

research

architect developer graduation research book A

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001 Abstract

"Three local structure experts must be nominated for a commission that will examine all projects. Considering how difficult it is to find experts, I proposed the commission should be made up of only one expert—me."

(Snozzi 2016, 134)

Architecture and real estate are one thing, both dealing with built environment. One is embedded in the other, yet not always present. Many complaints from architecture professionals can be heard about the power and negative impact of real estate on architecture and cities, but only few actually become involved in this issue.

The building development in Czech Republic has been taken over by profit seeking real estate developers. The negative impact of the real estate development can be felt. The legislation does not provide contemporary rules to control how are buildings built. Municipality have no strategic plan, no requirements from developers. Architects have been pushed aside.

Architects in present society are meant to be responsible for the environment, the built as well as the natural. Due to the lack of sufficient economic education, respectively real estate education, architects are losing battle to developers and are not equal partner on decision making process. Architects are easily dismissed in building processes. An architect with the knowledge of real estate development methods and tools is able to control, be engaged and be more equal partner in decision making processes of real estate development. Architecture with the knowledge of real estate can control the real estate market and become more useful to the built environment.

Finding a balance between architecture and profit of a building can create better quality buildings with higher material and construction standards as well can create higher demand among future dwellers and contribute to higher spatial qualities of the cities.

There is a wide field of possible involvement of an architect in order to influence the real estate market. The figure of the architect-developer, who is a synergy of architect and a developer in one person may be one of the next roles architects will be taking in the future. So can the architect-developer be a meaningful figure for the built environment? Can such figure help to improve the image of the built environment in the Czech Republic? Is it possible to merge high quality architecture with the economical feasibility of an architectural project?

## 100 Introduction





the number of projects in the real estate development built without the presence of the architect in the building process is in the Czech Republic prevailing

<u>architect:</u> none <u>developer:</u> EKOSPOL <u>project:</u> Barrandov Hills, Praha 5 <u>image source:</u> http://www.ekospol.cz/ <u>architect:</u> Jiran Kohout Architects <u>developer:</u> Metrostav <u>project:</u> Alfarezidence, Praha 3 <u>image source:</u> http://www.archiweb.cz/ The proposal of my graduation topic comes from the thoughts about the

## improvement of the position of architects and the quality of built spaces in my country of origin, the Czech Republic.

This feeling of the need of improvement and promotion of architecture and search for different ways in performing architecture is supported by my personal experience from working for architects as employee, working for my own clients and city representatives in the Czech Republic which I can compare with the approach towards architects and architecture with experiences I gained while working in Switzerland and studying in the Netherlands among others.

I feel my role in the architecture is not only about delivering design to clients and waiting for winning competitions but to be an active player in the profession and create opportunities for improvement of spaces and places and managing and controlling the processes behind them. An architect who is also a developer is a possible key to my vision, thoughts and commitment. The figure of the architect-developer may assure control over the building process and therefore high quality architecture creating spaces of higher quality for people to live in. My curiosity lays on the possible improvement of the built environment when the architect-developer is in charge of whole building process.

I would like to achieve

# a change of the culture of the built environment and grasp new opportunities which architects are facing

and contribute that way more to the built environment not only in the Czech Republic.

My graduation is not only a theoretical project of my own interest but it is an establishment of my future career and my office.

## 210 Problem Statement

\* the low quality of real estate development in Czech Republic in terms of urbanism, spatial planning, typology, material and comfort. For detail see 321 case studies: projects by the developer (p. 40).

Architecture and real estate development are both dealing with the built environment and both ought to have an equal impact on the built environment. Even though architects and developers have different approaches to the given tasks in the building process one profession is embedded in the other. Yet not always present in one another's profession in the real world as well as in the education.

The tools of the architect commissioned to work for the property developer are in general very limited and he is only reliable on somebody else's, mostly financial profit motivated, decisions. Responsibility for the built environment is split in many hands during the building process, architect him/ herself does not have a broad control of a project, the impact of an architect on the built environment is being decreased. An architect is usually simply a consultant with influence that extends only as far as a client's belief in the architect. Besides, if architects keep waiting for opportunities by developers and keep convincing them about correctness of their decisions if they go in a different direction than the architect is inefficient. (Katz, 2007). The goal of architects should be higher and wider.

# "[Architects should] have more than a design influence on a project."

(Katz 2007, 27)

In the Czech Republic the position of architects is not different, if not even weaker. Architects are not involved in the building process at all or are hired as a marketing tool to increase the asset value of the development and improvement of developer's project portfolio which is causing a low quality\* of the built environment in the whole country.

# Real estate development is a new thing in Eastern Block countries since 1989.

In the last 25 years it was due to economical, social and political circumstances a field with no previous experience and therefore had no boundaries, requirements and expertise. Not much has changed since. However, absence of the architect in the building process is not the only reason of the poor state of the real estate development. Obsolete legislation, unexperienced municipalities without requirements, long-term vision and regulation tools, loan rules given by banks financing the projects supported by low expectations and demands on the dwellers side. These factors all together contribute to the overall unsatisfactory image of the real estate development in Czech Republic.

Many complaints from architecture professionals, not only in Czech Republic, but also around the world, can be heard about the power and negative impact of real estate on architecture and cities, but only few actually become involved in this issue.

I believe, there is a wide field of possible involvement of the architect in order to influence the real estate market.

The figure of the architect as a developer may be one possible way how to be involved more in the building process and influence the real estate market.

# 220 Research goal

While searching for more involvement of architects in the building process today with the aim of creating higher quality built environment the goal of the research is to <u>find out how the</u> <u>architect-developer is a meaningful figure to contribute to the building process</u> and put it in the context of the built environment in the Czech Republic to discover <u>how the architect-developer</u> <u>can help to improve the built environment in the Czech Republic.</u>

With the research on the figure of the architect-developer I would like to discover the knowledge and decisions made in the building process by the developer and merge it with the creative and social abilities of the architect. Discovering how to design a building which maintains architectural qualities, addresses needs of the city in the chosen location, is realistic in terms of legislation, usage, size and finance and can compete on the real estate market should be a project brief and point of departure for my design.

I would like to test the gained knowledge from the research on an actual site and develop a design according to my findings. By developing and expanding the knowledge of the architect-developer I would like to make a new precedence for the real estate development and show an alternative for the real estate market and its clients, the dwellers, in the Czech Republic and use the knowledge for an establishment of my own good future career and possible architect-developer office which can contribute to the built environment as well as the profession.

# 230 Research Question

As the main goal of my research is to find out through the means of the figure of the architect-developer how to improve the influence and involvement of the architects in the building process and improve the quality of the real estate development and the built environment in the Czech Republic, the research question is summarized as follows:

# <u>How meaningful is the figure of the</u> <u>architect-developer in the building process in</u> <u>the Czech Republic?</u>

# 231 Research Sub-questions

Before it will be possible to start answering the role of the architect-developer in the building process it will be important to discover what are the approaches to real estate development from the perspectives of all involved stakeholders such as the developers, architects, municipalities, dwellers or public and what are their goals and their involvement in the building process. The goals and involvement of architect and developers is of special interest to see where each profession could be of a help to the other.

In order to be able to discuss how the architect-developer can be a meaningful figure in the building process it is important to define:

. What/who is the architect-developer?

. What are the activities and roles of architect-developer in the building process?

. In which fields and how can the architect-developer contribute or contributes to the building process with his/her expertize?

To see how the architect-developer can help to improve the built environment in the Czech Republic is important to discover:

. What are the problems and causes of the unsatisfactory image of the real estate development in the Czech Republic?

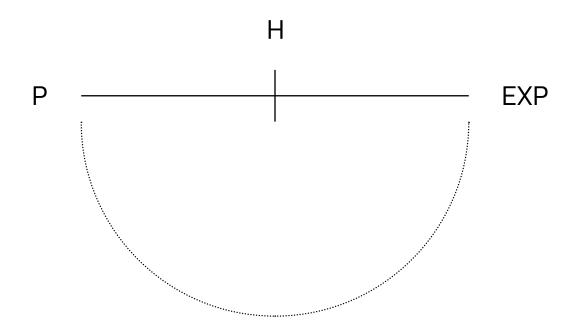
Like a thread which winds through the whole research, and to which I would like to <u>provide an answer with my design</u>, is a desire to find out if and how is it possible to merge high quality architecture which can contribute to the built environment with the economical feasibility of such architectural project?\*

# 240 Hypothesis

As a starting point and a trigger of the research I would like to confront the introduced problem of low involvement of architects in the building process with a hypothesis which is based on personal observations and which will be further confronted by the following research:

Since the developers are mostly concerned about financial aspects within the building process and the architects are from nature concerned about different contexts such as design, form, context or public good within the building process the figure of the architect-developer should be able to design and build a building which contributes to the needs of the city and neighborhood, fits within the context of the location and the urban fabric, communicates with the surroundings, contributes to the needs of the dwellers and address their contemporary lifestyle needs as well as manage the financial aspects of the building and ensure or increase its competitiveness on the real estate market.

# 260 Research method & approach



problem - hypothesis - own experience

### research part A

### Theoretical and empirical research

The part A of the research focuses on the background of the architect-developer. Due to the fact that architect developer is a relatively new profession and not much has been written on this topic, my research has an empirical character based on personal observations, which are supported by literature, case studies and interviews.

<u>Literature</u> and <u>case studies of build projects</u> by real estate developers, architects-developers and developers who collaborate deeply with architects will be used for the fundamental knowledge and comparison of real estate development projects done with and without the architect present in the building process and to illustrate the reasons for poor conditions of real estate development in the Czech Republic.

Additional <u>interviews</u> will be conducted with those involved in the building process such as architects-developers and developers collaborating with architects in an equal partnership as well as other stakeholders involved in the building process at various stages of the project. The aim is to interview those people who were involved in the selected projects as case studies.

### research part B

### <u>Research by design</u>

The part B of the research will focus on the initial phase of the building process during which the decisions about the site selection, building function, program and size are made and influence the further design and building development steps. In order to realize this part of the research, which requires practical approach and needs to be connected to an actual situation in a specific location and future design, a research by design is selected.

In research by design, the architectural design process forms a pathway through which new insights, knowledge, practices and products come into being. Research by design generates critical inquiry through design work that may include realized projects, proposals, possible realities and alternatives (Hauberg, 2011). Research by design investigates the research inquiry from the practitioner's methods and acknowledges practice as a mean of gaining new knowledge (Hauberg, 2011).

Research by design method is selected for the research part B under a condition of understanding the word "design" in my research as an active form rather than object form of design: <u>Research by active design of the building development process</u>.

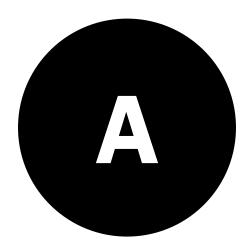
### Research by design method approach

Research is based on literature study of real estate development which is confronted with the approach of a practicing architect/student.

Research part B will be written as a self-reflective report about developing a building as the architect-developer. Due to the academic nature of the research the building development process will be researched from the inception of an idea about a building until the beginning of the construction process. Since the to decisions which influence the function, program and form of a project are made in the initial and preliminary phases of the building process, these phases will be emphasized, experienced, compared and commented in the <u>self-reflective report</u> based on personal experience of the architect-developer/student.

The decision making and action process of developing the building from the practical point of view and comparing and evaluating the results of the actions taken with theory, interviews and case studies will be described. The process of involvement of different agencies will be discussed. Explanation and reasoning of actions and decisions taken is necessary as well as independent criticism of taken actions.

This research part B will be a foundation for an architectural design based on the decision made in the initiative and preliminary phases of the building process.



theoretical and empirical research on architecture, real estate development and the architect-developer

# 300 research A: theoretical & empirical

<sup>1</sup> Collins Dictionary

<sup>2</sup> Online Etymology Dictionary

<u>architect</u>

noun

1. a person qualified to design buildings and to superintend their erection<sup>1</sup>

origin<sup>2</sup>

1550s: from French *architecte*, from Latin *architectus*, from Greek *arkhitektōn* <u>masterbuilder</u>, <u>director of works</u>, from *archi- + tektōn* workman; related to:

<u>arkhi</u> chief, leading <u>tekhnē</u> art, craft, skill <u>tektōn</u> artisan, craftsman, builder

<u>develop</u>

verb

1. to come or bring to a later or more advanced or expanded stage; grow or cause to grow gradually  $^{1}$ 

origin<sup>2</sup>

1650s: from Old French *desveloper* to <u>unwrap</u>, <u>unveil</u>, from *des*- undo + *veloper* to wrap up, reveal the meaning of, explain

1890: the real estate sense

<u>development</u> noun 1. the act or process of growing, progressing, or developing<sup>1</sup>

origin<sup>2</sup> 1756: an unfolding 1816: The <u>improvements</u> made on new lands, by cultivation, and the <u>erection of buildings</u>.

<u>real estate developer</u> noun 1. a person who <u>buys and develops houses, buildings, and land</u> in order to sell them and <u>make a profit</u> from them<sup>1</sup>

origin² 1833: one who develops 1938: speculative builder

## 310 who is an architect, who is a developer

<u>chapters:</u> . approach and goals of architects and developers in the building process . role of the architect in building process To start with it is important to differentiate and compare the agendas of architects and developers to understand their approach and roles in the building process.

Architects and developers have many similar characteristics, though different goals.

Architect is characterized as an expert providing the planning services, client's advisor and agent and representative with everyone involved in the building process. Besides delivering design variants architects should offers financial and schedule estimates (Bielefeld 2013).

Developers promote and finance a project, assemble a team of specialists, manage the team in order to realize a project (Miles 2015).

Both architects and developers are idea creators, team leaders and managers. As far as it comes to responsibilities, the architect is more of an advisor, controller and representative to a client or a developer who is the responsible investor that makes the final decisions to ensure the project is realized (Bielefeld 2013), see Fig. 04, p. 32-33.

Architects and developers are mostly individual private entrepreneurs, however the architects are more often commissioned a job and developers are the commissioners.

Responsibilities towards created space and its function are considered as important factors for both professions as well as creating positive impact with a project, building a solvent company to ensure continuation of such company and as it is not part of architect's vocabulary very often the goal of architects and developers is to built certain wealth.

