# Architectural Project and Research - specificity and meta-reflection

How can it be made possible to comply with requests for objectivity and transparency in a research-project that contains investigations in, and development of, the researchers own, personal architectural project?

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#### INTRODUCTION

With the upcoming awareness of how the intricate mechanisms of social negotiation and distribution is crucial to all kinds of knowledge productions, it becomes more and more obvious how the knowledge produced in scientific and technologic systems is as contextual and contingent, local, distributed and social dependant as all other plateaus in the liquid topographies of knowledge production<sup>1</sup>. In this situation, the systems of architecture in an unexpected, but very fruitful way regain their position as some of the most productive and useful knowledge systems. They iterate and contain relevant technology, methods, forms, distributions and ways of performing relations between singularities and multiplicities, homogeneities and heterogeneities – in the matter and the social. They have *specific modes* whose actuality is reaching far beyond the noble, but limited scope of the building industry.

So the million dollar question is then: how, in this liquid and changing conglomerate of spheres of knowledge societies, to argue for the possibility of posing and pursuing research questions on the basis of an architectural practice? How can this research-*genre* meet the claims for validity, originality and transparency that any work of research is confronted with, and still sustain and develop a specific, architectural project as *product*?

The need for this specific knowledge to be presented distributable and exchangeable is rapidly increasing with and within numerous other knowledge-societies: Management, IT-development, all levels of pedagogy, all fields of design in the broadest sense of the word. The transparent presentation of the knowledge produced becomes a necessity for the wider recognition of the activity as research and development able to pose questions and raise arguments that are stronger and more pervasive than the rhetoric defences for this or that architectural discourse.

# Specificity

The quest is to acknowledge and pursue the connections between two planes<sup>2</sup> of meta-reflection on the basis of substantial numbers of examples. <sup>3</sup> These planes or spheres *and* their ways of interconnectedness are keys to connect the systems of architecture in their *specificity* with other knowledge-producing systems, and thereby exchange and development. It is the pursuit of strong and precisely formulated themes, within an architectural discourse that provides the possibilities to formulate problems and ways of pursuing them in the context of a research project.

It is neither an option nor desirable to reinsert 'l'homme du renaissance', the omnipotent figure mastering both practicing and theorizing science, literature and architecture in the centre of the known world and in the middle of its history and knowledge.

The argument is rather, that in a fluid and multi-centred conglomerate of different knowledge-spheres it is certainly both possible and necessary to abandon the dead-end dichotomy thinking that leaves the practices of architecture, its processes and materializations on the floor between chairs of two seemingly vast and stable knowledge and identification systems: art and science.

The discipline, when caught up in this devastating trap, is limited to be seen as a *hybrid* and therefore not able to perform a thorough foundation for the development of a specific and *specifiable* field of architectural reflection and development. The criteria that according to this thinking can judge, if the results have validity are tied to see them as *either* 'good science' *or* 'good art'. They are therefore always awkwardly staggered when imposed on the rationality that originates in a practical architectural competence, and the utilization of the knowledge produced, while this competence is formulating and pursuing an architectural project.

Most interesting is also the thorough trial and sharpening of arguments aimed at destabilizing the deep and widely rooted assumption, that architectural practises are always in the tails of the food-chains of knowledge. Architects are regarded 'endusers' of the knowledge created by others somewhere elseeven when it comes to the core of the imaginative and constitutive practice, this knowledge is colonized and thereby shortened and narrowed by other knowledge systems not able to recognize how the architectural techniques and representation, and later architecture materialized, are crucial co-actors in the social and material construction of architecture. The reduced, mechanistic perspective of the social engineer; that architecture is merely the product of its factors, in this way pervades into other systems of knowledge, and blocks for the sharpening of perspectives both wider and deeper.

