

Atmospheric Interferences

On the production of physical presence in the age of digital representation

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"Architecture and the Digital Image"—and this is a quote from the subtitle of this conference, "architecture *and*..."—What does it mean: "and"?—Shall we think of this equation in terms of addition, gathering, confrontation, juxtaposition, categorization, or of something third, a category they share or relate to (like perception, art, culture)? Is there—to speak of logic—a "set of architecture" and a "set of digital images", which overlap in some areas, an intersection of elements which belong to both groups?

The thematic statement of this session¹ suggested an even more straightforward interpretation: architecture has to be regarded as a subcategory of visual studies (*Bildwissenschaften*), since it produces visibility and is determined by a graphic design processes. Architecture, with other words, belongs to the field of visual arts and visual culture. Hence, if *digital* media transform the main category of image and visual culture, it would be necessary and legitimate to reflect upon the changes induced in subcategories and disciplines of visual studies,—like architecture...

Architecture and the image

For the course of this discussion I would like to define image in the strict sense of picture, as it derives from the Latin word *imago*, which means picture, figure, portrait, but also representation (a waxen death mask of the ancestor), a shadow, imagination, appearance and—here we have a hint to the long history of the truth of "reality" versus specious "appearance" in European thought—*mimesis*, since image shares the rout with Latin *imitor*, which means to copy or to imitate.

An image or picture is an artifact that produces a visual phenomenon, most of the time (but not necessarily) through a reproduction of likeness of a pictorial subject to a physical object, the *icon* as natural sign of linguistics. An image consists of the material carrier (medium) as stimulus and the resul-

ting mental image (representation, phenomenon). The medium is a physical substrate, like paint on canvas or pixels on a screen, of an intended immaterial imagination, the "image object" (*Bildobjekt*),² rendered by the perception of the observer, but the medium has to remain "transparent"—i. e. under the thresholds of recognition—to be effective and produce visibility. This differentiation between matter and imagination, between physical cause and psychological effect, resonates in "the image makes something visible other than itself" and link the visual studies to semiotic theories.

To discuss architecture in relation to visual studies and "iconic turn" raises a categorical problem: architecture tends to be reduced to its mere optical phenomenon, to its primarily visual effects—which has of course a long tradition in art history and theory, where architecture has been researched, analyzed, and taught primarily on basis of its visual representations, such as photographic images, drawings, perspectives, etc. But we have to differentiate between the *subject* of visual reproduction—and this means that architecture can be the *motif* of visual representation as much as any other object—and the physical *object* itself. If visual representation has become the dominant mode of proliferation, discussion and reflection of architecture, this means, that architects, critics and historians think, that an image is able to transmit certain aspects of an architectonic substance or idea. But these images remain abstractions, samples and interpretative approaches of a specific three-dimensional artifact, a *mediation* of architecture, which then can be easily reproduced, stored and distributed. Hence, if Rem Koolhaas has put forward, that the photographic image would be more important than the architectural object itself, and architects should just proceed to produce glossy images for the magazines without taking the detour of building, he is putting his finger right on a problem of the current discourse of architecture in his cynical way.

This instrumental relationship between object and image can be traced in the production of architecture as well, where the omnipresence of graphics in the process of design does not qualify for architecture as a visual art, but has to be read as stand-ins, mock-ups and tools to visualize a mental concept of something as complex and discursive as an "architectural project" (including the various connotations of this word), but it would be a logic shortcut to take the visual image for the imagined object. Architectural design is not limited to drawing and images: there are models, material samples and language as well; and there are architectural objects (like Greek temples) which were realized without visual representation, which means, that images are no *conditio sine qua non* of architecture. And even the architectural representation par excellence—the orthogonal projections—with their strict

set of conventions and symbols might have more in common with notations (and therefore text) than with visual images.