The goals start to diverge when it comes to perceiving and performing quality of work and building and achieved revenue. Because of social, professional and personal ambitions and responsibilities which are of a nature to the architect. Architects prefer quality of the work and building over profit to maintain professional reputation and therefore continuity (Bos-de Vos et al. 2015). For the developer the quality required ends there where it exceeds the profitability of a project because maintaining the continuity of not only the project but also the office is a priority and even though the reputation is relevant for the developer just as much as for the architect it comes after the profit is gained. The success of the project on developer's side is considered and measured by the efficiency in the planning and construction process and the gained profit rather than the materials chosen for the facade. Architects are more committed and willing to spend more time and money on the project in the planning phase to provide the best possible design of a building precisely due to their personal ambitions and reputation (Bos-de Vos et al. 2015). The question whether something is worth the time and money is built up around aesthetics on architect's side rather than profit on developer's side.

The amount of responsibilities a commissioner, in this case a developer, has to carry on the shoulders goes hand in hand with the required profit achievement in order to stay solvent during the whole project. The responsibilities of an employee or someone who is only commissioned do not reach the responsibilities of the project creator, manager and commissioner.

### <u>approach and goals of architects and</u> <u>developers in the building process</u>

From what one can observe on the first site the approach towards a building by the architect and the developer differs.

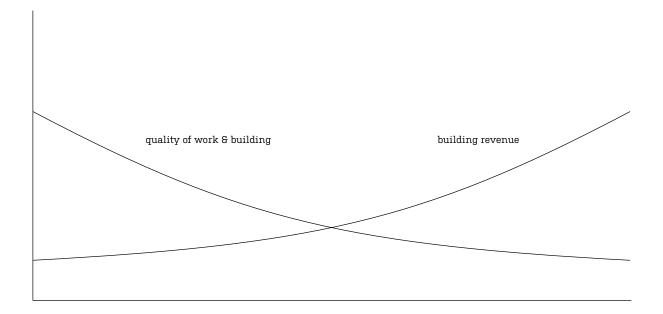
It would be wrong to generalize, but the majority of the architects is not concerned as much about the economical aspect of the project as are the developers. Architects blame often developers for being guilty for the low quality built environment caused by their hunger for high profit on easy projects.

Thought, the architect may be also blamed for the present situation for not being able to be a strong partner for the developer while seeking an agreement.

Opening of the free trade market in Czech Republic made everybody feel that making money is the most important aspect of every business. So did the developers. Most of the developers in the Czech Republic during the last 20 years considered houses not as long term investments, but as a product for sale. (Vašourková 2015). The financial profit has been prioritized over the quality of work and building, see Fig. 01, p. 29. For a more fruit full development architects can provide means and tools to work with community groups to understand their needs and preferences (Miles 2007). Architect can as an advocate of common good, the intermediary between money and society, develop good partnerships between stakeholders involved in the building process as well as those influenced mostly by the building after it is built (Ingraham 2014).

Architect is concerned of all different contexts of the process (creative, social, business, local authorities).

The architect in the end can provide different solutions for a task which allows for selecting the best possible solution at the moment (Self 2016). And find a balance between the quality of work and the building revenue, see Fig. 02 p. 29.



### Fig. 01:

Developer's approach: the financial profit is prioritized over the quality of work and building. To a <u>certain</u> <u>extent</u> it can be said that the more expenses are saved in the preparation phases or the construction phases or on materials, the higher the building revenue can be. Which is a paradox allowed by lower demands by future dwellers (discussed on p. 58).

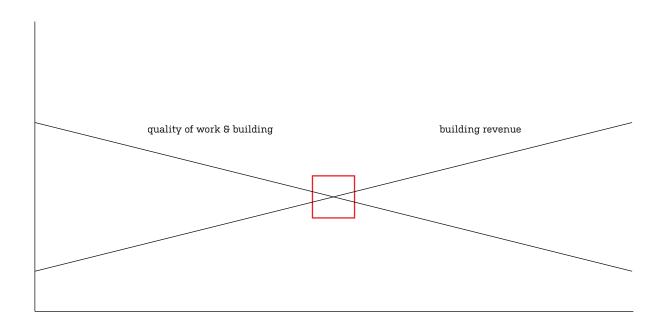


Fig. 02:

Architect's approach: finding a balance between the quality of work and the building revenue. An architect working in the field of real estate development is likely to trade some of his profits to quality of work and the building in order to provide fruit full development which reacts to the needs of the city, fits the urban context and is of a contribution to the location.

common building process approach: project always starts with a client

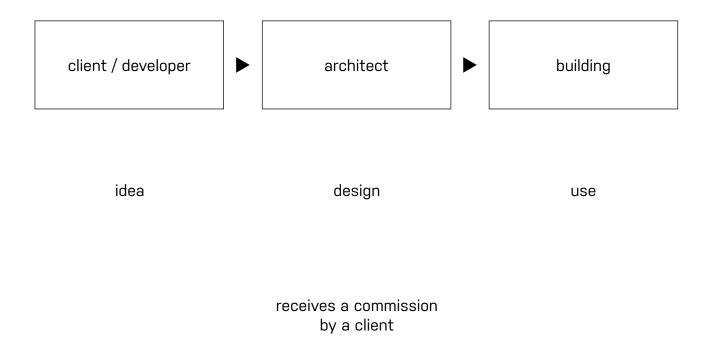


Fig. 03: common building process approach

## role of the architect in the building process

In a regular and commonly used process the architect is commissioned by a client or a real estate developer to work on a project, see Fig. 03, p. 30.

At the phase when the architect is approached by a client or the developer many aspects such as location, building function and program is defined and architect's task is to work within the given boundaries.

The role of the architect in the building process differs based on the size of the project and the commissioner. It can be said that today the architect has maintained his/her master-advisor role in smaller scale projects with less complexity (Bielefeld 2013). In a larger projects ruled by real estate developers the architect's role has been marginalized.

In smaller scale projects the architect is responsible and coordinates other specialists, experts and contractor and represents the client while dealing with municipal departments and authorities (Bielefeld 2013), see Fig. 04, p. 32-33. He is the main link between the building and the client, therefore is aware of the whole building process and has a certain influence on the final result and quality.

While the architect is hired by a real estate developer for a bigger scale project the developer is the responsible piece and main decision maker in the process and the architect becomes one of many advisors and experts in the process with limited amount of information and influence on the final result and quality, see Fig. 05, p. 34-34.

## project participants | client | small scale project

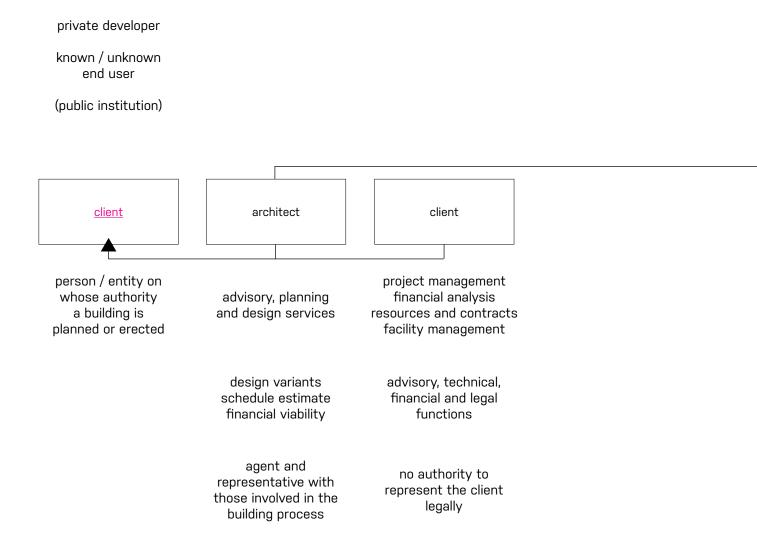
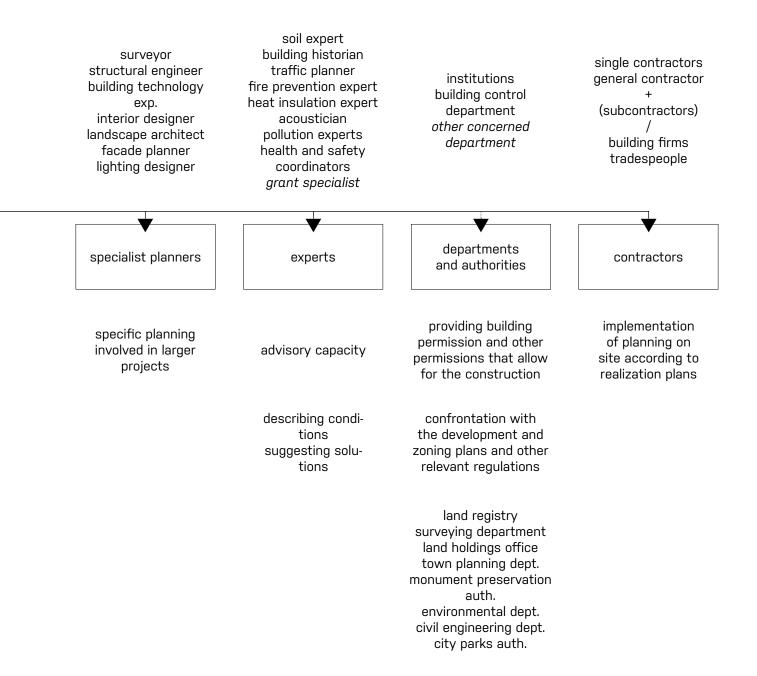


Fig. 04: project participants in common building process approach (Bielefeld 2013)



## project participants | developer | large scale project

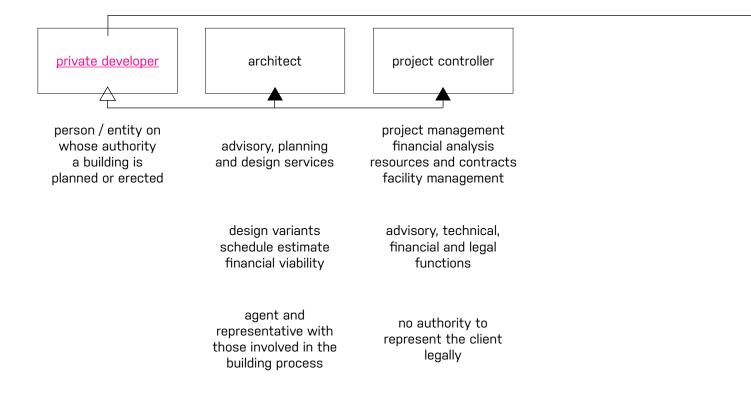
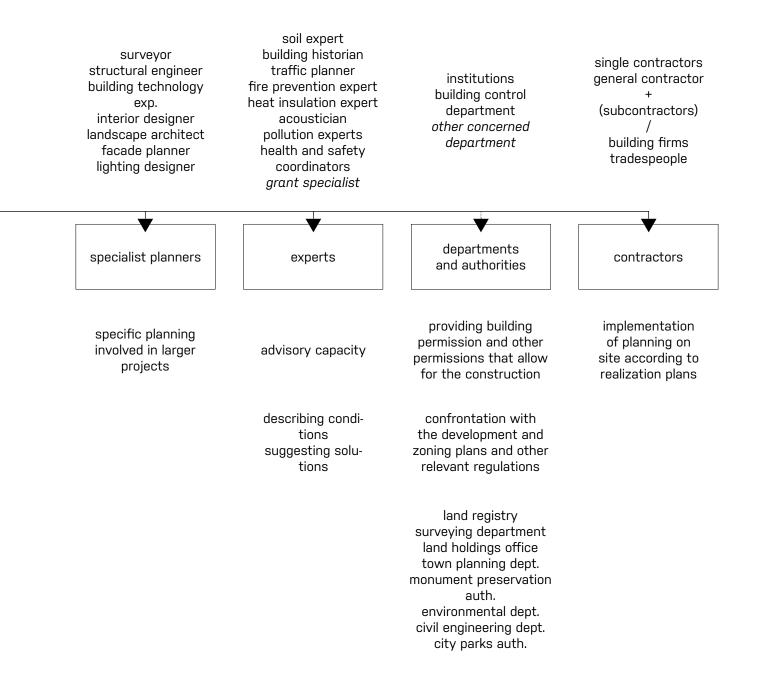


Fig. 05: project participants in building process managed by real estate developer, adaptation of diagram (Bielefeld 2013)



319 discussion on who is an architect and who is a developer

It is not a surprise that the roles of the architect and developer differ. While it may seem that main drive behind real estate development is the revenue of the project the revenue the developer, the commissioner and manager of the project, is trying to achieve goes hand in hand with the responsibilities the developer has to deliver the final product. During this process the quality of the project may be reduced. On the other hand the responsibilities of the architect while working for the developer are lower and therefore the goals of architect are not so much oriented on the profit of the project but the quality of the project.

However creating a certain profit and certain quality should be essential for both parties to ensure the continuity of the office or the company and continuity of good reputation among other professionals as well as future clients.

Long term thinking and achieving goals in architectural practice is essential, natural task. But, on the contrary, while the interest is put on investment and profit by real estate developer the thinking can be very short sighted in terms of a single project in order to ensure the cash flow of developer's office. (Vašourková 2015). Therefore it is very difficult for the developer to prioritize other goals than return on investment.

By searching for alternatives outside conventional corporate real estate development structures, such as the architect-developer, where there may be will and necessity to spend time achieving other goals such as ensuring the project fits within the urban fabric and contributes to the built environment and to the public living in the neighborhood of the new project, or focuses more on individual approach towards the future dwellers.

"Most of people and actors working outside the conventional corporate structures are primarily interested in goals other than financial return on investment." (Griffin 2011) To discuss the possible influence of the architect on the final product, the built project, while being commissioned by a developer, seems to be very much related to the size of the project and how much responsibilities and information is the architect in the project given.

It is very complicated for the architect to influence a project when the amount of information he is given is for example limited only to the design part especially when the building function and program has been already decided.

It can be discussed why developers don't want to share all the information concerning the project. In some situations the information may be private or delicate to be provided to third parties. In other situations the developer may be following his business plan while being convinced about the correctness of decisions made and the architect is only commissioned to deliver a job, a piece of puzzle.

# real estate development in the Czech Republic

Before it will be possible to start answering the role of the architect-developer in the building process and how such a figure could contribute to the built environment in the Czech Republic it is important to find out the problems and causes of unsatisfactory image of the real estate development in the Czech Republic.

Throughout the research it became necessary to research the involvement of the architects in the building process of projects created by real estate developers as well as their relationship with the developers.

As very important stakeholders beside architects and developers are municipalities, public and dwellers it is important to look into their goals and their involvement in the building process as well.

Since the final outcome of a project is not only shaped by architects and developers the legislation and building standards needed to be researched as well.

