts and placeholders. One of the projects whose genesis we observed was the planning of a movie theater. The basic design principles, as formulated by the chief architect in his first brief of the designer team, were: to create a large volume within a densely populated urban space that "barely touches" its surroundings (thereby creating a specific tension between autonomy and referentiality); to maintain the notion of a floating "skin" that uses light to produce an almost imperceptible metamorphosis, from hermetically shimmering in the morning to communicating the building's contents—projected cinematic images, people's movements—in the evening; and to construct one large container housing a stack of volumes (the movie theaters), thereby creating in-between spaces and vistas.

Within the design team, the design concept is present in the first few early sketches, as well as in the metaphorical language and imagery used by the chief architect in describing it (figure 2.1). It takes some effort to give it real presence in project meetings and in the actual process of drawing up plans. One of the team architects mentions different levels of grasping the design concept within the team, which gradually, in recurrent discussions of the design's details, is externalized and concretized in a growing number of sketches, an initial simple-scale model, and gradually turned into shared knowledge. The chief architect introduces metaphorical descriptions, such as "tissues as membrane," as well as reference examples. For example, in the notion of the buildings "barely touching," the play between closeness and distance can be seen in what Rowe and Koetter, using the example of Sant'Agnese on Piazza Navona, describe as "affected and untouched. The compressed space exerts pressure" (Rowe and Koetter 1978, 108).

Physical models of the design serve specific purposes in this early phase. One of the initial problems is how to pack eight movie theaters into the volume. Here the chief architect will emphasize the importance of openness and fuzziness, engaging in free-floating thinking and playful explorations. The team starts out with the ground plans of the theaters—2D rectangles or squares—to get a feeling for the dimensions. As a next step they use small blocks of foam to experiment with different ways of positioning them within the available volume, creating different combinations, perhaps realizing that the initial idea leads to spatial arrangements that are far too complex, "disturbing the influx of light and a certain generosity, that this is too

Figure 2.2
First expressions of a design concept (source: Project "Eurocity," Rüdiger Lainer).

Figure 2.3
Exploring the notion of "organized labyrinth" (source: Rüdiger Lainer).

of how to assemble volumes and voids (lecture halls and courtyards) in this interior space. Images of plaitings and wickerwork helped to disrupt thinking along obvious lines. Instead of using cast glass for the skin, which covers the whole structure, both walls and voids, the architect explored other possibilities such as plaited plastic hoses filled with water.

Another crucial aspect of design work is the ability to work with "fuzzy concepts" and to maintain projects at different stages of incompletion. It accounts for the fact that architects often work with preliminary specifications, which at any given moment
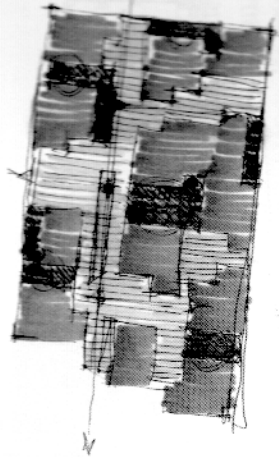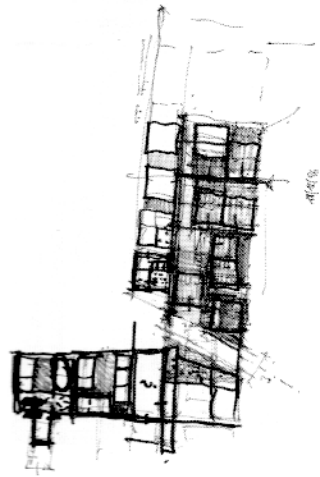
cannot be defined with precision. A placeholder stands for something that is still in the process of being formed. It underpins the passage from possibility to actuality, which is the work of design. Working with placeholders is a method for representing relatively complex systems before they have taken shape. Placeholders facilitate communicating about something that has not been specified in detail. They enable people to focus on the concept rather than on a particular material, product, or constructive solution. Placeholders may range from very small things (e.g., a missing parameter in a product specification) to large ones.

This is best illustrated by a small urban planning project in the area of the *Gasometers* in Vienna, in which the architects made systematic use of this technique. Their approach was to define spaces of different qualities rather than specific objects. Much time was spent within the team to clarify these concepts, which were "encircled" by using metaphors, producing sketches, and searching for associated images. The "Vitrine" (showcase) stands for one of these qualities, with several layers of meaning. As an "osmotic wall" it mediates between inside and outside, between public space and the world of consumerism and entertainment (figure 2.4). The Vitrine can be entered, walked through, or used as exhibition space: "Working with placeholders means to look at the specific space of 'Vitrine' or the preliminary specification of the 'principle façade' as an hypothesis" (Zschokke 1999).