But if we take the building as physical medium that transports an "image object", the question arises, what is this image about, what does it show? How is the relation between material medium and immaterial image?—For architecture, the physical medium and the "image object" seem to be the same: it is the building itself; the "artificial presence"³ (Lambert Wiesing) of the image is the physical presence of the building, but this unity and self-presence would undermine the minimum definition of an image as visual representation of something *other*.—Of course, one could still argue for the self-reflective mode of architecture, of an "architecture about architecture", where the *subject* of architecture might be its own history, as with the images of Aldo Rossi (fig. 1), or the structural analysis of its

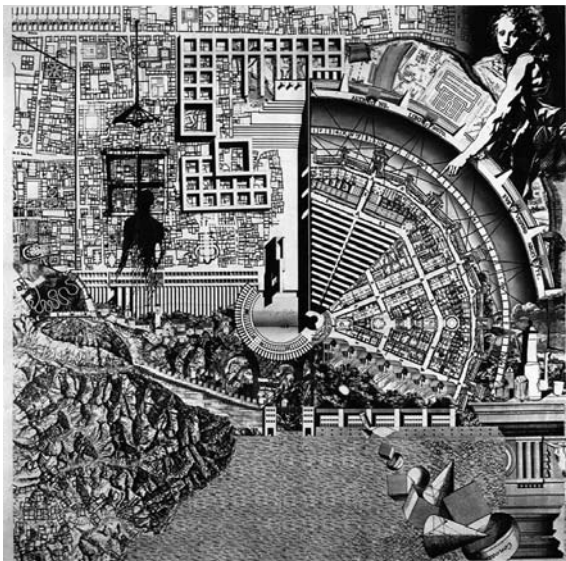


Fig. 1: Aldo Rossi: *La città analoga*, 1976, 200 x 200 cm

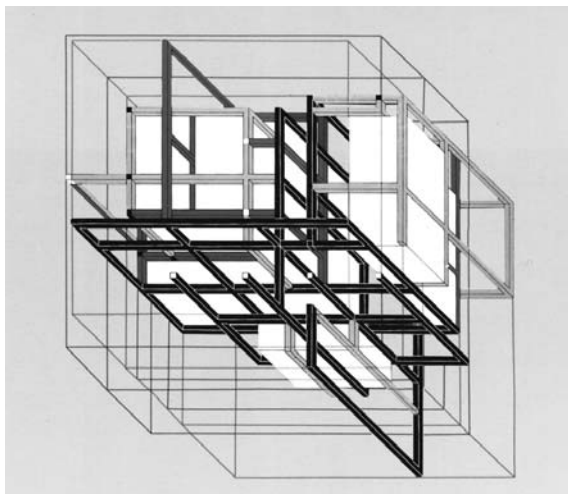


Fig. 2: Peter Eisenman: *House VI*, diagram, 1972–75

syntactic composition, as with Peter Eisenman (fig. 2), however both these self-referential approaches do not relate to the specificity of visual studies, which is the "iconic difference" (Hans Belting).

Architecture and the digital

After an enthusiastic, experimental phase of digital architecture—the layering, folding, seamless "blobs", "friendly aliens" or digital user interfaces, after programmed randomness (algorithm) and the sudden chance for realization of visionary designs via engineering software, (Bilbao)—which has been contrasted by a retarded acceptance of CAD in office practice, where it was primarily limited to a drawing tool—digital media now finally seem to have infiltrated the everyday of architecture. All data is registered digitally, projects are envisioned, designed, presented, detailed, submitted and constructed with computer programs, and now even digitally facilitated (building IP). Almost all design decisions are based on digital means of representation—either traditional orthogonal projections, abstract, conceptual or photorealistic perspectives, up to animated movies and even complete virtual 3D building models (fig. 3). Diagrammatic and combinatory design software simulates and optimizes the "creative" design process (fig. 4, 5); robotic modular pre-fabrication, assemblage and construction are at their breakthrough. Therefore contemporary architecture, following the thesis of this symposium, is determined by digital techniques of representation on all stages, from concept, to design, realization, distribution and reception.