Because we are talking about the built space and architecture it was important to research how developers design their building, how do they compose public space and apartments, which strategies do they use in terms of sustainability and materiality and how do they market their projects.

Last but not least the decisions of the developer are also shaped by a bank which decides whether a project is feasible and worth financing.

Some of these aspect will be explained on the previously mentioned case studies.

# 321 case studies RED\* in the Czech Republic















case D.01

<u>developer:</u> EKOSPOL <u>project:</u> Barrandov Hills, Praha 5 <u>image source:</u> http://www.ekospol.cz/

case D.02

<u>developer:</u> KARLÍN GROUP <u>project:</u> Rezidence Vltava, Praha 8 <u>image source:</u> http://www.rezidencevltava.cz/

case D.03

<u>developer:</u> FINEO <u>project:</u> Trio Karlín, Praha 8 <u>image source:</u> http://www.triokarlin.cz/

case D.04

<u>developer</u>: private developer <u>project</u>: Vitrage House, Praha 2 <u>image source:</u> original photography taken by the author

case D.05

<u>developer:</u> SATPO <u>project:</u> Sacre Coeur 2, Praha 5 <u>image source:</u> http://www.satpo.cz/

case D.06

<u>developer:</u> Property Solutions <u>project:</u> Jubileum House, Praha 7 <u>image source:</u> http://www.jubileum.cz/

case D.07

<u>developer</u>: CRESTYL <u>project</u>: 4U Living, Praha 8 <u>image source:</u> https://www.4uliving.cz/

\* real estate development

The aim of the case studies of built buildings by real estate developers is to illustrate the factors of poor quality of real estate development in the Czech Republic and confront them with real estate development developed by architects or by developers in close collaboration with architects.

Six case studies were selected in order to address different aspects of the raised issues of real estate development. The case studies of built buildings by real estate developers have been personally visited if possible. The construction of case studies D.01 and D.03 has started after my visit. The other projects are already built.

Evaluation of case studies is based on my own observation and research related to the raised problems and issues.

Since the case studies are included gradually in the research report to better illustrate the issues they are introduced here for the overview. 322 problems and causes of the unsatisfactory image of the real estate development in the Czech Republic

<u>chapters</u>

- . involvement of the architect in real estate development process
- . architects loosing their reputation to developers
- . municipalities and legislation
- . dweller's demands
- . building standards
- . templates & repetition + obsolete typology
- . marketing
- . banks
- . public space & city, contribution to public
- . materiality x durability x sustainability

#### involvement of the architect in real estate development process

Globally, it can be said, even despite, as the theory of real estate development confirms, that

architects are central to the process from the perspective of aesthetics, physical safety, community acceptance, yet the role of the architect is not fully understood and appreciated

(Miles 2007, 45)

it is in the present situation difficult for the architect to be involved in the process and contribute fully and be familiar with all aspects of a project which the architect is commissioned by the property developer to perform:

"...architect is asked to intervene in, but never to appreciate or understand, a given situation."

### (Koolhaas 2016, 116)

When architects are asked to collaborate on the project often the program and size of the building is calculated ahead based on feasibility studies and developer's decisions and, usually for developer's information protection, not all the information concerning the whole idea of the project are not provided to the architect so he can fully understand and be able to intervene more.

This rather a pervasive condition of architectural practice which might be too radical but very relevant to the proposed problem of this research is describing the issue of low involvement of architects within building processes run by developers very correctly.

Such conditions are better or worse depending on a country one speaks of. Nevertheless, architecture as being part of a culture of every country, is related to its social and cultural evolution. As we can see the differences in building culture in developed and developing countries we can also observe differences in Western and Eastern Europe.

Different social and cultural evolution in the Czech Republic also caused

lack of spatial planning and architectural knowledge among general public, politicians, policy makers,

is contributing significantly to the poor situation on real estate market. Czech Republic being on the edge of politically divided Europe is still lagging in the development we can experience just on the other side of its western border. The rapid economic transformation created rather a chaotic situation for the built environment and therefore cities as well. The policy makers are behind with planning strategies, the land of cities was quickly privatized, the control is not in the hands of those who run the cities. And it is the cities who are also held responsible, still after 25 years of independence of the country, for not being able to replace the undeveloped city regulations and obsolete city planning rules with modern planning tools and long term

visions. Notion of the importance of proper city planning is among politicians and public known but hard to apply. These long term visions and planning is marginalized by political fights. Recent political fights over the control of IPR (The Prague Institute of Planning and Development), is bright example of such practice. The modern approach to city planning are not in favor of those who like to parasite on the existing chaos in Prague and are lobbying for degradation of the Institute. And if the city is not the example for its citizens it is harder to spread the knowledge.

# Moreover discussions about the built space and architectural quality are still mostly present only among professionals.

Greater understanding of the public and city officials, compare to, for example, Switzerland where discussions of high relevance and level are on a daily bases and are part of the news broadcasts, is absent in the Czech environment. The historical and present involvement of the architects in Czech Republic within the traditional building process can be illustrated on the fee described by a percentage of the total project performance which describes the time and cost requirements (Fig. 06, p. 46).

After the realization documentation is done the involvement of architects during the tendering and on site inspection phase (meaning presence during the building process) is awarded 8% and 13% of the whole performance. While in Switzerland these phases are valued by 18% and 49.5% and in Germany by 14% and 32%. It is giving the Czech architect only a third (respectively half) of the responsibilities and influence in the project than the Swiss (Fig. 07, p. 48) or the German (Fig. 08, p. 49) architect has.

The possibility of a building to contribute to the needs of the city is not only dependent on whether the architect is involved in the project but also how much is his opinion valued,

how much responsibility is he given and for how long and since when is he in the building process involved. Despite the textbooks on real estate development underline the importance of the architect being present in the building process since the initial phases, architects are usually, also according to these books, invited to the building process often very late just when all the most important decisions concerning the location, function, program and volume which influence the project the most are made (Bielefeld 2013, Miles 2007, Wamelink 2009), see Fig. 15, p. 96-97. In the real estate development practice in the Czech Republic there exist two extremes concerning the role of the architect in the process. There are many other positions of the architect that could be debated but these are the two extremes:

## 1. The architect is not present in the process at all

and an in-house or external engineer can do just as fine job and fulfill the requirements of the developer.

## 2. Architecture is used as a marketing tool.

Architecture and architects, in the Czech Republic more than anywhere else, are often used by developers not as a creator of the asset value of the building but for marketing reasons to promote the developer's reputation, portfolio and building itself. A shiny façade, convincing renders and starchitect's signature in a brochure do the job. In fact, a starchitect may do a preliminary design but the project is not elaborated further by the same person, instead developer's in-house architect develops the design. The involvement of the architects in the building process is very vaguely defined already in the real estate development textbooks:

"Architects can help guide the developer in selecting a site for a specified use or develop alternative concepts for a site and head the land use team to bring a concept to fruition."

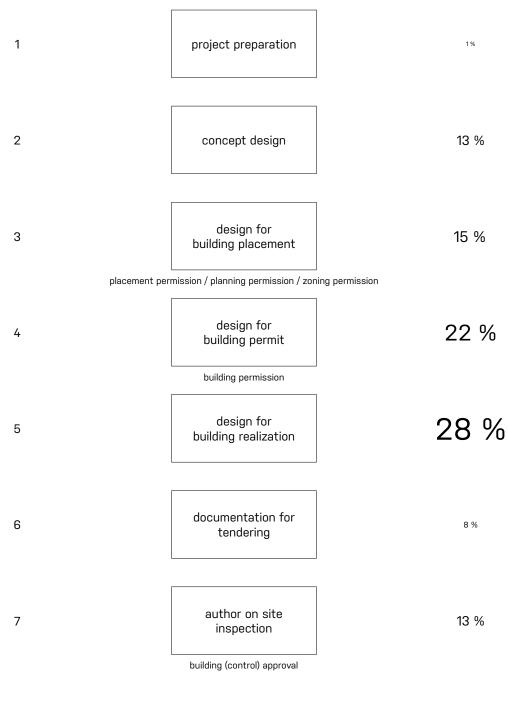
(Miles 2007, 45)

The same textbook denies itself two pages further:

"On the other hand, it may not be cost-efficient or necessary to design a duplex on a simple site in a town where the developer has built already 100 similar houses." (Miles 2007, 45)

This is where the trouble of poor quality in real estate development starts. One hundreds house as a precedence of work without the need of the architect are even worse than just one. Such low quality reference becomes a precedence for standard quality for other developers and the dwellers.

## project performance | architect in the Czech Republic



100 %

Fig. 06 (Standardy profesních výkonů a souvisejících činností, ČKA 2014)

preliminary analysis of the site, assessing the suitability of the site for the intended purpose specifications, necessary documents and surveys conducted by specialists definition and clarification of the necessary design work and special professions

preparation of the proposal / study concept / study design in variants (text, drawings) detailed specification of needed parts to preliminary surveys for specialists preliminary negotiations with the concerned authorities and parties

commissioning the preliminary surveys to specialists processing of documentation for placement permision (text, drawings) obtain comparative bids for technical equipment estimation of investment costs (based on 1&2), procurement documents and statements of public bodies and organizations necessary for a zoning decision

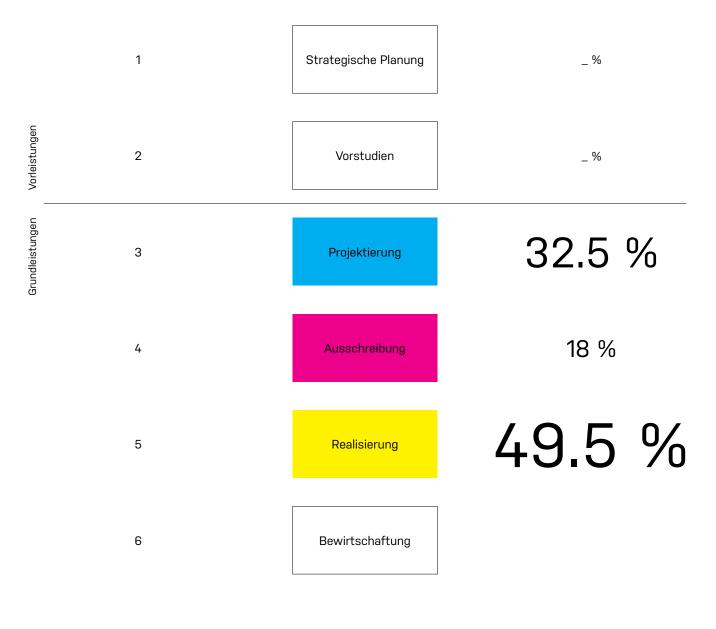
preparation of documentation for building permissionng (text, drawings) static design verification, participation in construction management estimate indicative costs for building construction documents and statements of public bodies and organizations for building permit

processing documentation for construction (text, drawings) details 1:50 to 1: 1 with the necessary explanatory notes and descriptions cooperation with the client in selecting materials and their use

list of works and supply needed for the construction assessing offer of the supplier / contractor

on site inspection collaboration during the construction

## project performance | architect in Switzerland



100 %

Fig. 07 (Leistungstabelle und Prozentwerte für die Honorarberechnung nach SIA, 2003)

## project performance | architect in Germany

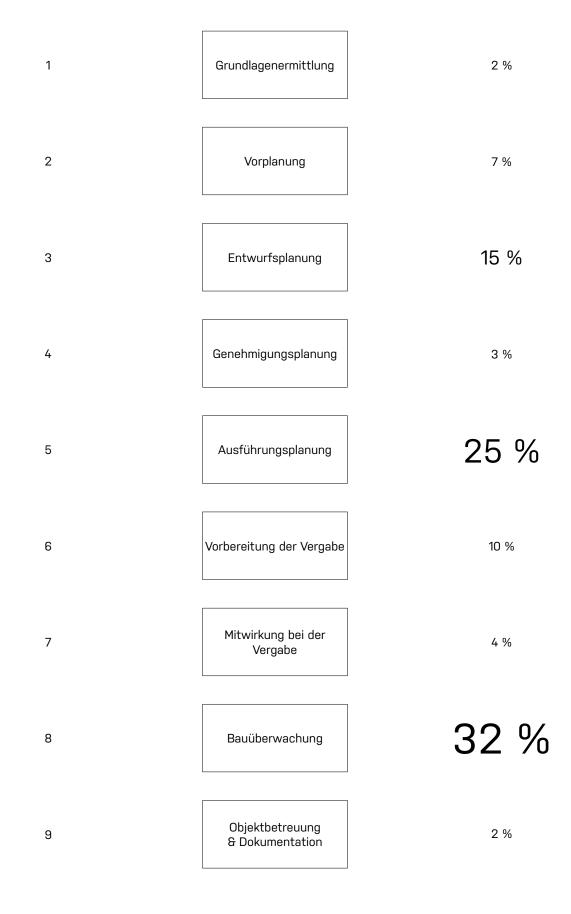


Fig. 08 (Honorarordnung für Architekten und Ingenieure HOAI, 2013) 100 %

#### <u>architects loosing their reputation to</u> <u>developers</u>

The poor state of real estate development may not only be a fault of the end users but by architects themselves. Hiring the architect for many developers also means a financial risk whether the building costs will remain within the budget. Architects have proved many times that their unrealistic ideas are causing developers to struggle with the budget, making the building too expensive, putting the projects in risk and gaining no profit on the project, which goes against developer's and economic principles. For example, it is irresponsible trying to persuade a client to spend more money on a facade regardless of what the benefit is (Stern, 2014). It could be due to the lack of sufficient economic education, respectively real estate education, that architects are losing battle to developers and are not equal partner on decision making process.

"Architects don't know what they are drawing!"

(Gluck 2014, 97)

Thomas Gluck argues the cause of architect's failure in real estate development that often architects don't consider building construction as part of their area of expertise and provide drawings which are very hard to built. Such drawings are either adapted or the details created are too expensive.

Due to the disconnection of architects from the practical construction part of the building process which is becoming more and more complex is undermining their reliability and importance for the builder, architects are no longer the building experts, therefore are easily dismissed by the developer. For the developer money plays very important role and are another cause of architect's loosing their reputation. Key for the architect is to operate well and carefully with other people's money (Stern 2014). However the budgets are often exceeded and architects are blamed for spending too much money on seemingly non important details. If the developer thinks the collaboration is no longer working in the preliminary stages he just walks away and not just one architect looses a job, but the developer may never come back nor ask another architect for help, it is not worth the developer's time and money (Interview with Holle 2016).

