Function at all events.
An ontology of architectural function

DANIEL GRÜNKRANZ

Introduction

In his work *The System of Objects*, Jean Baudrillard refers to the concept of functionality and to the term ›functional‹. Accordingly, this »term evokes all the virtues of modernity, [...]«.[1] Moreover, one can say that this term became a key issue when discussing the *modernization*[2] of architecture and likewise for the severe critique directed at its shortcomings; it contained essential motives for the re-conceptualization of architecture and at the same time factors for an uneasy relationship. Even if the term ›function‹ still evokes unease and even dismissal among architects and scholars and even if there are debates about its area of authority, either located within the realm of architecture or within the realm of the user, it shall be claimed that architecture is function at all events. Baudrillard has pointed further out that the term ›functional‹ seams to suggest

> »that [an] object fulfils itself in the precision of its relationship to the real world and to human needs. But [...] ›functional‹ in no ways qualifies what is adapted to a goal, merely what is adapted to an order or system: functionality is the ability to become integrated into an overall scheme.«[3]

The words of Baudrillard are generating an access point to crucial thoughts concerning an ontology of architectural function as introduced in the following text. But when it comes down to the fact that objects do not simply adapt to human goals or that the function, effect or action of an object is the key for its integration into a system (which again belongs to formal causation), we will refer to the work of another scholar: to Graham Harman and his metaphysics of objects.

The metaphysics of objects

Based on a radical reading of Martin Heidegger's *Zeuganalyse* or the analysis of equipment, Harman argues in principle for a dual structure of things: every entity (and that's including human beings) is at the same time appearance and effect, form and function, concrete tool-entity and tool-being, present-at-hand (V*orhanden*) and ready-to-hand (*Zuhanden*). But: To be ready-to-hand does not mean for an entity to be just discovered as useful by a human being:

> »Equipment is not effective ›because people use it‹; on the contrary, it can only be used because it is capable of an effect, of inflicting some kind of blow on reality. [...] In each instant, entities form a determinate landscape that offers a specific range of possibilities and obstacles. Beings in themselves are ready-to-hand [...]. The tool is a real function or effect, an invisible sun radiating its energies into the world before ever coming into view.«[4]

1 Baudrillard 2005 [1996]: 67

2 Cf. Bruyn 2008

3 Baudrillard 2005 [1996]: 67

4 Harman 2002: 20

Accordingly, an entity is an apparent thing or an object of discussion while its function and actions belong to an invisible realm concealed behind its concreteness as entity. It is possible to reflect on the effect of entities or to conduct an intellectual led examination spinning around the question concerning the being of equipment. But it is still something distinct to the act of the entity itself, which belongs deeply to its tool-being and which is irreducible to any occurring properties of the entity.

There are two important insights to this assertion: The first major contribution is the detection that all entities have the same ontological footing. The second refers to the conjunction that the actual effect of a specific entity is certainly not dependent on another entity. But entities are capable to enter alliances. This is equally held true for every entity, even if we design artifacts and put them in place for our use. Equipment is in action and has a certain impact upon the world as an individual and tangible entity. The effect of equipment does not reside within its tangible realm, but lies beyond any perception we might have of it. Nevertheless, we encounter equipment as equipment (its appearance represented by individual entities), »no longer simply sheltered in its silent activity, but now explicitly on display.«[5] In further consequence, we can talk about architecture or the designed architectural object as a specific entity with distinct architecture-effects.

Consequently, before entering the realm of architecture, it is important to emphasize on the fact that ›function‹ does not become simply a concept of architecture, able to be deployed when needed or refused as unloved and irrelevant for example in the face of creative processes. Function is relevant in connection with every entity and therefore also with every possible manifestation of architecture. Harman argues that being and meaning (Sinn) ›are one and the same‹; that equipment is ›meaning‹ »in two distinct senses. It is the performance of a withering subterranean force, but a force that also acts to summon up some encountered reality.«[6] Meaning belongs to the whole parts of the dual structure of things. From this point of view, the meaning of architecture is also its effect or action and therefore its being. Most essential: Architecture contributes effectively to man's living condition; its principle effect is *inhabitable environment* while the modes of inhabitation differ. Across from the outside or the external environment, architecture is conditioning the context in which inhabitants live. With the perspective of equalizing ›function‹ and ›meaning‹ becomes this topic also absolutely accessible for architecture. Thereby, the term ›meaning‹ does not undergo a supercharging with relevance coming from the outside. In general, with the materialization of architecture, the factor of the effect of architecture occurs as well.