Of course, the direct impact of the digital technologies on the making of architecture is obvious and undisputed, but is outnumbered by the indirect effects, i.e. the cultural shift induced by the digital, in the way people think about categories of time, space, corporality, perception, reality or about the city, society, habitation or representation, etc. Just remember how digital data networks have questioned the traditional understanding of territories and borders, of distance and time, or of information, communication and distribution. The most important characteristic of the computer is its plasticity:

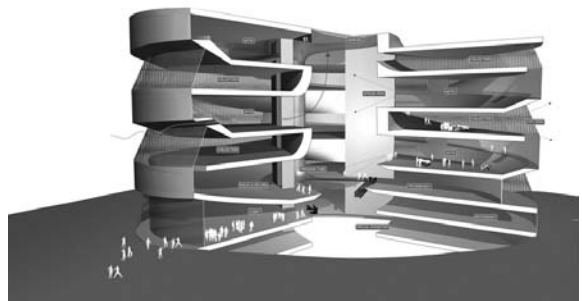


Fig. 3: UNStudio: *Mercedes Benz World*, 3D section of digital model, 2004–06

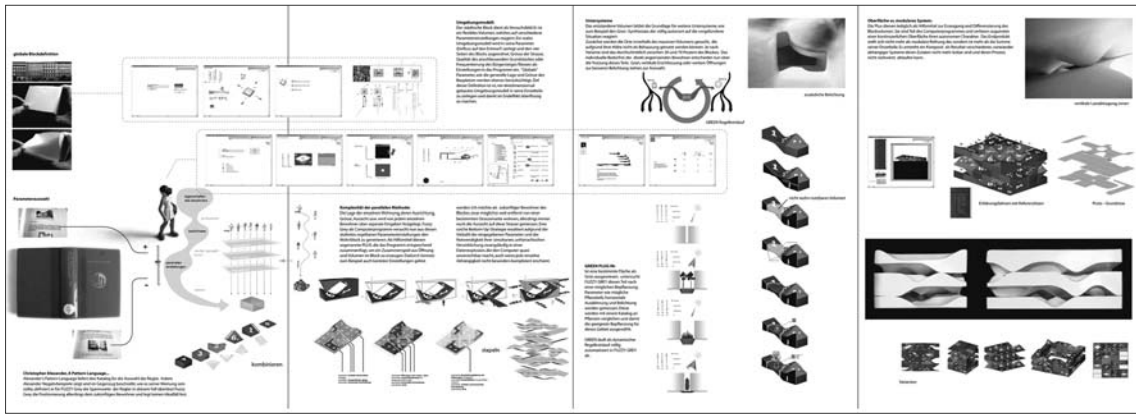


Fig. 4, 5: CAAD ETH Zurich: Kaisersrot, design software, Project Veld 12, Schuytgraaf, NL, Professur Ludger Hovestadt in cooperation with KCAP, 2004–06

as an apparatus to calculate and run programs it is a tool for everything that can be transformed into numeric syntax, into a digital model. It is as much omnipotent as it is a machine of abstraction, and if we follow the argumentation of visual studies, the computer has been able to introduce a new set of images: *simulations*.⁴

Architecture per se?

However, this might be just half the story: beyond an architecture of the “digital/iconic turn”—which is determined by matrix, image and texture, and might show traces of the ephemeral, simulation and immateriality—there might be further alternatives and gradual transitions in architecture, from which I will address only one here in detail: the contemporary conscious enhancement of *architectural specificity*. Thereby I mean the exploration of architecture’s unique features as *cultural practice*, the exaggeration of architecture’s ability to combine various media, systems and discourses at one place, at one time, into one *physical artifact*—to form a new, singular meta-structure. Architectural interventions of this type reflect on singularity in time and space, which includes locality, materiality and patina; they enforce *contiguity* with the specificities of the site, culture and society, in front of urban context, orientation, views, white noise, mood of

light, influences of weather, season, ground, production or technique etc. Today, even the digital media world has left the screens and entered a phase of location-awareness, since portable GPS-phone-handhold-computers enable interaction, communication and (role-)play in the “real world”; as much as we witness the digital reproduction of urban reality and bodily presence in “Second Life” (fig. 6).