Fitting these spaces with different qualities into the existing one of buildings and roads requires a high level of fuzziness. Details have to be ignored in order to highlight the main structural qualities of the design. Here the principal architect thinks aloud about how to use different representational techniques for the idea of creating layers of different heights, working with the concept of "Vitrine":

what you did with the layers, these "Vitrinen," . . . when we do this in virtual blocks, in 3D, here the question of the base (of the "Gasometer"), that we say, we have these basic blocks, and define, for this we use a dotted line, now I take this front part, this area we have done already,
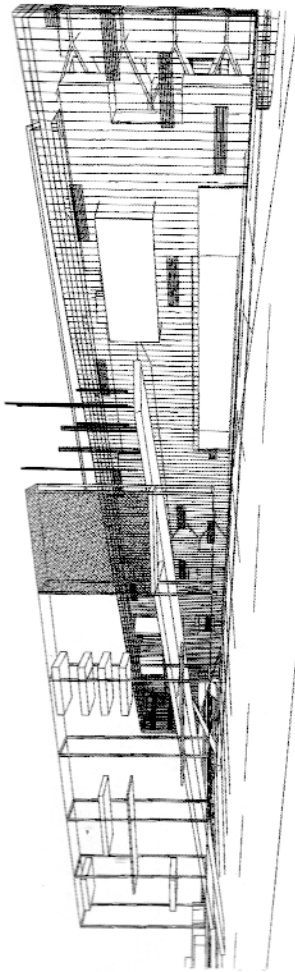
inspirational material—not only images but also textual descriptions that invite multiple associations:

You have to use a diversity of methods that help you define the "essential" in a kind of allegory with the help of texts that have an imaginary quality. . . . James Joyce's *Ulysses* is such a text that defines the urban experience without working with drawings. (Interview by I.W. with Adolf Krischanitz, March 28, 2001)

The process this architect describes is one of working on layers, with the design concept being concentrated in each of these layers. A designer needs the "stranger's gaze," the creative gaze that simultaneously implies closeness and distance. He emphasizes the movement of closing and reopening the design concept in particular situations, to research, integrate additional resources, and so on: "You cannot design unremittingly but have to confront your design with almost its opposite—removing, reproducing, collecting, quantifying, qualifying, and so forth" (ibid).

These and other observations led us to think of creative design as:

• Systematically cultivating the "art of seeing": working with metaphors, analogies, and themes that help express, contrast, and intensify the design concept so as to create a common understanding, to evoke imaginations rather than prescribe, invite others into a dialogue, and the like.

• Engaging with a plethora of materials—inspirational resources as well as material conceptualizations of the design concept (text, diagrams, comics, video, sketches, rough "sketch" models, virtual 3D models, CAD drawings), with the diversity of design artifacts increasing the designer's possibilities of evaluating the design, as each representation helps make particular aspects of a design visible.

• Engaging in a movement of closing and opening, in a rhythm that is characterized by formulating "themes," searching for "facts," and experimenting with different solutions.

• Being able to work in a "meandering" way, with "floating concepts," while maintaining things at different stages of incompletion—architects use expressions such as "working with placeholders" (a method for representing relatively complex systems before their form is finalized) for their ability to keep a sense of things that are tentative and incomplete. They define bandwidths for development.

The Role of Inspirational Resources in Design Work

Inspirational and experiential resources play an important role in creative design work. Professional work, as well as legitimate peripheral participation in such work, is stimulated by resources that provide an element of surprise and discovery and may help the designer to see things in a new way (the chance finding of a perfectly suited

Figure 2.4
The "Vitrine": working with placeholders (source: Project "Austria Email," Rüdiger Lainer).
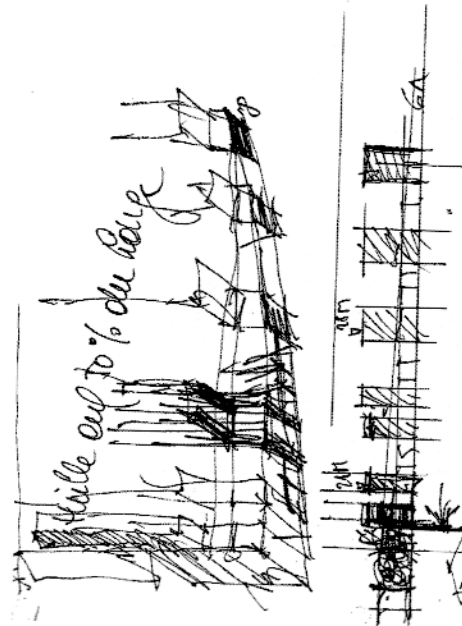

Figure 2.5
Fuzzy concepts: "diving in and cutting out" (source: Rüdiger Lainer).

there is the "Vitrine," this we have defined, where one can put something in, and then this part in the back, and there somewhere is this grid, it consists of these elements of diving in or cutting out. . . . one could do this symbolically, . . . a kind of simulation, to show the principle. (Observation, November 24, 1998)

The small sketch, a section from a series of "simulation drawings," visualizes the "diving in or cutting out" (figure 2.5).

Although quite specific, this architect's design practice reflects some common principles and strategies. One of our interview partners described the importance of