Formal causation

It is the task of architects to join elements – for example elements like wall, floor, roof, or partitions in general – through more or less sophisticated processes into internal relationships from which the architectural object and simultaneously the effective system is composed. For Harman the term ›system‹ refers to the ontological realm. The *world* is the furthest expansion of the system of forces where all equipment would be theoretically dissolved into a global tool-empire, swallowed up in the total significance of tool-being and forever withdrawn. But this is not quite true because what happens in the world is an occupation with distinct entities taking specific positions and generating

worlds through their effects. »The crucial point is that at any given moment, every tool is plugged into certain limited systems of machinery while excluded from others.«[7] The status of individuality is most important. Otherwise *physical causation* and in further consequence ›formal causation‹ would be impossible. The world is not a unified totality lacking parts. »Instead, it is made of pieces [...]. An entity does not run up against a single system of meaning, but against various distinct entities. The world is not just one; it is also many.«[8]

The architectural object is absorbing its elements into an effective system like other tool-beings do as well. »[It] is already a system, a machine in which numerous components are arranged in some form or another. The object is a kind of formal cause.«[9] In further consequence, the »concept of the entity as a certain respectivity of parts«[10] is causing a philosophical paradox. Harman claims that the view on the apparent form, structure and features of an entity does not reveal anything about its secret labor or its function forever withdrawn from our views. But in the next moment, »[t]he supposed [...] innocence of withdrawn equipment ended as soon as it became apparent that tool-being is also inherently relational.«[11] Every system or *machine* integrates a number of concrete parts and entities. They contribute in their own power to the execution of force of a more extended system and object, for example of the architectural object. This means that the formal composition matters for the tool-being to radiate its specific array of powers into the world.

At this point, it is also important to keep in mind the range of tools and the implications of conceptual thinking consequently leading to various designed architectural objects, but all capable of effects. In the face of forms of materialized architecture, it is unavoidable that architects and scholars pursue an intellectual encounter targeting at these effects. This does not become a question about architecture and functionalism – nor about formalism – as distinct concept and language. Principally, all forms of architecture are effective, offering possibilities and obstacles for users. We are under the impression of the products of different architectural paradigms.

If form becomes important again, because the formal requirement is not indifferent for tool-beings to do their work, it does not imply to emphasize on a controversy about the *what* when being confronted with the architectural object. Rather, the production of architecture »marks the birth of an actual concrete power amidst the cosmos, the Vollzug of an independent force« as Harman would argue.[12] In a world occupied by things it is not the *what* that is of concern, but *how* they be by *Vollzug* or execution of performance. The ontological encounter presented herein would not be interested in dealing with uncertainties in the definition of things, for example when being confronted with hybrids, infrastructuralistic landscapes, ornamental structures, or responsive environments, but in their performance or effect as distinct entities.

Relations

The basic relation, from which Harman departures, is that between concrete tool-entity and tool-being (tool in action). In principle, they constitute the two faces of a dual reality. The *as* (equipment is effective as equipment) marks the point of intersection between the two realms while they only exist in communication.[13] »A thing appears as what it is; entities are encountered on the plane of the as-structure. [...] But the thing *as* thing is not the same as the thing

DANIEL GRÜNKRANZ

7 Ibid.: 23

8 Harman 2002: 34

9 Ibid.: 259-260

10 Ibid.: 260

11 Ibid.: 290

12 Ibid.: 79

13 Ibid.: 45

itself [tool-being], which can never be openly encountered.«[14] The view on the *as* does not reveal the interior powers of an entity. Nevertheless, in connection with formal causation, it was also pointed out that the ontological realm is »already infected with the as-structure«.[15] The problem of formal causation becomes a problem of relations of concrete parts combined into a larger system. It is the task of architects to initiate or conduct a process of *contexturing*, which merges assigned elements into an overall architectural form.

The reality of interacting subsystems, of tool-beings not only withdrawn and removed from all relations, but of inherent relational systems, changes the perspective on the dual structure of things. Tool-being and the tool as tool »are not simply the two faces of the same entity«,[16] but according to Harman they have to be two separate entities altogether: one in its own right and one coming into relation respectively being composed of relations. Leaving aside the further philosophical implications of this claim, we turn to the possibility of relations between human-entity and architecture-entity, between user and the designed architectural object. With reference to Maurice Merleau-Ponty, it is just to argue that the relation between active human individuals and external objects, to which their actions are directed, is that of a *practical system*.[17]

The actions of the human and the function of the architectural object and its elements alike integrate them into a system composed of relations. These relations become likewise elements of a discussion and of contemplation. Don Ihde, a philosopher of technology, gave an account of human-technology-relations based on a description of phenomena when running across technologies:[18] Sometimes we detect a sound of technologies working unattended in the background; we immediately handle tools and technical artifacts while they recede into a quasi semi-transparency in the cause of a project or of an end to which they are assigned; we perceive and read technologies; we encounter technologies, which leave the impression of a reactive and conscious Other. But behind these phenomena, technologies are operating from the hidden reality of tool-being. There is no reason not to consider Ihde's account of relations between humans and of embodyable, readable, able-to-interact, and of environment-conditioning technologies for the designed architectural object and its elements. And even more so as we deal with objects, which are in themselves relevant and which are connected to a complex of human practices. But in the line of argument it is important to remember again: Equipment or tool-being does not reside within human practice, but belongs to the effective inner core of tool »irreducible to any of its negotiations with the world.«[19]