Architecture exceeds the visual representation of (digital) images with dramaturgic pictorial-space-sequences, local topological, social or other *situations*, and the production of physical presence by materiality, weight (“empathy”) and haptics, an activation of sensual spatial qualities, such as tactility, sound, humidity, heat or smell,—in short: *artificial atmospheres*. As Paul Valéry had already noted at an early phase of modernity, architecture has the potential to enclose, to surround, to house-in; the observer has to move absolutely and inevitably within a human artifact, where he is constantly confronted with its artificiality and therefore with himself, with his corporal presence—as human being.⁵

Architecture is transgressive: once inside there is no distance for bourgeois autonomous reflection and delight, no pedestal nor frame,—no *par-ergon* to constitute or limit the work. Architecture is a



Fig. 6: Second Life Street Scene, interactive platform in digital environments

Presence versus Representation: l'architecture physiologique

The opposition between "digital image" and physical "reality" seems too replicate for architecture, and has to be explored in a more dialectic mode: with two projects by Herzog & de Meuron [and Philippe Rahm]⁸ I will discuss exemplary practices that operate with digital media in an innovative way, but address in concept and in realization the physical sensibility and the atmospheric immersion of the observer—to the point of an invisible physiologic-psychological effect—as a conscious *mediation* and *production* of authenticity (*aura*), which can be read as critique of the (digital) construction and consumption of "reality": (of course I will continue to show digital images, but they are meant as deficient representations of something more complex, beyond visual phenomena, which is difficulty to present in this lecture).

This is an *image* from the stage design of Richard Wagner's *Tristan und Isolde* at the Staatsoper unter den Linden Berlin by Herzog & de Meuron, directed by Stephan Bachman and conducted by Daniel Barenboim in 2006 (fig. 9). The height of the stage was reduced to about a third and framed in black, the depth of the stage was narrowed to a small strip with a pale white concave rubber skin



Fig. 9: Herzog & de Meuron: *Tristan und Isolde*, Staatsoper unter den Linden Berlin, Act 1, April 8th 2006

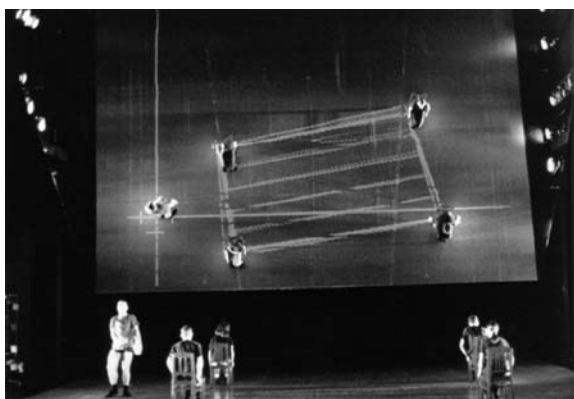


Fig. 10: Diller + Scofidio: "Moving Target," 1996, "Rotary Notary," 1987

that could be manipulated by low-pressure chamber that seized the whole backstage area. The small, residual space of the stage was empty and only inhabited by the singers and their accessoires. The three "pictures" of Wagner's musical drama are not reduced to atmospheric light—like in the legendary sets of Wieland Wagner at postwar Bayreuth, which reflect on radical, early modern stage sets by Edward Gordon Craig or Adolphe Appia—nor flattened to digital images, video screenings and projections, like other contemporary stage designs of vanguard architects (fig. 10), nor did Herzog & de Meuron fall into the trap of referring to their architectonic oeuvre, and staging for example ornamented glass panels, or perforated copper plates of *de Young* museum in San Francisco or the "cool" white interior tubes of *Prada Epicenter Tokyo*, like many of their colleagues of architecture's favorite circle. The three "pictures" of *Tristan and Isolde*—"ship", "palace" and "castle"—are evoked by *physical objects* (rigging, stairs, arches, bodies, rocks, catafalque) that are pushed against the curved surface of the rubber from the back (fig. 11, 12).