It is very hard for these systems to acknowledge, how the architectural 'arguments' are specific in their modes, and that artefacts and prototypes used and represented, as liquid and accessible performers in processes, are always involving the multiplicities of other practises and knowledge systems - be they digitally or analogous distributed. It is equally hard to recognize, how the architecture represented, in-its-making is centring and ordering the heterogeneous situations in which it performs. Not only the spatial, materialized order it anticipates, but also the social situation in which it is negotiated, is rearranged and continuously ordered. The architectural representations, in all of its many kinds, can be conceived of as non-human, but very active actants in the social negations taking place in the processes of architectural be-comings. In this view, the study of the be-comings of architecture is a key to understanding the tight connections between architecture, technique, performance, discourse, power, economy and society.

# Meta-reflection and discourse

The work of research and development created with an origin in the development of a specific architectural project can contribute essentially to the practise and discourse that construct and solve architectural problems, and is at the same time a key to the further investigation and critical co-reflection from other spheres of knowledge-production. On the other hand, the meta-reflections of these investigations are the gateways for the investigators acquirement of experience and ability in developing theories within other spheres of knowledge. Knowledge production thus simply qualifies knowledge consumption.

Not that the architectural discourses and the war of positions that take place within them are in any way obsolete – on the contrary. In their multiplicity, in the ways they locally organize themselves around the contested notion of architecture, they actually maintain coherent value systems, develop references and sharp critique, and can thus be seen as *vehicles* for knowledge production able to achieve acknowledgement outside of the narrow but deep discourses of architecture.

Without digging too deep in the elaborate and very extensive notion of *discourse* as the way language is constituting

conditions of possibilities of articulations and strategies, and how it constructs meaning and identity of objects of knowledge and subject-positions, it is here proposed as an elaboration, or a way to destabilize the traditional conceiving of the notion of architectural style. In this way, the interconnectedness between works of architecture, both materialized, distributed in various medias and in digitally represented prototypes in-their-making and with multiple accessibility, can be realized as continuums. Not fixed as immoveable references in time or geography, but qualified by the very way their connections constitute meaning and identity in particular spatial out-spokes or notions, that makes up the many little, but specific rules for the formation of the discourse. 4 Thus, architectural works that are thousands of years and miles apart, congregates and contribute to the discourse by the transport or distribution of details, elements and out-spokes, and specifically the ways these elements are performing singularity or unification of the architecture, between them. It is in this ecology, or interconnectedness between architectural modes, a notion of architectural discourse as the premise for research can be understood<sup>5</sup>. It also suggests how the precision in and ordering of the discourse are at the same time deciding who's in and who's out, literally spoken, in the social situation in which the discourse performs.

The obvious problem of the notion of 'a researching architecture' is of course, that it itself will perform a discourse that includes and excludes certain architectural expressions. This is where the claim for 'control of in-transparency' arises. The validity criteria and utilization imposed by other knowledge systems will not do in order to establish foundations for such a genre of research. Nor is it done by claiming a position of knowledge simply on the basis of *any* architectural practice - naming every single task with a funny programme and solved with another formal gimmick to satisfy the client's needs on an ubiquitous market as 'research'.

The question of *specificity* is closely related to the question about the technique as the *loci* of the necessary critique. Specificity is maintained by critique; what defines good architecture is a question of the discursive strides to negotiate it is not a question ever to be settled. There is no 'house to end all houses', but the strides themselves are medias for precision and concentration - and thereby specificity. In this light, the most appropriate critique within architecture is simply this: doing it better. Being more daring and precise in the spatial and material arguments raised, pursue their tight coherence in the architectural out-spoke. Addressing and studying the works that are point of departure and their modes openly, acknowledging them as invaluable sources. It is to argue, that the position within the works, both in the ways they perform while in their making, their techniques and representation, the way they present themselves materialized are possible end therefore necessary topoi for the adequate critique. It is also only when arriving at this point, that any kind of broader cultural critique can be raised from the field - and the possibility of meta-reflection and research arises.