#### legislation and municipalities

Sometimes the lack of quality of the built environment is the consequence of a lack of regulations (Brandlhuber 2016). Since years municipalities in the Czech Republic have been criticized by professionals for not being prepared for a dialog with developers. There is a very unclear situation between politics and real estate development since long time ago.

Buildings are erected based on an obsolete zoning low and regulations which do not react to the contemporary urban needs.

In order to improve these conditions since 2011 when the The Prague Institute of Planning and Development has been established the new Metropolitan Plan (zoning law) is being created, the strategies and visions of the future development of the city are made but will not be enforced earlier than in 2020.\* What needs to be mentioned is that not even the greatest plan assures good development.

As positive can be considered implementation of the new Prague Building Regulations in the Spring of 2016, created by the The Prague Institute of Planning and Development.

Due to the absence of proper city planning and strategies the rules were created by the developers during the ongoing process. Developers have a high influence on the physical spaces in which people live in and will live for a long time.

Because the role of regulators, the municipalities, which are supposed to control the actions of real estate developers, was not, and still is not, working properly, many projects in Czech Republic were not developed very well.

"Naturally, developers are not willing to give themselves any boundaries. These are also results of the past [situation in real estate development in Czech Republic]." (Kohl 2015) "Debates about the new Metropolitan Plan and strategic concept development of the city and the constant delays in their approval contribute to the instability of city development and significantly reduces the possibility of further conceptual development. Ultimately, it will be harmful for all."

(Linhart in Deloitte 2016, 23)

Lukáš Kohl explains one example of wrong legislation type concerning the noise around the buildings:

"The noise legislation is trying to protect citizens from moving into locations with high level of noise. The paradox of such measure is within the area of the inner city, where today there is quite a lot of noise. The noise regulation makes building in such places more expensive and more complicated and indirectly pushes [property] development behind the city boundaries, where there is no noise. But in consequence it increases vehicular traffic within the inner city limits. In conclusion the impact of the noise legislation is contradictory and therefore wrong."

(Kohl 2015)

The administration system also makes the processes complicated and therefore it take too much time to approve any development, which when the development is bad is good on one hand, but on the other, it is also making the quality of development poor. The good projects are not being built either. And speaking of time and money again, if the developer knows that it will take a long time to get a building permit and it is going to be costly, he tries to save money on other things within the project (Interview with Adamec 2016). And that is when the budget for architect is also cut.

\* Although at the time the thesis is being written there are personal turbulences in the Institute caused by political interests.

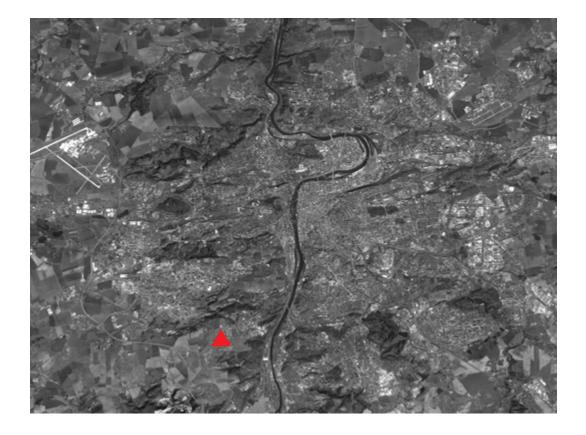
# obsolete legislation & missing regulations

Obsolete zoning planning together with faulty legislation and missing regulations of single parts of the city allows for suburban sprawl of large apartment blocks in the fields on the outskirts of the city which do not respect the context of the surroundings while the there is unbuilt space within the inner city limits which would provide progressive densification of the city and contribute to a more livable city. This approach would not be necessarily wrong if the city would be densely built up and would need to grow outside the city borders.



### city scale

Instead we can observe mistakes in the integration of buildings inside the existing urban structure. Buildings of inappropriate height and scale are being erected. Due to the affordability of land, not strict legislation and unspecified boundaries of the city the boundaries of the cities in Czech Republic keep growing without any long term vision, plan or strategies. The fact that the city is not built concisely and new buildings do not fit or follow the urban tissue confirms the missing urban strategies and visions.



case D.01 exterior | city scale

<u>developer</u>: EKOSPOL <u>project</u>: Barrandov Hills, Praha 5 <u>image source:</u> http://www.ekospol.cz/

# obsolete legislation & missing regulations

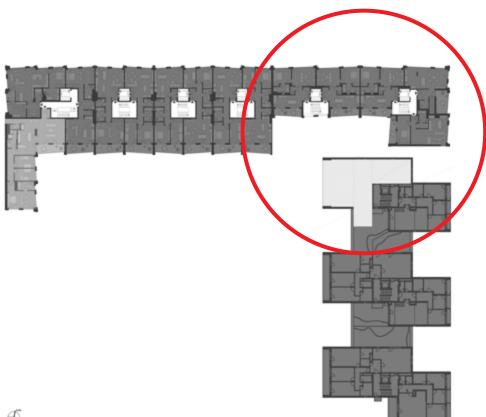


case D.02 exterior | urban block

<u>developer:</u> KARLÍN GROUP <u>project:</u> Rezidence Vltava, Praha 8 <u>image source:</u> http://www.rezidencevltava.cz/

### urban block

Missing regulations can be observed on the level of urban block while there where an urban block should be formed solitary buildings are built inappropriately next to each other instead. These solitary buildings are built without enough space being left between them and creating unpleasant shaded niches and facades without use and with energy and material loss.



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case D.03 exterior | urban block

developer: FINEO project: Trio Karlín, Praha 8 image source: http://www.triokarlin.cz/

# missing regulations & irresponsible municipality

Not only that the regulations are missing but the poor appropriation on the level of ground floor proves the lack of interest of municipalities, specifically the planning departments, in the appearance of the public space and their irresponsibility towards the life in the streets.

The built houses do not communicate with the surroundings on the ground level, their relationship the surroundings on the street level is poor and potential of such spaces is not fully used.



case D.01 exterior | street level

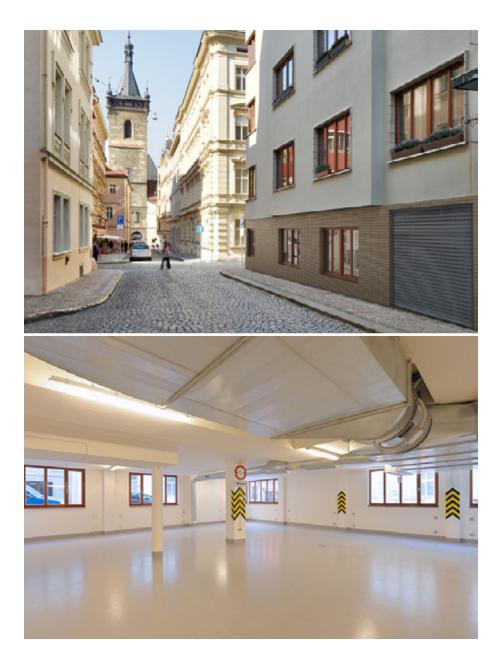
<u>developer:</u> EKOSPOL <u>project:</u> Barrandov Hills, Praha 5 <u>image source:</u> http://www.ekospol.cz/ case D.02 exterior | street level

<u>developer:</u> KARLÍN GROUP <u>project:</u> Rezidence Vltava, Praha 8 <u>image source:</u> http://www.rezidencevltava.cz/

### street level

The ground floor of buildings, there where it could be appropriated to attract the neighborhood life or enhance the livability of the houses and could be used for public life or even commercial space, is rather used for parking and technical installations of buildings.

Example: If a building is already built on the outskirts of the city in a rural quiet and relatively private area it gives great opportunity to offer private gardens on the ground floor instead of parking and garages.



case D.04 exterior | street level

<u>developer</u>: private developer <u>project</u>: Vitrage House, Praha 2 <u>image source:</u> original photography taken by the author

### dweller's demands

Since dwellers in general are not fully aware of what they can receive under which price as well as the quality of the space they live or work in, nor they are unable in some cases to absorb and appreciate the offered quality, their demands for good buildings and spaces are not high. Still present western dreams of house with a swimming pool in suburbs, an apartment in a new building block and demand for rather as cheap as possible and new living still prevail among the Czech dwellers (Fig. 09, p. 59).

"Low quality of demand side creates low quality of supply in real estate development in Czech Republic. We try to do high quality development because it is our belief, but it is very often not understood and discovered by our clients."

(Interview with Interview with Adamec 2016)

Dwellers requirements, to the delight of developers, are not very high. Real estate developers in Czech Republic are not forced into creating high standard housing which may contribute to their surroundings and cities, nor its users as much as they could. Real estate development is therefore, logically, driven mostly by the highest achievable profit possible. Profits are not difficult to create by saving on the building quality by applying cheaper materials or cheaper labor. Developers crave for higher profit over the building's quality.

Since no quality is much demanded from the demand side this is one of the reasons why only very few buildings built today are designed by the architect in the Czech Republic.

On top, despite the growing interest for new and "ready-made" housing, the interest for architecture is decreasing among public in the Czech Republic according to Google Trends (Fig. 10, p. 59)

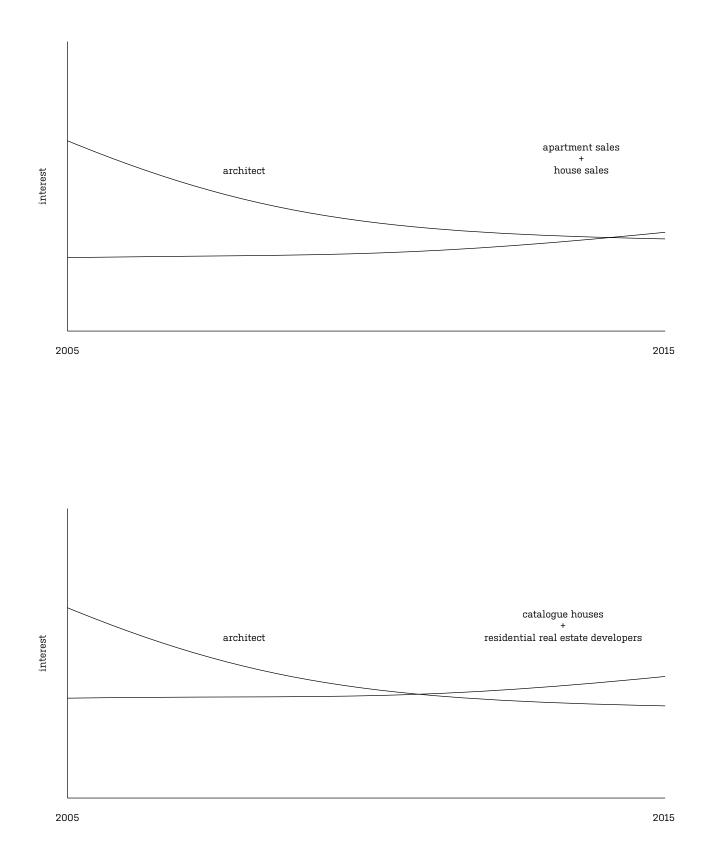


Fig. 09, Fig. 10: Maps the total volume of search entries for a given keyword over time can provide near real-time insights into the subject of interest. Prague, Czech Republic (Google Trends)

The possibility of general public to distinguish between good and bad within real estate development is unfortunately very low. The market is full of low quality development, clients have difficulties to find the good quality projects if such even exist. (Interview with Adamec 2016). Developers, who try to provide high quality architecture in close collaboration with architects, find that their properties are not being sold primarily because of good architecture but mostly by accident. The location, square meters or number of rooms met the requirements of customers. And if architecture is discussed, then on the level of design rather than the architecture (Interview with Adamec 2016).

It is not only the developers fault that developers are not building nice houses, but the clients don't require nicer environment. They are influenced by standards, unwritten rules, which determine expectations, behavior and demand; those determine what is acceptable and what is unacceptable; those are nowhere written and in society passed on (Kohl 2015).

Developers base their market research on what people want. People base their requirements on standards and references they see around themselves either build or in commercials. Since what they, in most of the cases, see is what the developers have already created before, we arrive to a vicious circle. The dwellers demands are based on low quality references which create low quality demands. The market research is much narrowed only to a demand for square meters and number of rooms, and is not influenced by the way people spend their time and live. Developers gladly adjust to undemanding dwellers, it is part of their business to meet the dwellers requirements even though they are not high. The whole task is just easier and uncomplicated rather than inventing new approaches to the real estate development and risk their careers. (Kohl 2015).

#### standards & building standards

When architects are hired their brief is to follow these standards and that the building needs to be understood by a banker, lawyer, broker and the future buyer. That gives very narrow field of work and is the reason why all buildings look alike and marketing departments are after trying to create an impression that something extraordinary is being built (Fidler 2015).

For banks it is important to built according to certain standards so it is possible to finance such a project. Standardized buildings are being erected and these standardized buildings become the earlier mentioned market products.

Building standards which were carried out in Czech Republic in past years in most cases don't bring quality but average (Kohl 2015). Standards create unified buildings. Unification goes in hand with a loss of contextual aspects of the building which is therefore having issues fitting in the location and the neighborhood (Griffin 2014).

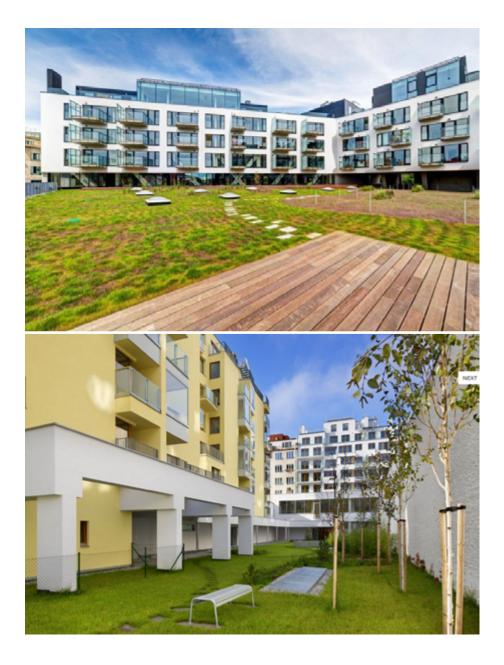
Standards were created to protect the end user rights and to ensure the end product received is of the best quality and is reliable and durable.