Set design—the world of "fake" plaster objects, of images and decoration, the frame of perspective illusion—*scenographia*—which had a short career under postmodern historicism, like the "Strada Novissima" at the Biennale di Venezia in 1980, and which was attacked by iconoclast materialist authenticityists as well as conceptual minimalists,—right into this domain of "imaginary architecture" and "re-presentation" yields the screening of corporal "presence" of Herzog & de Meuron. Of course not in the sense of setting up a "true" castle, but at least massive stairs, furniture, bodies etc. instead of projections or cardboard decoration. But these *things* are not "presented" as fetishized objects, the "stone is *not* more stone than ever" (Nietzsche), they are filtered by the membrane, and appear as imprints or "impressions" on the surface (Jacques Herzog: "Eindrücke"). The theatre as exemplary place of imaginary time and space, the *other* of society—as Foucault had observed in *Heterotopia*—yet precisely framed by the period of performance and the defined box of the stage (*proscenium*), this instrument of mediation, spectacle and *appearance* is used by Herzog & de Meuron to conceptualize spatial appearance, to explicate atmospheric emergence. The stage accessories are not shown in a "realist" or "naturalist" fashion, they *cast* in the membrane, in the semi permeable rubber skin that transmits to the audience shadows of the objects by the rear lightning (*projections*) as well as the physical impression, the sculptural *mold* of objects on the surface, almost like *bas-reliefs*. The tension and concavity of membrane alters during the scenes, covering and excavating the objects, making them appear and vanish. Jacques Herzog speaks of the continuous flow of images to imprints, from



Fig. 11, 12: Herzog & de Meuron: *Tristan und Isolde*, Staatsoper unter den Linden Berlin, 3. Act, April 8th 2006



Fig. 13: Stanley Kubrick: 2001 *A Space Odyssey*, GB/USA 1965–68, lobby of the space station



Fig. 14: Herzog & de Meuron: *Tristan und Isolde*, Staatsoper unter den Linden Berlin, Act 2, April 8th 2006

representation to presence and back, but this breathing-like movement can also be thought as “*pneuma*”, as the old Greek word for breath, soul and spirit, before the differentiation and fragmentation of body and mind of European thought. Image, imaginary and corporal presence of objects and actors are perceptible (or tangible) at the same time with the music and the atmosphere of a dramatic play, to form a unity, but resist complete visibility.

However, this physical presence of the stage setting, the breathing membrane, the “pneumatic chest”, is dialectically opposed by flatness of the setting, since the third dimension, the depth of the stage is reduced to a mere plane “cinemascope” format: though we witness physical objects (and actors of course) they seem distanced and abstracted,—an effect that is underlined by the diffuse lightning from behind, that takes away the shadow (and weight) of the bodies, like the agravic scenes in Stanley Kubrick’s *Space Odyssey* (fig. 13). The “real” bodies of the singers seem ephemeral, like spectral appearance themselves, whereas the setting—which stays close to Wagner’s instructions for the three acts—breathes an artificial atmosphere. This dialectic of presence and imaginary resonates in the static, intellectual, almost marionette-like stage direction of Stefan Bachman, who cooled down Wagner’s ecstatic love-lust-death libretto to upright posing and singing—to aesthetic *still lifes* (fig. 14). With other words: the most dramatic musical tragedy of Richard Wagner, the masterpiece of unachievable love that ends with the lovers united in death (“*Liebestod*”) is staged as dialectic juxtaposition of the atmospheric presence of the setting versus an umbral immateriality of the actors, as if their reality would not be part of this world. The stretched-out animated skin forces the love-spelled protagonists of the tragedy to interact with and to retreat from it. Reduced to ritual pace and distanced, almost *meta*-physical actions (one review pointed out: “Wagner is going voodoo”⁹) the dialectics of stage play versus set design seems to remind us to the pessimist connotations of Wagner—following Schopenhauer—of the illusiveness of all reality as representation, what he called the veil of