Of course the practise of architecture is 'heterogeneous engineering'. It is performing singularities in the multiple, and it is telling stories of unifications, of coherence and consistency between parts and wholes. But in that, it differs in no way from other knowledge systems and the ways they contain, distribute and maintain knowledge. Having now stripped the seemingly universal truths of science and technology to (almost) mere social construction as liquid, local and ephemeral as all other products of our rapidly changing societies, we can look upon the production of architecture without disturbing, or being disturbed by the truly mystic or even ritual contents of perceiving, imagining, producing and presenting architecture, and instead have a sober look at how it is done, in and with

what it is done, how it works and changes and thereby promote the necessary meta-reflections.

#### **Double context**

The next quest is then to raise the ability for reflection on, and development of the why's, what's and how's of architecture in a *double*<sup>7</sup>, *connected context*: The development of the specific and discursive architectural project and its manifestation in concrete architectural out-spokes and artefacts as *both* origin for, *and* object in, a research project. Therefore it makes sense to raise arguments that can meet the scepticism at first hand, that questions how it can be possible to sustain and acknowledge both the strongly dependant, local, contextual and even sometimes personal pursuit of an architectural project and its development in very tight connection to a frame of precise, thematic research-questions?

Part of the answer will lie in the treating and presentation of *the relationship* between the levels of observation in this kind of research, providing the foundation for the trial of its transparency, coherence and accessibility.

The specified themes as points of departure for a transparent expounding are in several ways relevant for the research including 'an architectural project' on all levels: in questions asked, methods used and relevant theories applied.

A kind of multiplication of the criteria of 'strong' themes occurs: *both* the development of the architectural project, *and* the research carried out will need to have strong themes, if the pursuit and development of the architectural project shall be recognized as research.

# **Architectural Project**

For the sphere of a case, it can be argued that the theme consists of the architectural project of the researcher<sup>8</sup> and its development. Obviously the concept of 'an architectural project' must be contested, and as such evades attempts of precise definition. In this, the notion is understood as the continuing investigation in specific architectural problems, techniques and modes as a motor in an architectural practise. Not as the single-standing architectural work, be it represented or realized, but the pursuing of explicated themes in actual architectural products, or out-spokes.9 'The architectural project' is thereby characterized by a set of 'strong' themes formulated and pursued within an architectural discourse - the tighter the better - and the explication of these themes can accordingly perform as the leading questions of the research, indicating its temporary horizon. The acknowledgement of this level is naturally discursive, settled by peers and recognized by virtue of prizes, competitions and publishing.

The sphere of research and the sphere that investigates and develops an architectural project are staged in an *inter-dependency*, where the former is framing the latter in a context where it is itself contributing to the coherence between the explicating problems and the theoretical contextualization. The architectural project will in this way, with its explicated themes be reflected in the themes of the research, its preconceptions and guiding questions, like the work of research will be reflected in the development in the architectural project.

What is interesting about the correlation between the planes or spheres in this type of research is *that it cannot be hierarchical, because no privileged position of observation is available*<sup>10</sup>. One position can observe the production of the architectural development and see, what cannot be seen from the position within this work, but on the other hand, this position will 'look back', and inform about the topography of, and 'blind spots' inherent in the position of investigation.

In this dynamic, the possibility of an interesting 'clutch' or 'bridge' is occurring. This link simultaneously maintains the difference between the observing positions, and enables their observing, mutual coupling in the unified development of the research.<sup>11</sup>

It is thus not a question of achieving 'objectivity' in or 'raising the consciousness of' the architectural project in the process of research. This is not achievable, not even desirable. It is its development that is interesting and it is thus far more relevant to ask how clear this 'theme-bridge' or clutch between the spheres is produced and presented, and thereby how the architectural project and the research project are connected, how they expose and stimulate each others production.