In a research carried out this year by Deloitte in Czech Republic architects have agreed that the building standards are those which need to be changed the most. Building standards are unbalanced, the regulations are somewhere to strict, somewhere unsatisfactory and insufficient because they have not been updated and are today obsolete (Deloitte 2016). The building standards in Czech Republic are also only of a technical manner. They include requirements for construction stability, fireproofing, light, distances from other buildings or the plot border. But the building standards never speak of functional requirements, such as public space requirements around the building as in Switzerland. Where there is a building law which talks about requirements for the spaces around the buildings (Interview with Holle 2016).

# irresponsible municipality & obsolete building -

The importance given to the spaces around the buildings either within their close proximity or within the compound is from the developer's side as well as from those who give building permissions low. These spaces are still not considered as an added value to the development.

This approach creates generic spaces without any identity of the spaces. Spaces with a potential of collective use by the dwellers within the courtyards are generic and not appropriated and properly designed.



case D.05 exterior | collective space

<u>developer:</u> SATPO <u>project:</u> Sacre Coeur 2, Praha 5 <u>image source:</u> http://www.satpo.cz/ case D.06 exterior | collective space

<u>developer:</u> Property Solutions <u>project:</u> Jubileum House, Praha 7 <u>image source:</u> http://www.jubileum.cz/

### collective space

## - standards & poor dweller's demands

A relationship between the ground floor apartments and the courtyard is missing as well as hierarchy and design of public (collective) and private space in the courtyards or around the buildings and vague terms of urban green are used for spaces without specific purpose or function.

The fact that dwellers keep inhabiting such development process only creates a bad precedence for the future development.



### $\bigtriangleup \triangleleft$

Example: A common collective space for the dwellers could have been created in the courtyard, but it was too expensive for the developer to develop the space above the garage space.

> case D.01 exterior | public space

<u>developer:</u> EKOSPOL <u>project:</u> Barrandov Hills, Praha 5 <u>image source:</u> http://www.ekospol.cz/

### public space

#### templates and repetition in materiality and typology

Many developers are still not prepared to pay for a good quality architects, because they consider it too costly for them.

"Developers don't have any taste and have big ambition to design themselves. And architects or engineers in most cases don't have enough time for their work, because time is money of course, so they use the same solutions and templates again and again." (Fidler 2015, 28)

The materiality of apartments based on customer's price range repeats from a project to a project. The repetition of materials, furniture and decorations suggests generic and inept approach within similar price range of apartments.

The typologies of residential houses keep repeating themselves since late 19<sup>th</sup> century and are not evolving, nor trying to react in a joined discussion with dwellers to contemporary lifestyles and spatial requirements.

During the last one hundred years society and everything it creates went through a huge development which can be seen on a telephone or a car. But the typology of an apartment in Czech Republic keeps repeating itself and is not evolving. Until today the typology offered (not only by real estate developers) in apartment buildings for a 2 room apartment follows the same scheme as even one hundred and thirty years ago. It is another consequence of obsolete building standards and a missing discussion how people live in the present time and what are their needs.

Such typologies are an expression of low individual approach. Such typologies are missing variability and adaptability and do the spatial and organizational limitation they do not provide appropriation for contemporary needs, lifestyle and comfort of the dwellers.

## typology without progress

. no invention and progress in typologies for 130 years

 $\triangleright$ 



142, Praha 5



Vitrage House, Praha 2



Marina Island, Praha 7



Waltrovka, Praha 5

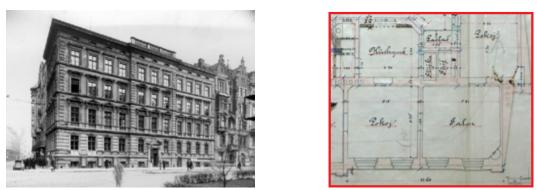
### $\triangle$

. repetition in floorplans

. use of templates of schemes

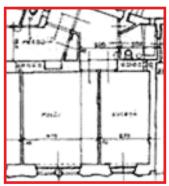


image source from the top left clockwise: http://www.142praha.cz/, http://www.marinaisland.cz/, http://vitragehouse.cz/, http://www.waltrovka.cz/



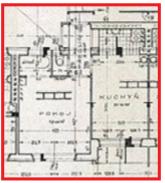
floorplan from <u>1887</u> | Václav Sigmund, Na Kocandě, Praha 1





floorplan from 1914 | Josef Chochol, rental apartments Hodek, Praha 2





floorplan from 1928 | Evžen Linhart, rental apartments, Praha 3

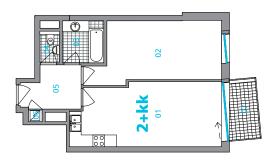




floorplan from 2016 | Jubileum House, Praha 7

image source from the top down: http://www.archiweb.cz/, http://www.archiweb.cz/, http://www.archiweb.cz/, http://www.jubileum.cz/

## floorplan repetition



Jubileum House, Praha 7



Waltrovka, Praha 5



142, Praha 5



Marina Island, Praha 7



Barrandov HIIIs, Praha 5

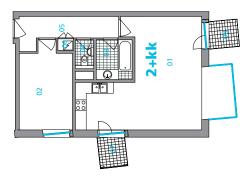


U Dubu, Praha 5





image source from the top left clockwise: http://www.jubileum.cz/, http://www.marinaisland.cz/, http://www.ekospol.cz/, http://www.byty-u-dubu.cz/, http://www.142praha.cz/, http://www.waltrovka.cz/



Jubileum House, Praha 7



Waltrovka, Praha 5



Viladomy Vackov, Praha 3



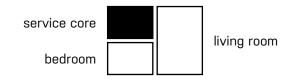
Marina Island, Praha 7



Vitrage House, Praha 2



Sacre Couer, Praha 5



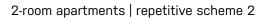


image source from the top left clockwise: http://www.jubileum.cz/, http://www.marinaisland.cz/, http://vitragehouse.cz/, http://www.satpo.cz/, http://viladomy.navackove.cz, http://www.waltrovka.cz/

# repetition of materiality and style



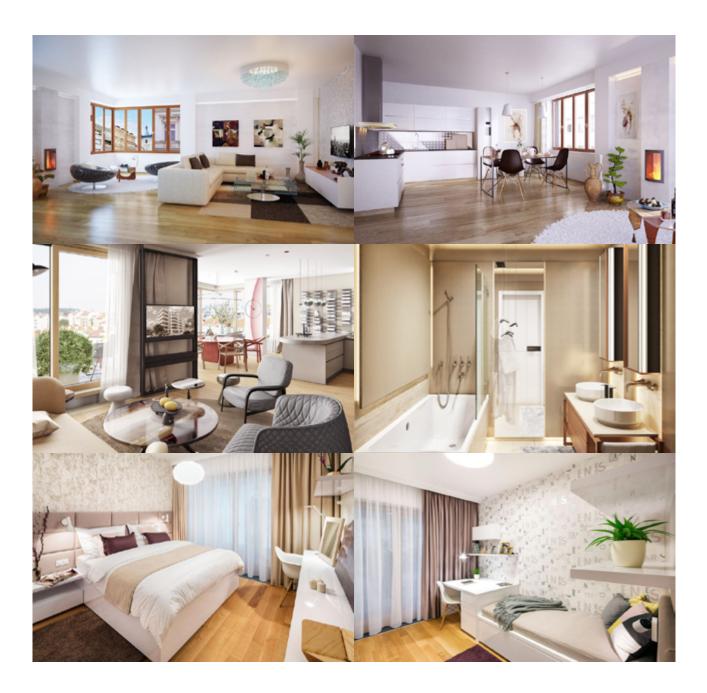
case D.07

case D.02

#### case D.04 interior

<u>developer</u>: private developer <u>project</u>: Vitrage House, Praha 2 <u>image source:</u> http://vitragehouse.cz/ case D.07 interior

<u>developer</u>: CRESTYL <u>project</u>: 4U Living, Praha 8 <u>image source:</u> https://www.4uliving.cz/



case D.02 interior

<u>developer:</u> KARLÍN GROUP <u>project:</u> Rezidence VItava, Praha 8 <u>image source:</u> http://www.rezidencevItava.cz/

#### <u>marketing</u>

At the end of every project marketing is subsidizing the missing quality in projects and is used as a tool to differentiate a particular project from other projects hence being built on similar principles, standards and templates, trying to catch and persuade a client about the right product for him/her.

The idea of marketing in general is to distinguish one project from another and maximize the sales against the competition and show that a project or a product is exceptional and better than the rest on the market.

Through the means of presentation, its graphics and renderings of perspectives and floorplans one can easily distinguish between the price range of a project and therefore the wealth of the target group and the ambition of the developer. With such indicators one can also assume the proximity of the project to the city center.

However within these groups the presentations of projects become very similar and hard to distinguish from each other (graphics, renderings, typology, materiality, furniture). As if the developers were not hiding the repetition and similarities of the projects. It becomes hard for the dwellers to find the right project for them since they have to find their way through a thick layer of visual repetition, if that is of dwellers' resolving power (Interview with Adamec 2016). This also proves that developers create their projects according to market research based on the undemanding customers mentioned earlier and try not to risk and prefer to build what the other developers build in the area.

### renders x reality

What is of a high disappointment is the developer's false marketing strategy used to convince the potential customers. The renderings often don't concur with the reality.

The connection to the surrounding nature and spaces is visibly different outside the Rezidence Vltava project.

The development of public spaces is often left out and the commercial street front of the buildings which could house a restaurant or a cafe or any other public function which could contribute to the neighborhood show how these aspects are neglected and not pushed forward



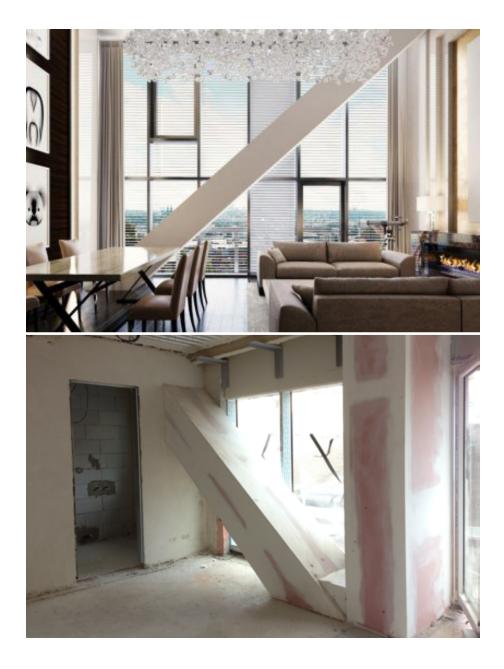
case D.07

<u>developer</u>: CRESTYL <u>project</u>: 4U Living, Praha 8 <u>image source:</u> https://www.4uliving.cz/

### marketing x legislation x money

also by the municipalities. While satisfying the fire safety legislation requirements the easiest possible solution to cover the steel load bearing beam with plasterboard cladding became a massive obstacle inside the apartment which also differs from the rendering shown to promote the project.

We can speculate whether it is only the money which needed to be saved on selecting another fire proofing method or it is a fault of an obsolete legislation?



case D.05

<u>developer:</u> SATPO <u>project:</u> Sacre Coeur 2, Praha 5 <u>image source:</u> http://www.satpo.cz/, original photography taken by the author

#### <u>bank</u>

Real estate market is to a certain extent designated by bankers and investment funds, who don't put a lot of attention to how the house looks like and where it is located. For a bank it is important that the project fits in the financial models and is built according to required regulatory standards (Fidler 2015).

Real estate development projects are financed based on standardized financial models which are adapted to concrete projects, the basic input is:

. capex (capital expenditure: building construction costs estimate)

- . opex (operation costs)
- . market price
- . sale price
- . rental price
- . rental contracts

The financed project must be naturally profitable. The more profitable the cheaper and easier financing. Critical measure for the project profitability is the possibility to repay the bank loan with a reserve of at least 20%. According to a bank there is no economical sense to provide a loan to a less profitable project than the mentioned 20% + the cost of the loan.

Logically a bank will not finance a project which does not receive a zoning permit or building permit which means that the building is built according to building standards and valid legislation.

As the rules are made and the market is set for the developer it is easier to finance a project with higher share of low square meter apartments due to their high liquidity on the real estate market (Kucerova 2016).

The high demand for smaller apartments proves their popularity and high demand on the real estate market and opens a question why do these apartments keep being so repetitive if there is such high demand by so many individuals. The financial model which compares the costs and the profits and is confronted with the risk management of the bank and the inputs in the financial model are carefully checked these are the only parameters which the bank uses to consider the success of the project (Kucerova 2016). The success is based purely on the economy of the project. Which confirms that the bank is not interested about any qualities of the project and confirms its influence on the project. But it is important to be clear, that the bank can not replace the municipality nor can decide of the qualities of the project.

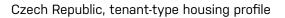
Despite that fact that banks have due to economic situation in Czech Republic at this moment a lot of money they (after the last crisis) prefer to secure their money and lend the money at the stage of building permit. With that they require own finances and percentage of sold, pre-sold or under contract square meters of the project.

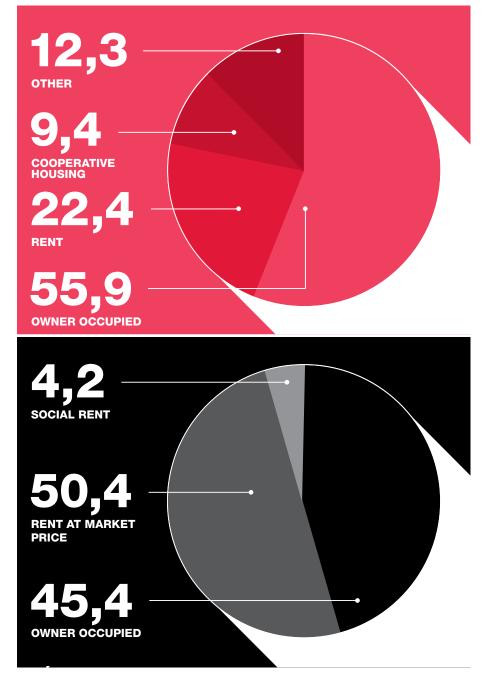
\* Precise input were hard to receive since those are of a secret of each bank and developer.

#### rent, sale and building quality

Due to low residential rent prices and lower demand for rental apartments given by the tenant types in Czech Republic than in Western Europe developers prefer to sell their residential properties instead of renting them out (Pitini et al 2015), see Fig. 11, p. 79. Under these conditions we can think of two different real estate models. In the first model where the property is intended for sale can be considered as short term investment and in the second model the property is intended for rent stands up for the long term investment thinking. This supports the theory of a building intended for a sale as a product and short term investment (Vašourková 2015). The approach to the first model is as follows: build fast, sell fast and hand in responsibilities to the new owners. The quality and durability of such development is given up (Fidler 2015). The second model requires the developer to remains as an owner and manager of the building and the apartments are rented out to dwellers.