Instead, we encounter the concrete world, its looming contours and shiny surfaces. »The specific contours of objects are nothing less than specific contours of the ontological difference itself. Being itself reverses into beings.«[20] Being *shelter technology* is for architecture to operate as distinct forms of shelter technology conditioning the context in which habitants live and in which they pursue their daily activities. Fundamentally, architecture as a complex operates as technology in a background position: »[T]he position of an absent presence as a part of or a total field of immediate technology. [...] The background role is a field one, not usually occupying focal attention but nevertheless conditioning the context in which the inhabitant lives.«[21] Of course, architecture does not occupy solely the status of a background technology. With its formal manifestation, the human-architecture-relations become complex and multilayered. Likewise and for example, architecture is to a certain extend embodied by the user. Activities of inhabitants find a basis in the architectural environment

DANIEL GRÜNKRANZ

14 Ibid.: 69

15 Ibid.: 260

16 Harman 2002: 262

17 Merleau-Ponty 2010 [1958]: 114-117

18 Ihde 1990: 72-123

19 Harman 2002: 169

20 Ibid.: 238

21 Ihde 1990: 111

while movements are organized through the built structure.

If »an entity is not only hard work in being what it is, but is equally effective at drawing me into its orbit as an individual thing,[22] meaning« counts as well for the »explicitly encountered reality.«[23] The possible active occupation of a distinct conditioned place and the movement through space are experiences in the face of architectural forms, not only silent at work but explicitly on display. Our experiences are the result of a permanent contact with entities populating the world to which we orientate ourselves.

Closing remarks

Considering architectural forms produced over the course of the constant re-conceptualization of architecture and through the implications of conceptual and instrumental factors, the ontological approach, which was presented here, proves just. It is targeting at architectural systems, all equally capable of effects and responsible for generating a world. In this regard, ontology tends to become a kind of *system theory*. But it is much different from the established understanding concerning system theory and also from its approach towards the theorizing of architecture.

System theory is targeting at forms. Conceptually, they are inherent two-sided forms because of the factor of distinction. System theory comes up with a sharp definition how architecture can be housing or shelter technology: Whenever we deal with a partition dividing inside and outside, we deal with architecture. It is architecture as long as effects of the partition are obtained allowing to distinct between inside and outside.[24] Forms of partition, which accomplish the exclusion of the inside from the outside, are also argumentative defined as real elements – for example as walls. Architectural system theory even refers to the performance of the wall, which is identified as division, enclosure and exclusion.[25] But there prevails no interest in the power of the wall as distinct shaped object and architectural element.

In contrast to architecture as self-referential system, ontology in the wake of Harmans implications has chosen to deal with specific emerging parts and regions in the cosmos of tool-being and with the impact of concrete results of architectural production. In this production, processes are assigned to join elements into internal relationships, which compose distinct architectural systems. Their specific formal structure is not indifferent. Every single one of them is operating out of its inherent structure fulfilling the task of conditioning a part of the environment. The problem of formal causation does not refer exclusively to certain regions of architectural language. Because of this situation, it is substantial to develop a sense for the performative capacities of architectural forms through a serious intellectual encounter.

DANIEL GRÜNKRANZ

22 Harman 2002: 242

23 Ibid.: 26

24 Baecker 1990: 90-91

25 Dürfeld 2008: 49

Bibliography

Baecker, Dirk 1990: Die Dekonstruktion der Schachtel: Innen und Außen in der Architektur. In: Luhmann, Niklas / Bunsen, Frederick D. / Baecker, Dirk 1990 (Hgg.): Unbeobachtbare Welt: über Kunst und Architektur. Bielefeld: 67-104.

Baudrillard, Jean 2005: The system of objects [1996]. London.

Bruyn, Gerd de 2008: Die enzyklopädische Architektur: zur Reformulierung einer Universalwissenschaft. Bielefeld.

Dürfeld, Michael 2008: Das Ornamentale und die architektonische Form. Systemtheoretische Irritationen. Bielefeld.

Harman, Graham 2002: Tool-Being. Heidegger and the Metaphysics of Objects. Peru.

Ihde, Don 1990: Technology and the lifeworld. From garden to earth. Bloomington.

Merleau-Ponty, Maurice 2010: Phenomenology of perception [1945]. New York.

Daniel Grünkranz

Dr. arch. phil., *1978 in Villach, Austria / 1998-2005: Study of architecture at the University of Applied Arts in Vienna, Austria and the Aarhus School of Architecture in Denmark. 2005-2012: Collaborator in architectural offices in Denmark and Austria. 2011: PhD on the subject: Architecture and Movement. Human-architecture-relations in the line of action of topography, parametric generated and responsive architecture. Since 2011 in office partnership with Form Society | Panajota Panotopoulou to address topics of architectural theory and to develop projects in the fields of architectural and urban design. Lectures in Austria, Japan, Germany, Denmark and Turkey.