This commuting, or with Deleuze and Luhmann themselves, the *oscillation* between positions is of course possible, but it is not possible to stand at both positions at the same time. <sup>12</sup> This type of research activity, requiring that the doubled themes are precisely connected thematically, will demand vast amounts of time – for the researcher, groups of interconnected researchers and for the upcoming fields or spheres to establish. <sup>13</sup>

The recognition by an architect such as Peter Eisenman, <sup>14</sup> that the perfect correspondence between the architectural act and what can be said about it is not possible, is a level of meta-reflection that equals corresponding realizations within other fields of research, for instance the vast and pervasive field of qualitative research. The developing of the architectural outspoke and the investigating, tentative texts and interfaces is thus, when laid forth and exposed so the coherence and the 'insoluble vagueness' or in-transparency *between* them is presented coherent, laid open for critique on all levels – no matter how much the architect will 'lie' about her work. The *coherent presentation* can in this way very well make it up for the consistency of the 'theme-bridge' between the spheres, and in this the problem of correspondence and transparency is met qualified.

Architectural development carried out as research in this way, offers the researcher possibility of 'context of discovery' in at least two levels, coupled or clutched with each other, and thereby developing *each other*: By the specific, architectural project, developed by the leading questions of the investigation and thus contributing to renewal, precision and development of the discourses of architectural practise. Through the thematic context consisting of leading questions, cases and theory, developed by virtue of the architectural project, and besides contributing to meta-reflection and formation of theories. 'Context of justification' is constituted by the transparent presentation of both levels *and* of the thematic coupling between them.

In this doubling lies the decisive leap from the conceiving of architectural insights, techniques and discourses as inaccessible black-boxes to the presentation of it as open source, the key to development and distribution of a research practise including architectural procreation. To what extent the themes of the architectural project and the themes of the investigation can merge, without risking that the crucial doubling becomes invisible or not transparent is thus answered with the 'themebridge' that both combines and segregates. The clutch is so to speak *maintaining* multiplicities while performing singularity... The challenge for the upcoming field is in developing ways of presenting the different levels and their interdependency.

There is no argument stronger than a row of paradigmatic examples, and such rows elaborated by the researcher who practises and teach architecture will give a thorough picture of the architectural discourse in which the research and development is pursued. <sup>16</sup> It is also essential to create and

sustain strong networks practicing and exchanging, and in this way making it possible for students of architecture to invest their libido in these networks, to see them as admirable and appropriate economies of meaning.

It is about the *presentation* of the produced – that the researching architects do not hand over the contextualization of their products to others, but take upon themselves the responsibility to set their work in play on a larger scene – and *in that* make possible discussions and critique that oscillates between fields. Not *transcending* nor *dissolving* or making obsolete the specificity and precision in vague 'transdisciplinary knowledge' but accepting, exploring and unscrupulously exploiting the dynamics produced in the encounters between the local, disciplinary boundaries of different knowledge systems.

# The disarmament of a couple of 'scientific superstitions'

The misconception of 'systematic development' as a linear progression is riding most research processes as a mare: 'first question, then answers' or 'theory first, then test' - and following from it, that the criteria of validity is to what extent the answers are appropriate or all deductive possibilities are exploited. Numerous fields of research, especially the pervasive field of qualitative research, acknowledge that the criteria of judgement is to what extent the coherence between questions, methods of research and the theoretical contextualization is pursued. It is thus not a question of chronology in the making, but of how the research is given form in presentation and review. The accounting for, what came first is simply not always relevant, what decides the value is the coherence and transparency of the arguments tabled. The simultaneous more than the chronological, the abductive rather than the deductive.

It is also only on the basis of a substantial number of examples, that the achievable and appropriate demands for validity and transparency can be discussed – in a number of research-fields it is vividly discussed, that the way the different, multiple levels of the research can 'observe each other' and in that perform a coherent singularity may be a criteria for validity.<sup>17</sup>

The results will not be 'testable' in the Popperian sense, providing the possibility of perfect reproduction of the resulting architectural out-spoke. This is the strong argument adduced by the social constructivists: 'Scientific knowledge' is itself a social construct. It is contingent, contextual, dependant. *It could have been otherwise*. The testability lies in the *transparency* in the presentation of the arguments proposed, and in the tight and well argued *coherence* between the themes pursued in all levels of the research carried out.<sup>18</sup>

The argument implies that technical and phronetic knowledge - knowledge created and distributed *in* the world, is actually more pervasive and robust than epistemic knowledge - knowledge *about* the world, somehow contained in 'a world apart'.