The second model, which could provide more quality to the real estate market is in the Czech Republic very marginal.





Germany, tenant-type housing profile

Fig. 11: tenant-type housing profiles in the Czech Republic and Germany (Pitini et al. 2015)

#### <u>materiality, durability, sustainability,</u> <u>financial consequences</u>

As the quality and durability of a building is not of the highest priority the emphasis on durable and long lasting materials is also not very often present. Instead short lived, unstable and cheap materials such as plastic windows and plastic floors are used.

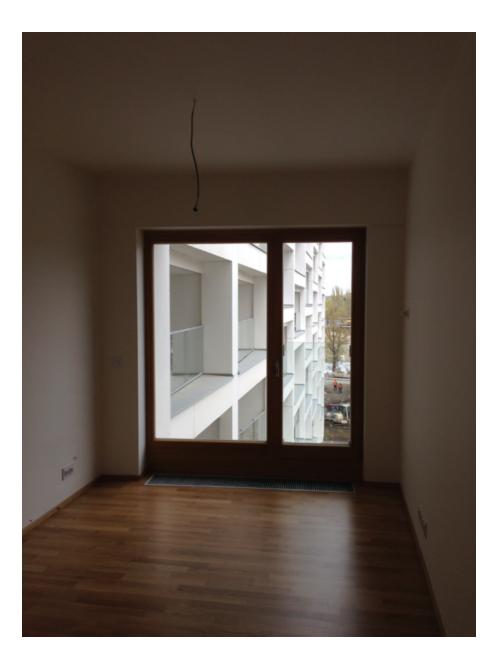
What is of an interest by developers is fulfilling the energetic standards and receive a certification with energy consumption level which are in the Czech Republic not very strict and demanded so the buildings usually end up only with insulated facade.

Elements which would contribute to the lower energy consumption of the building such as the building's orientation in relationship to climate conditions, use of natural, structural or exterior shading elements, advantage of cross ventilation are not considered.

Renewable energy sources in all the researched case studies were missing which is causing a higher energy consumption and higher working costs for the dwellers in the long term perspective.

Due to poor material quality and missing renewable energy sources maintenance and operation costs are higher and due to the spatial and energy inefficiency the units are of high acquisition costs while the dweller's invested money is not efficiently spent.

# materiality x durability x sustainability



case D.02 | interior

<u>developer</u> KARLÍN GROUP <u>project</u> Rezidence Vltava, Praha 8 329 discussion on the real estate development in the Czech Republic

Despite the real estate development theory about the importance of the architect in the building process it is still difficult for architects to be involved in building processes fully. The cultural and social evolution in the Czech Republic is even worsening the situation, the knowledge about architecture among public is low and therefore the developers are not forced to involve architects in the design to deliver high quality products which the dwellers would demand. In the end the architects are hardly present in the building process of real estate developers to do the real architectural role.

As it is in a way institutionalized and if we consider the involvement of architects in the building process by expressing the time percentage of single performance phases of the building process the architect is trained to do while and we compare those to the time percentage of each performance task done by architects in Switzerland or Germany we see that the role of the architects in the building process in Czech Republic is seen mostly as design work and not surveillance work during the construction process. The design work can be seen easily as an extra unnecessary cost since there is no demand for high quality architecture. The surveillance of the construction can be done by an engineer.

It can be observed that due to the low demand for high quality architecture the developers cut the expenses for the work of the architect very often.

It has been discovered that the building legislation in Czech Republic is obsolete and the municipalities are not prepared and not good negotiators while it comes to dealing with any kind of real estate development. A comprehensive plan is missing and the municipalities in most cases do not know what they should require in different locations because the strategic plans created for single parts of the cities are missing. And since the tools are missing the component of municipalities as coordinator and strong and acknowledged negotiator in the project permitting phase is missing.

The municipalities need to know what to require and what is the best for their cities spatially in order to enhance the livability of their neighborhoods and contribute to the quality of life of the inhabitants.

The demand for higher quality built environment needs to come not only from professionals but also from the public. Until then the developers are those who set the standards of the built environment.

The obsolete administration system which makes the building permission process longer than required is also contributing to the lower involvement of architects in the building process as the architect's job due to the long building preparation process does not fit in the developer's budget.

Not only the legislation but neither the building standards balance the poor situation. The building standards which were created to protect the end user in general or standardized situations do not bring the best quality but only average in the Czech Republic. And as professionals agree that the building standards need to be changed the most out of all legislative tools I believe we should be careful about the strictness of the building standards. Housing should not be considered as an anonymous product. Housing requires individual approach which cannot be standardized. By creative spatial organization and orientation the standards as well dwellers individual needs can be met.

It can be said that until a comprehensive plan in Prague is passed and the building standards are updated the form of the built environment is up to architects', developers' and architect-developers' own responsibility.

While saying that it is important to have in mind that regulation or over regulation does not always provide better solutions. As Brandlhuber confirms, the lack of vitality in cities is a consequence of its over regulation (Brandlhuber 2016). But regulations which do not react to contemporary issues of the cities may harm the cities even more than if there are no regulations at all.

Clients play a big role, definitely it is not possible to generalize and each dweller stands for different demands and expectations.

"There is the Skoda, there the VW and there is the Audi. Technically they are the same, but not everybody drives Audi, because it is not only a bit more beautiful. But there are other differences and every car has different technical nuances while they are all great. But you have your budget and with that you buy the car which you can afford."

(Interview with Holle 2016)

But higher dweller's demands are essential premise for a higher standard development.

As the research shows the conventional development, where masses are addressed, there is no space for many alternatives, building, as mentioned earlier, are driven by demand which is created by references created by developers earlier. The process goes in a circle and the self-repeating typology templates are hardly questioned

No innovation is readable in the contemporary real estate development in the Czech Republic, we can see a lot of repetition in typologies and materiality, the projects are not trying to be different, they just follow the main stream and the average customer demand.

The means of marketing of the projects quite surprisingly and interestingly also show the repetition in renderings and materiality and a non-innovative approach of developers towards the built environment and contribute to the low image of the real estate development in the Czech Republic.

Moreover in many cases the means of marketing are used to twist the reality and try to present the projects in a better light. Which can be considered quite alarming but it does not seem that many future dwellers mind it.

Due to the fact that banks provide loans after a building receives a building permit, and a long way of planning and investing needs to made before the building permit is received, the banks put a financial burden on developers straight from the beginning and therefore the building preparation phase expenditures are being lowered as much as possible, so there is not a lot of remaining space for more thorough planning in the initial phase of the project. In these conditions architecture is considered as an extra cost which can be cut. Large development corporations which are driven by their profit required by their investors and shareholders can not afford to spend time with negotiations and extending the building process (Interview with Adamec 2016).

The quality of the real estate market is also not supported by the condition on the real estate market. Due to low rent prices of residential development most of the real estate projects are intended for sale. If the developer would remain as an owner of the building and would be renting apartments, it would be in his own interest that the building lasts as long as possible in order to lower the maintenance costs as well as fit the building in the neighborhood the best way possible to ensure its attractivity and popularity in the future, which in exchange would bring more quality to the built environment due to the long term thinking of the investment.

The fact that all the properties are immediately sold out goes hand in hand with the poor durability of the buildings. Cheap materials and very little sustainable solutions are used in the real estate development in the Czech Republic.

## 330 architect as developer

<u>chapters:</u>

- . involvement of the architect-developer in the building process
- . importance of the architect
- . division of issues in traditional design-bid-build scheme **x** . architect-led design-build
- . responsibilities, building quality, durability
- . local identity, context, cultural value
- . public / dweller participation
- . financial control
- . typology

"classical role is too passive and undetermined"	John Portman¹
"provide high architectural quality"	DN2M <sup>2</sup>
"yearn for more control over the project"	Mike E. Miles³
"achieve the desired quality"	David C. Hovey⁴
"earn fair reward for the work"	Jonathan Segal⁵
"offer better more individual housing types"	DN2M <sup>6</sup>
"integrating disciplines deeply engaging in a dialogue"	Marc Koehler <sup>7</sup>
"we don't really have much input on a program, site and budget"	Alex Barret <sup>s</sup>
"we have greater responsibility now"	Jared Della Valle <sup>9</sup>
"we take responsibility, therefore we construct buildings with fewer problems"	Thomas Gluck <sup>10</sup>
Why architects may want to become developers?	

<sup>1</sup> Portman 1976, 14; <sup>2</sup> DN2M in Archipreneur 2015; <sup>3</sup> Miles 2007, 38; <sup>4</sup> Hovey 2016;
<sup>5</sup> Segal in Archipreneur 2015; <sup>6</sup> DN2M in Archipreneur 2015; <sup>7</sup> Koehler 2016, 32; <sup>8</sup> Barret 2014;
<sup>9</sup> Valle 2014; <sup>10</sup> Gluck 2014, 98

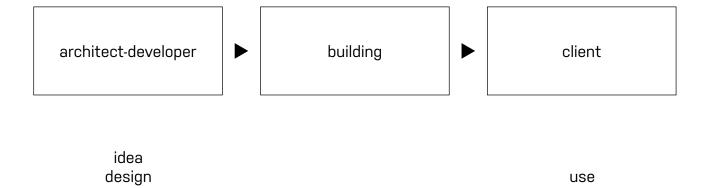


Fig. 12: architect-developer led building process

construction

Architects who became developers in one person were seeking for the possibility to influence projects in earlier stages of the project before the project's brief was defined, wanted to be more active in the building process and not to wait for clients to come or win competitions, had an ambition for more responsibility and contribute to the built environment directly by controlling the building process until the end and achieving the desired quality, offer more possibilities to the clients and integrate all disciplines involved in the building industry to engage a dialogue.

There is a great potential in architects working as developers not only for architects themselves and that good architecture can increase the market value of a property but for the cities too. Architects already know how cities work and know how to build a building and if they start to think a little bit like a business man they can contribute positively to the built environment and the real estate market (Tamarkin 2014).

Considering how much a design costs is not taught in depth the schools nor completely understood and practiced in architectural practices even though economics behind buildings are for investors as important as for architect is the design. Designing based on what is it going to cost is a big constrain enough which leads to a challenging task (Barrett 2014).

The role of architect-developer brings profession of architect and developer together. Bringing quality of work and building together with building revenue. A multi-disciplinary person who is aware of architectural qualities, building technology, construction management and finances behind a project. A person who is able to direct all professionals and other stakeholders who should be involved in a project to construct a project which can be of a contribution in its location for all involved. (Such a person does not necessary need to arise from the architectural profession, however in the center of my research is the architect with multi-disciplinary abilities.) Due to different more independent approach and different goals architects as developers have a great potential for seeing possibilities there where conventional developers would not expect them or would not dare to risk to invest (Portman 1976). Other than in a regular building development process where architect are called and asked to do only specific design and planning work after a location, use and size of the building is decided in the architect-developer led building development process the idea, design and project specifics come from the architect (Fig. 13, p. 90-91).

This process may seem very straight forward, with a client confronted with a final solution at the end of the process, but thanks to the involvement of the architect as the initiator of a project there are tools of participation of public and future dwellers which will be elaborated further on in the research (Fig. 14, p. 92-93).

The benefits of developing architect for the built environment will be discussed in next chapters.

## project participants | architect-developer

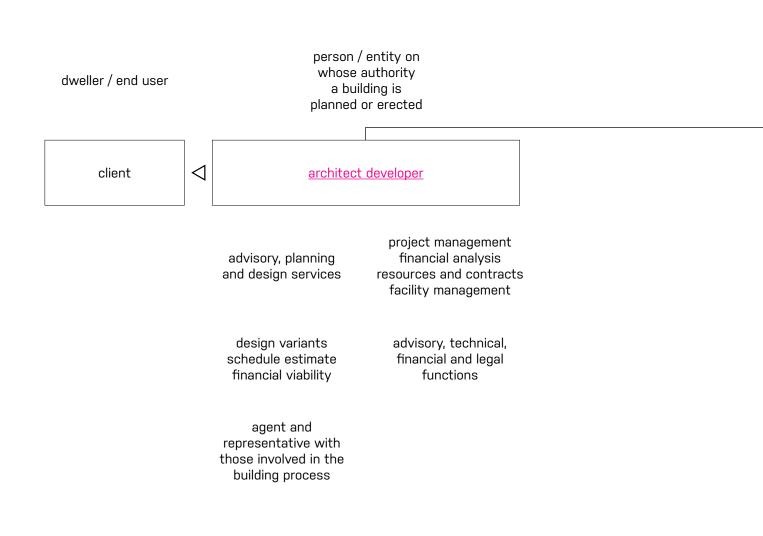
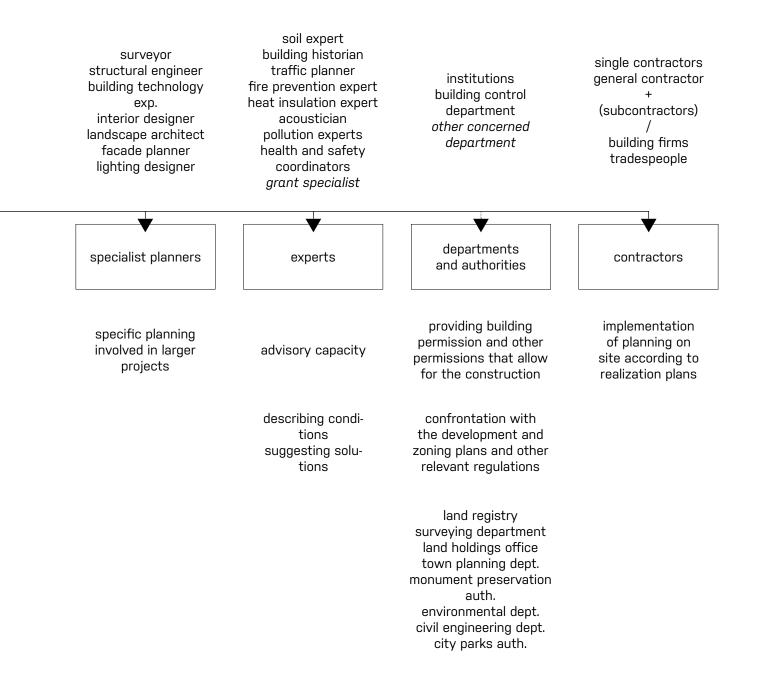