Maya, whereas "the truth" could only be found in (immaterial and absolute) music.¹⁰ (fig. 15–17) And maybe it is not an accident that Paul Valéry described the human body as "wonderful instrument to perceive architecture" that could be read as a paraphrase of the ideas behind the architecture of Herzog & de Meuron—but Valéry has put these words into the mouth of Socrates' *ghost*.¹¹ And the Valérian Socrates goes on to compare architecture to music, because they both induce artificial spaces, spherical entities,—which are not referential, but a sort of movement and action *per se*, a human "creation" without natural model (*Vor-Bild*).¹²

This might explain, why Jacques Herzog spoke of the "hallucinatory effect" of the set design to *Tristan*—if we think of "hallucination" as the false perception without sensual stimulus, the delirium, the loss of difference between reality and representation: this piece of architecture is at the same time staging conceptual explication of the physical impression and atmospheric bodily perception as it is creating a distanced image, developed and realized by state of the art software, building services and material technology. In other words, this project *evokes* bodily presence; it recalls certain imaginations of tactile experiences of the audience—which remains distanced in the opera seats and participates primarily via set, play and music—but these memories of sensual impressions, of authenticity and physical truth seem to fade away or already lost, reminding us to earlier experiences, almost like the melancholic, associative drawings of Aldo Rossi, who has been the teacher of Herzog and de Meuron in the 1970s. The natural (phenomenological) body is no longer. You can leave the theater now.

Conclusion: architecture beyond?

Maybe the most interesting part of a history of means of representation in architecture is not following a linear direct causality, but the undefined space of interference between architecture and media, and between media and observer, instead—this, what lays *beyond* representation, as Robin Evans, still in regard to classic means of reproduction, had already suggested?¹³

Notes:

- 1 From the CFP 10th International Bauhaus Colloquium 2007, 2nd Workshop "Architecture and the Production of Visibility".
- 2 Lambert Wiesing, *Artifizielle Präsenz. Studie zur Philosophie des Bildes*, Frankfurt 2005, pp. 30ff.
- 3 *Ibid.*, p. 31.
- 4 *Ibid.*, pp. 120ff.
- 5 Paul Valéry, *Eupalinos oder Der Architekt*, übertragen von Rainer Maria Rilke, Frankfurt 1973, p. 94 (original, idem: *Eupalinos ou l'architecte, précédé de L'âme et la danse*, Paris: Nouvelle revue française, 1923).
- 6 See Peter Sloterdijk, *Wohnungen als Immunsysteme*, in: *Sphären. Plurale Sphärologie* Band III. Schäume. Kapitel 2, Frankfurt 2004, pp. 534ff.
- 7 See Peter Sloterdijk, *Ungeheures Erscheint*, in: *Sphären. Plurale Sphärologie* Band III. Schäume. Prolog, Frankfurt 2004, pp. 74–86.
- 8 Décosterd & Rahm, Winter House (Tahiti/Jericho, 2002–2005); due to the time limit of 20 minu-



Fig. 15, 16, 17: Herzog & de Meuron: *Tristan und Isolde*, Staatsoper unter den Linden Berlin, April 8th 2006

Maybe we should not limit our observations to the determinative aspect of digital visual culture on architecture, but include the resistance of the medium into our thinking and practice, the dialectical aspect of mediation or the transgression of the medium, what exceeds (digital) visibility—like the invisible staged in the movies of Jean-Luc Godard?

tes the analysis of this example of physiological architecture had to be taken out of the presentation; for a discussion of this project against another background, refer to: Ole W. Fischer, "Alle reden vom Wetter..." *Atmosphärische Räume zwischen kritischer Lektüre und projektiver Praxis*, in: *Archplus* 178, June 2006, pp. 76–81.