It is crucial to meet the danger of 'appendixation' – if criteria of validity are only posed to the part of the project presented in other terms than spatial out-spokes by 'external' evaluators, the architectural project becomes an indifferent appendix for a 'true' research project. On the other hand, if the criteria are merely that of 'good architecture', only a limited discursive development of little or no interests in broader contexts will result, and the text will be degraded to playing guitar disconnected from the architectural developments.

The foundation for the acknowledgement of this genre of knowledge production, tightly connected to the practises of architecture can be established, if the will to create the environments for the production of a substantial number of examples of such research and development can be found. It can be reasonable for a time to accept that the validity of the research-products is limited to that of the architectural discourse. Not in misunderstood 'no-critique' in its judgement, but in order to be able to produce a substantial number of examples, that can provide a basis for the necessary meta-reflection on its utilization and methods, transparency and validity on more levels. It is a question of promoting the unavoidable and indispensable plane of judgement, to be able to distinguish the research and development in all levels of its procreation; as knowledge created and artefacts produced – and vice versa.

Progressive institutions are showing ways and producing fine examples, but in this process it is crucial that also studios, offices, magistrates and consortia raise questions of research and development on the basis of the development of their *own* architectural projects, and are *themselves* involved in the undertaking of this research, economically and as corporations. It is crucial for the distribution of the knowledge produced, especially that between institutions of educations and the practises of architecture. Hope can to a certain degree be placed in the development of the liberal markets for knowledge production, in which architects and their associates can participate and profit, also financially.

Furthermore that the institutions of architecture, both educational and professional, contribute to the development of this 'new agency' of architectural knowledge. Questions of validity are also questions of power - to establish and sharpen arguments for studios, offices and departments actively involved in architectural procreation as producers of knowledge, as topographies of knowledge-creation inseparably intertwined with the development of a specific architectural project.

It is needed. Contemporary production of architecture is under pressure, especially in terms of the time available for the solution of the tasks, ever-increasing in the complexity of demands posed upon it that cuts deep in the principal: the absolute necessary absorption in to the assignment and the character of the architectural work as the outset for 'an architectural project'. Some tediousness within the available contemporary discourses of architecture, in competitions and in the build results, is being pointed at elsewhere.

It requires a validation in the surrounding knowledge societies of a type, or *genre* of research and development, that can include a specific, architectural project carried out by the researcher or researching team.

Architects will have to regard their practise in a context of knowledge *production* as well as knowledge *consumption*. To become able to undertake assignments that include knowledge-production in co-operations requires a raised consciousness within the fields of architecture on how the research-competencies are being formatted and how they can be of massive advantage for the development of the practises of architecture, as they are in for instance medicine, engineering, information-technology and software-production.

No research can grasp the ungraspable, or explicate the inexplicable in how the perceived and remembered is transformed into architectural throw-outs and out-spokes on anticipated realities. Research does not automatically, as the mere practicing of architecture, lead to invention or originality. But it can, as a rigorous discipline offer platforms indispensable for the future of architecture as a crucial player in the fields of knowledge production.