Fig. 13: project participants in building process managed by architect-developer, adaptation of a diagram (Bielefeld, 2013)



### project participants | architect-developer + participation

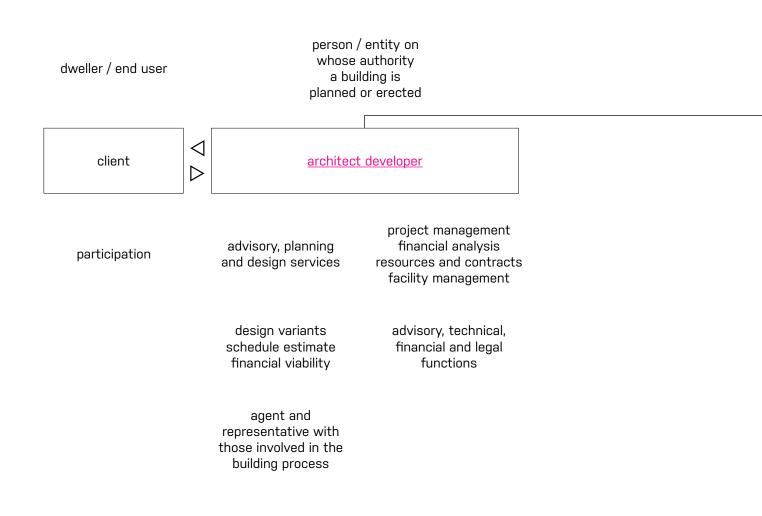
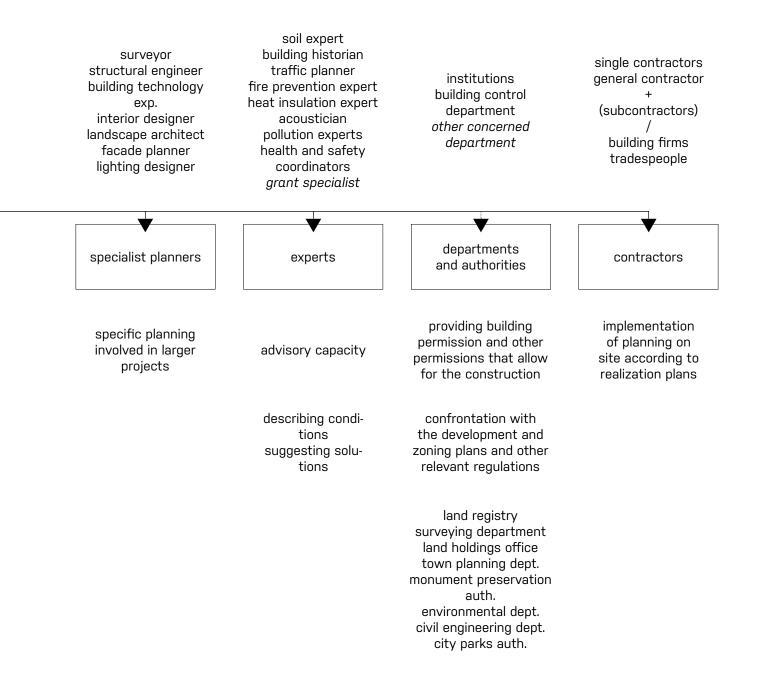


Fig. 14: project participants in building process managed by architect-developer including participation of the future dwellers, adaptation of a diagram (Bielefeld, 2013)



#### involvement of the architect-developer in the building process

If architects expand their profession's field of action, they can maximize the creative potential of their project and at the same time can be able to give priority to architectural quality throughout negotiations with the banks, the bureaucracy and the builders.

"We believe, that to have the chance to do groundbreaking architectural work, you have to have control of many of the aspects that traditionally lie with developers."

(Griffin 2016)

By expanding the field of influence as property developers Matthew Griffin and Brita Jürgens from Deadline designed an economic model that allowed them to realize the architecture they envisioned (Blender-Slender project in Berlin, used as a case study). This meant they could let the architecture formulate the economics, rather than the other way around. That architects can support developers in the initial phase of the project and be of a help in the decision making process is confirmed by Miles:

"Architects can help guide the developer in selecting a site for a specified use or develop alternative concepts for a site and head the land use team to bring a concept to fruition."

(Miles 2007, 45)

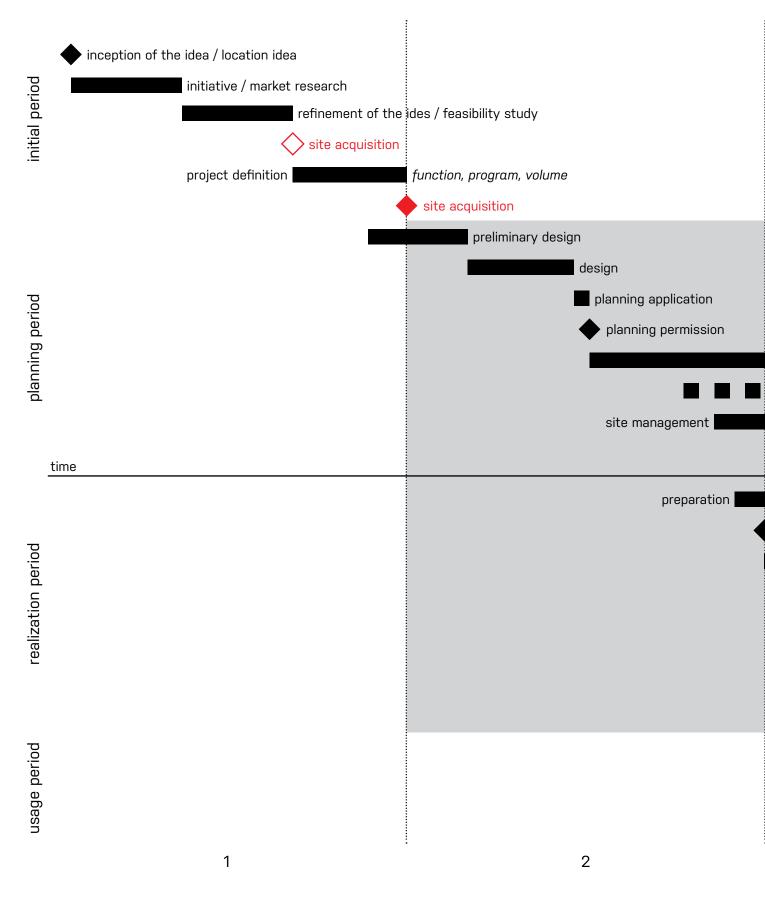
And the case study project in Winterthur, Switzerland by DN2M confirms the real estate development theory:

"Architects are able to find a location with potentials which the developer would not consider as potentials or would evaluate them as challenges which are hard to overcome. But architect could create a feasible project on such site."

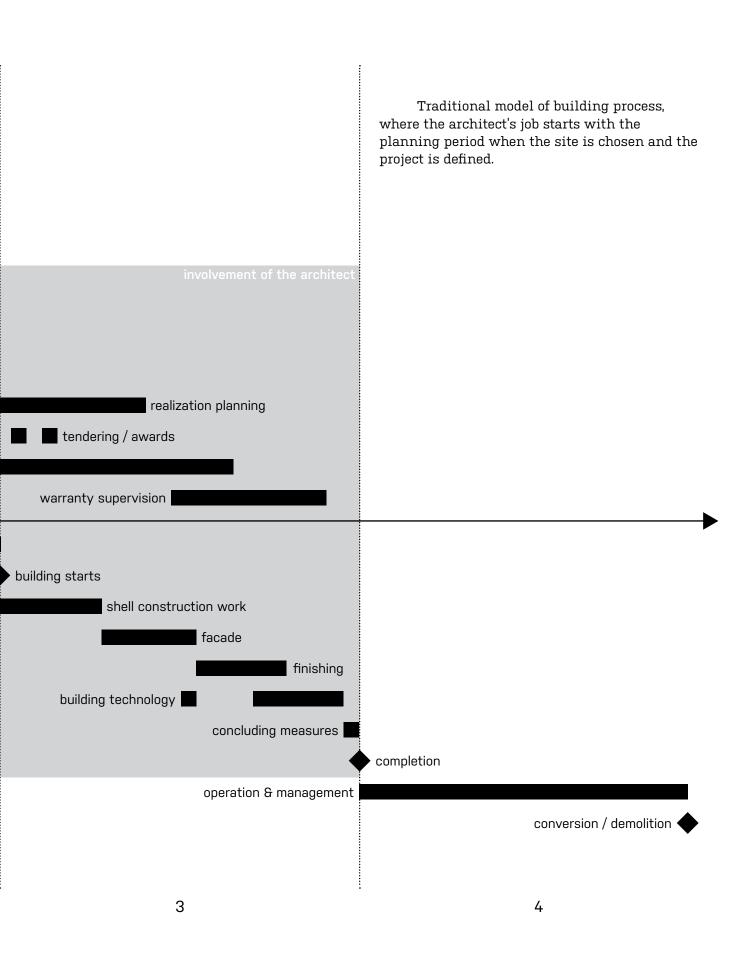
(Interview with Holle 2016)

When the knowledge of the architect is combined with the knowledge of the developer such architect should be able to adjust to any necessary changes more freely and based on his/her best measure considering the ration between architectural quality, market possibilities and profitability. In Fig. 15 and 16 we can compare the presence of the architects in the process. In traditional scheme, the architect is usually invited to collaborate on a project after the site is chosen, the function and program defined and size and volume of the building is predefined (Bielefeld 2013, Miles 2007, Wamelink 2009). If the architect is involved in the building process since the initial phase of the project he can influence decisions about the location selection, function, program and building volume. Which are precisely the phases which influence the project mostly through which the complete vision of a building of the architect can be realized.

### traditional building process







### architect-developer led building process

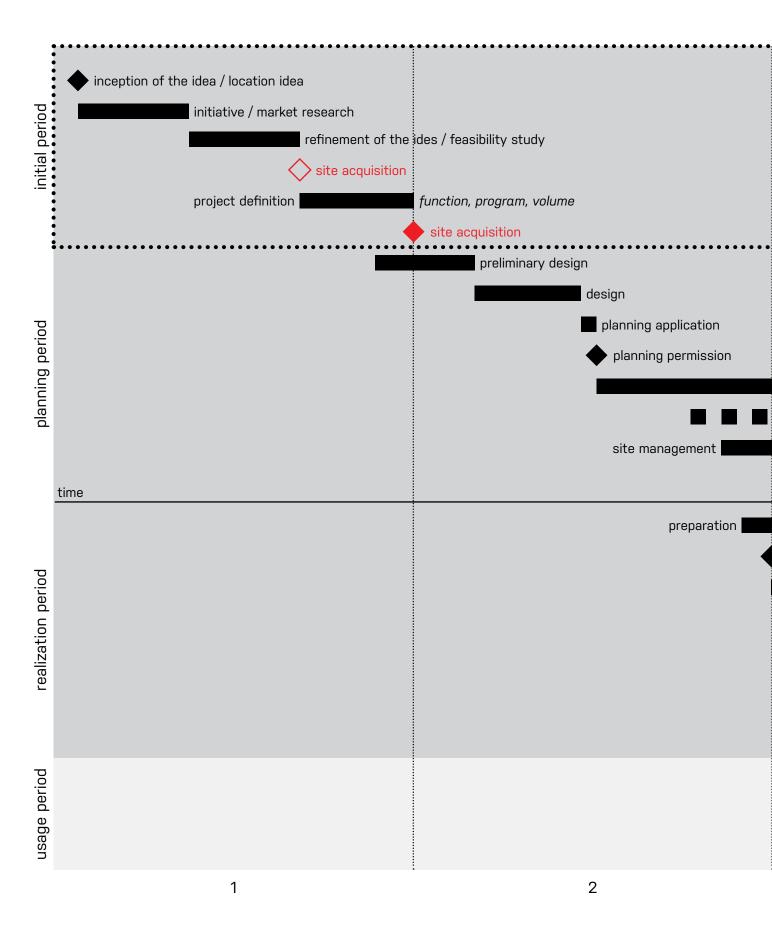
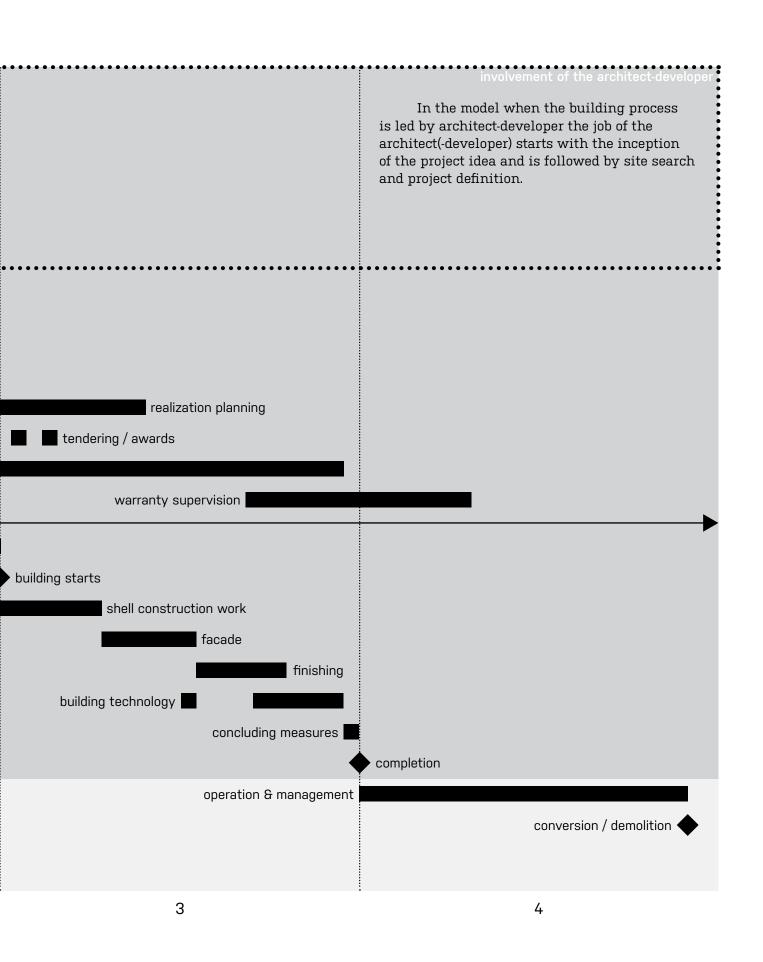


Fig. 16: architect-developer led building process phases, adaptation of a diagram (Bielefeld 2013, Miles 2007, Wamelink 2009)



However, as both interviewed developers Marc Holle and David Adamec collaborate with architects thoroughly since early phases of the project and can not imagine to work without the architect their practical experience shows a later involvement of the architect in the process. David Adamec searches always for location and does rough programming and volume of the building himself (Interview with Interview with Adamec 2016). The precise program and size of the building is done in collaboration with the architects.