- 9 Hanno Rauterberg, *Wagner wird Voodoo. Entrückter geht's nicht: »Tristan und Isolde« an der Berliner Lindenoper*, in: *Die Zeit*, Nr.17, 20.04.2006.
- 10 refer to: Arthur Schopenhauer, *Die Welt als Wille und Vorstellung*, (Teil I: 1818, Teil II: 1844), Wolfgang Frhr. von Löhneysen (ed.), Frankfurt 1986; a discussion of the specific references of Richard Wagner to Schopenhauer in *Tristan und Isolde* and how these motives are taken up (consciously or not) by the architects exceeds the frame of this presentation and has to be developed further in another study.
- 11 Paul Valéry, *Eupalinos oder Der Architekt*, (1973), pp. 89ff.
- 12 Ibid., pp. 100ff.
- 13 Robin Evans, *The projective cast. Architecture and its three geometries*,

Credits:

- fig. 1: Aldo Rossi: *La città analoga*, 1976, 200 x 200 cm; in: *Aldo Rossi opere recenti* (catalogue), Comune di Modena, Comune di Perugia (eds.), Modena: 1983, p. 52.
- fig. 2: Peter Eisenman: *House VI*, diagram, 1972–75, in: *Perfect Acts of Architecture*, Museum of Modern Art; Wexner Center for the Arts (eds.), 2001, p. 57; with courtesy of Eisenman architects.
- fig. 3: UNStudio: Mercedes Benz World, 3D section of digital model, 2004–06; with of courtesy of UNStudio.
- fig. 4, 5: CAAD ETH Zurich: Kaisersrot, design software, Project Veld 12, Schuytgraaf, NL, Professur Ludger Hovestadt in cooperation with KCAP, 2004–06; with courtesy of the chair of CAAD of ETH Zurich.
- fig. 6: Second Life Street Scene, interactive platform in digital environments.
- fig. 7, 8: Madelon Vriesendorp: "Eating oysters with boxing gloves on...", in: Rem Koolhaas: *Delirious New York*. Downtown Athletic Club, London: 1978, p. 132; plan 10th floor Downtown Athletic Club: medical treatment of the bachelor body, in: *ibid.*, p. 130.
- fig. 9: Herzog & de Meuron: *Tristan und Isolde*, Staatsoper unter den Linden Berlin, Act 1, April 8th 2006; Photo: Monika Rittershaus, 2006.
- fig. 10: Diller + Scofidio: "Moving Target," 1996, "Rotary Notary," 1987, in: *Scanning: The Aberrant Architectures of Diller + Scofidio*, (catalogue) Whitney Museum of American Art, New York (ed.), 2003, with courtesy of the architects.
- fig. 11, 12: Herzog & de Meuron: *Tristan und Isolde*, Staatsoper unter den Linden Berlin, 3. Act, April 8th 2006, Photo: Monika Rittershaus, 2006.
- fig. 13: Stanley Kubrick: *2001 A Space Odyssey*, BG/USA 1965–68, lobby of the space station, © Warner Bros. Entertainment Inc.
- fig. 14: Herzog & de Meuron: *Tristan und Isolde*, Staatsoper unter den Linden Berlin, Act 2 April 8th 2006, Photo: Monika Rittershaus, 2006.
- fig. 15–17: Herzog & de Meuron: *Tristan und Isolde*, Staatsoper unter den Linden Berlin, April 8th 2006, Photo: Monika Rittershaus, 2006.