## NOTES

- 1 In the fields known as science-technology studies (STS) or post-actor-network-theory, strong arguments have been raised to question the dynamics and dependencies of the productions of knowledge. An inspiring introduction with astute examples and clear arguments is David Turnbull (2000): Masons, Tricksters and Cartographers comparative studies in the sociology of scientific and indigenous knowledge.
- 2 Actually, it is more than two levels or spheres, it is multiple. But acknowledging that dualisms are not that easily dispensed, this essay will take its off-spring in the possible relation between two spheres.
- 3 For an intelligent attempt to acknowledge the multiple heterogeneous character of both the research process and the process studied, and how its own presentation actually, in *presenting* the case heterogeneous, that is in multiple *ways*, performs singularity and coherence, see: John Law (2002): Aircraft Stories decentering the object in technoscience.
- 4 'The problem is that we can't absolutely give up judgement a posteriori either. The question is how to overcome the operative paradigm that has come to dominate all disciplines and intellectual or productive practices: the critical process. The solution perhaps lies in the interior of the construction process: to be able to construct sequences of micro-judgments that operate on very specific and concrete aspects of the project; to disassemble the great paradigms of references into chains of small local decisions in time and space, that can be realized without resorting to grand visions or absolute references'. Alejandro Zaera Polo, hunch 6/7-2003, s.30.
- 5 That is, the discourse in which the present architectural *project* inscribes, not the *architect* as author.
- 6 Turnbull p. 40.
- 7 Multiple, actually...
- 8 Or, of course, the interconnected group of researchers. But claiming that authorship *automatically* disappears or dissolves because the process is displaced in interconnected interfaces or that 'design emerges' from nowhere or strange holes in the language is to dangerously deny 'that individualism, diversity and scepticism are deeply rooted in western society' as stated by Ulrik Bech in Archis nr. 2, 2001.
- 9 Architectural research needs to deal specifically with the tools and materials of architecture, and to be fundamentally aimed toward *architecture* as a product.' Alejandro Zaera-Polo, Hunch 6/7-2003, s. 24.
- 10 Kneer (1993) s. 105
- 11 It can be argued, that the observation of the research-sphere will have the character of 'observation of 2. order', and as such be able to see that it cannot see, what it cannot see....Furthermore, that it will be able to recognize its circumstances as poly-contextual, whereas the 'observation of 1. order' possible within the architectural project necessarily will grasp it as mono-contextual. Kneer (1993) s. 105-106. The research-based investigation will in other words be able to include other contexts than its own architectural project, and set them in relation to them. In this way, an *unhierarchic* but *asymmetrical* relation between the two spheres emerges. They become each others before and after. Luhmann (1997) s. 366.

- 12 Kneer (1993) s. 101. Luhman (1997) s. 364ff explicates the notion of oscillation. The latter with an appropriate compliment to Deleuze...
- 13 It can be argued, that collectives of interconnected, inter- and transdisciplinary research teams would then be more *effective*. Possible, but their constitution should of course be regarded in terms of the knowledge produced. What is at stake is to get to the possibility for researching architecture as *products*, not as *phenomena*.
- 14 Peter Eisenman responds to Derrida in a discussion about the purpose of architecture: "In the end, my architecture cannot be what it should be, but only what it can be. Only when you add one more reading of my work alongside your reading of it in pictures and texts that is a reading in the event of a building only there will you see the play between presence and presentness, only then will you know whether I have been faithful." Eisenman (1993) s.

The work of architecture, or the architectural project can only be presented transparent, when it is read both from within and from without, in its own premises, in its own position and game; 'in the event of the building'. The research project thus has to contain this position to be able to perspectivate it, *and for it to perspectivate*.

- 15 Not that this in any way will grant any 'instant access' to the techniques of architectural procreation or the ability to formulate what is here called 'architectural project'. These competencies are specific, and it takes years, or a lifetime of training to achieve them....
- 16 In this way, the listing of "canonical examples of such progressive research in projects and writings: "Vers une architecture" by Le Corbusier, , "Contradiction and Complexity" by Robert Venturi, "Critical Regionalism" by Kenneth Frampton, "L'Architettura della Citta" by Aldo Rossi, "The Wall House" by John Hejduk, Peter Eisenman's studies of Terragni, Libeskind's "Choral Works" and "Delirious New York" by Rem Koolhaas." in the prospect of the phd-programme of 'progressive research" at the Berlage-institute are both relevant and valid.
- 17 Law 2002.
- 18 'If there is no consistency in the research then there is no real possibility to 'test' because every project becomes on-of-a-kind. And then there is no experimentation either. Alejandro Zaera-Polo, hunch 6/7-2003, s. 27

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