Unlike in the Winterthur project, where the architects of DN2M were present in the project since the beginning, Marc Holle as a manager of the second project in Bremgarten, Switzerland worked on the site and programming himself. The program and shape of the building was after designed together with the architects (Interview with Holle 2016). The roles in this case were rather divided to architect and developer. Even though the Bremgarten project is executed in a high quality, it is visible it is more rational and conservative than the project in Winterthur, Switzerland where the architects were developing the project from the beginning alongside with the developer and adjusting the project to clients demands during the process.

In these practices we can see that the architects are not present since the ultimate beginning of the project, but it does not really hurt the project.

Although, it is important to admit the architectural background and passion of architecture of both developers, as Marc Holle is an architect and David Adamec would like to be an architect if he was not a developer. The reason for that is also clear division of roles as the developer has a deeper understanding of the potential profit and thus is able to secure a sound development process.



DN2M, Winterthur, source: http://www.dn2m.ch/projekte DN2M, Bremgarten, source: http://www.dn2m.ch/projekte

#### importance of the architect

# Both interviewed developers agree on the importance of the presence of the architect in the process.

Last but not least not only the initial and preparation phases but also the construction and final phases of the building process are as important as any other part of the process and its supervision by the architect is necessary for the execution of the complete vision of the architect. An exceptional building of high quality architecture needs to excel also in the final details. The degree of supervision of a project in the construction phase is very dependent on conditions, position of the architect in the process, money and as well time. The supervision is often reduced to monitoring of the construction as a service for the developer and for the need of architect's approval which is usually also required for each construction loan drawn from the construction lender (Miles 2007)

### division of issues in traditional design-bid-build scheme and in architect-led design-build scheme

During the course of history the role of architects has shrunk from master-builders to designers. By putting the construction part outside of the architect's expertise area and by limiting professional liability and risk reduction the role has limited itself to be able to engage effectively in the building process (Gluck 2014). Today the building process is divided into two parts. Design and construction of the building are each done by different actors and are split between the two.

Architects are concerned more about the program of the building, what the building wants to represent, how the building fits the site and the context, how does it contribute to surroundings. Contractors are concerned about the means of execution, costs of construction (materials, labor, details) and time planning (Gluck 2014).

During the construction process the responsibilities and decision rights of the architect are shrinking while the construction manager's range of actions is rising also due to presence of more actors the coordination of each is becoming more complex as well as time consuming (Gluck 2014), see Fig. 17, p. 104.

This divisive system is making the third party (the client, the investor, the developer), (who is not an expert neither in design or construction), to mediate between these two parts of the building process (Gluck 2014), see Fig. 19, p. 105. This division of roles can in the end cost money, time and cause an unsatisfactory building result (Stern 2014). Combining the roles of building process under one head into one single source of responsibility can be of an advantage to all parties involved.

If the same person is responsible for the whole building process from the design until completion it can contribute to the quality of the project as well as save cost of the building through efficient planning and design which is directly related to the construction process. When the architect is also the builder the continuation of actors and responsibilities can be ensured throughout the whole process (Gluck 2014).

By combining the design and construction under one head many other problems can be solved (Gluck 2014), see Fig. 18, p. 104 and Fig. 20, p. 105:

. Possible justification of the design at any stage of the building process to physical conditions on the site, building costs and time planning.

. Continuous supervision of the site by the author of the building which saves time and confusion during the construction process.

. No time is wasted in communication between third parties.

. Due to responsibility of one person the building may be designed and constructed with more care in order to protect oneself; if only one person is responsible for the project, it is obvious that person is to blame if something goes wrong.

. The client's role and responsibility, whether he is known or unknown in advance, is much eased, the responsibility lays on the shoulders of the expert and that can be a premise for satisfactory building result.

The architect through this way could hold the design during the process together, react to the changes faster and update the building concept during every stage.

(Gluck 2014)

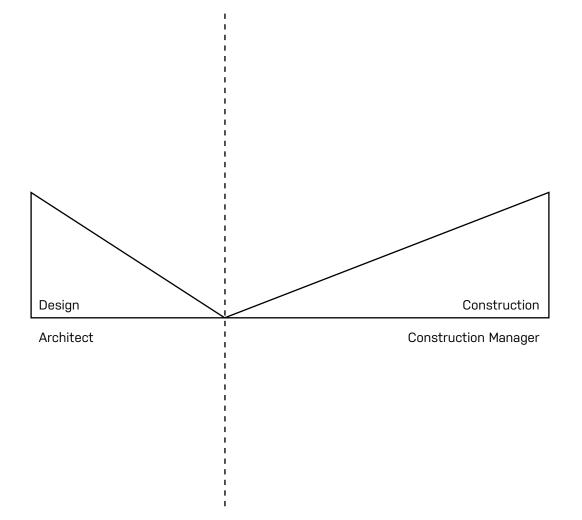


Fig. 17: Traditional Design-Bid-Build, distribution of the influence on a project (adapted from Gluck 2014)

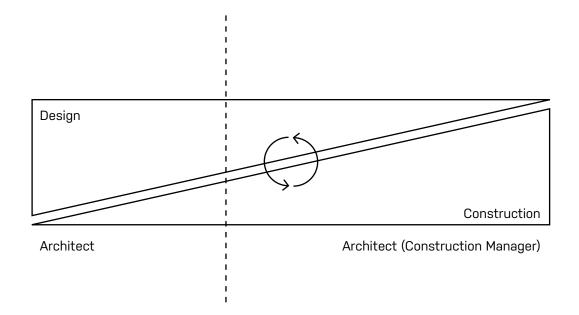


Fig. 18: Architect-Led Design-Build Scheme, distribution of the influence on a project (adapted from Gluck 2014)

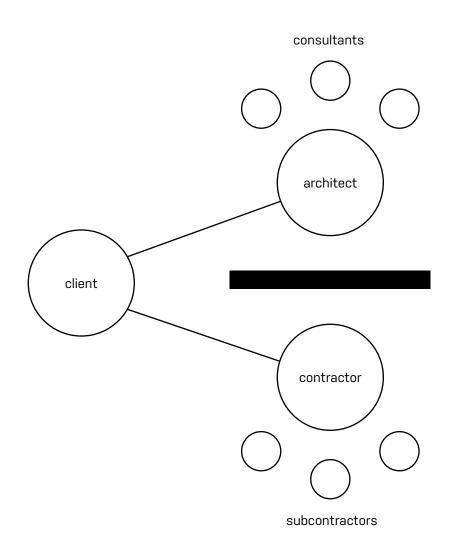


Fig. 19: Traditional Design-Bid-Build, links between the involved during the building process (Gluck 2014)

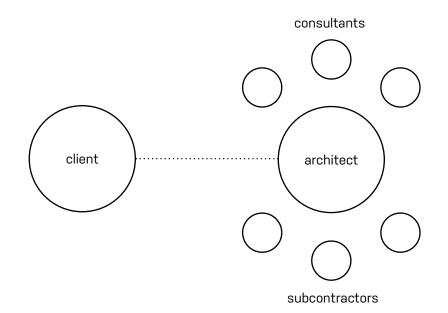


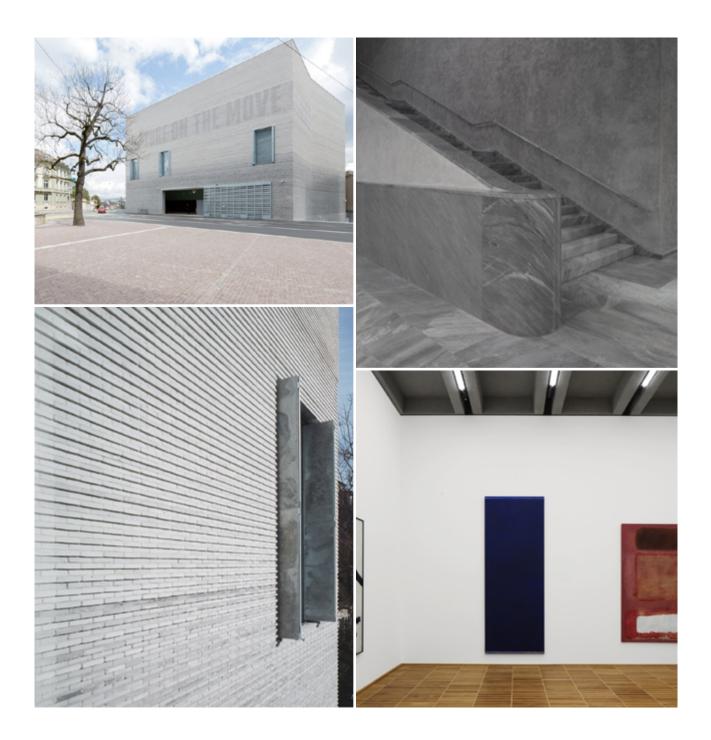
Fig. 20: Architect-Led Design-Build Scheme, links between the involved during the building process (Gluck 2014)

#### responsibilities, building quality, durability

Buildings constructed by architect and contractor in one person have a potential of being constructed with fewer problems. In the traditional system, if there is a problem, the architect and contractor fight and try to blame each other (Gluck 2014).

If there is only one person responsible for the project, it is evident who can be blamed for any problems on the construction or in the building therefore this one person will have more responsibility and will be forced by the circumstances to supervise a good building is built.

Examples of contemporary architecture show new possible paths how to enhance building's durability and contribute to the sustainability of the built environment. The Kunstmuseum by architects Christ & Gartenbein in Basel, Switzerland who want to test their building in time. The building is built out of materials which last longer (concrete, stone, brick, oak wood). They are interested in contributing to the environment by allowing things to last longer (Christ and Gartenbein 2016).



Christ & Gartenbein, Kunstmuseum, Basel, Switzerland, image source: http://www.christgantenbein.com/

#### <u>contribution to public, local identity,</u> <u>context, cultural value</u>

In last couple of years it was very popular and easy to be arrogant and don't take into an account neighbors or what is important and good for the city by real estate developers in the Czech Republic. The role of the buildings in its environment were not emphasized, nor their streets functions were defined.

### "Arrogance over quality of architecture and a given place is very trendy." (Fidler 2015, 27)

At this moment investors are proud that the percentage of public spaces in their projects is low. Looking at this from a long term perspective, it is wrong. If the public spaces inside a building are not nice then the apartments don't have nice entrances. It is the quality of the house and the address which is important, not only the size of apartment, whether it is 2 m<sup>2</sup> larger or smaller. Same logic can be applied to the exterior spaces (Eberle, 2015).

"Quality of a building will be in the future more evaluated by its ability to contribute to the public."

(Eberle 2015, 22)

For each building built it is important that it reacts to local aspects and environment, therefore it is contextual and can help people to identify with space or maintain the local qualities (Griffin, 2011). Such developed cities can inspire people to live in and visit them. A building should communicate with its exterior and interior life to compliment local education, cultural production, business or service and living requirements. "Globally operating developers who build the same anonymous boxes everywhere are threatening the very life blood of our cities their individual identity."

(Griffin 2011)

The most exciting projects in Berlin of the last decade have not been built by large corporate investors, but rather by individuals or small building groups that collectively construct their personal vision of living in this dynamic city.

"If more people embarked on this adventure, our cities would be more inspiring, more dynamic, and more specific" (Griffin 2011)

The project of a cable car stations by architects Menos é Mais in Porto, Portugal expresses how a project can pay homage to the tradition of the place (Guedes and Campos 2016). The project was a private commission which was responding to a demand of the public and the architects after a conclusion with the developer created a public space which uses the infrastructure as driver of heritage enhancement by improving the way citizens of Porto can move within the city (Guedes and Campos 2016).



Menos é Mais arquitectos, gaia cable car, Porto, Portugal, image source: http://menosemais.com/

#### public and dweller participation

The public, those who will walk by a new building every day after it is built, and the dwellers and tenants, the future owners and renters, have very little to say about the function, program or layout of the new building. There are definitely certain constrains to the participation process. But participatory design as such in Czech Republic is not present at all. It creates not only a bad atmosphere and negative image of developers, but does not create spaces and buildings which can serve a meaningful purpose to the whole neighborhood, but on the contrary exploit present conditions of the neighborhood. A positive approach to development and participation is missing, developers don't see benefits, rather extra costs for the project.

Instead of any applying participations methods developers in Czech Republic try as much as they can not to inform public until it is necessary and keep their projects under cover as long as possible. The way public can influence a project in present days happens ex post, when a project is designed and the developer is trying to get a zoning and building permit. The only defense tool against a new development the public has is a statement issued to the municipality by a civil associations with legal rights in the area of the new development.

Such participation is mostly negative and goes against the development and creates tension between public and developers. As the legislation is set today the public has more rights to step inside the process without any responsibilities concerning the outcome and reasonability, is given an infinite space for delaying or stopping the construction. Which would be fine as far as this participation was meaningful and constructive for the project or future development instead of having as the only purpose delaying and obstructing the project (Deloitte 2016).

These civil associations are meant to protect the public against unscrupulous development. Unfortunately very often these civil associations only block new development for other reasons than fighting for buildings which could contribute to the neighborhood or the future dwellers (Interview with Adamec 2016). Neither of those methods mentioned create good progressive contemporary development.

Developers and public got themselves in a negative relationship instead of a collaborative one from which the build environment and all stakeholders could profit

Lukas Kohl, architect who works as developer in the Czech Republic confirm that the participation is important tool for information gain and for correct implementation of the new building within the urban tissue and neighborhood context. Also they confirm that participation process in Czech Republic is still in its beginnings, all stakeholders are learning how to do it well and is at this moment still very difficult (Kohl 2015).

Of a help to present the means and methods of participation and improve the collaboration between public, municipalities and developers in the Czech Republic would be a platform for idea exchange in Prague. Which hopefully should be part of CAMP (The Architecture Center of City Prague), which is being built at this moment.

Beside others, participation requires acknowledged stakeholders to create a meaningful discussion leading to a successful development which is profitable for the developer in terms of money as well as the public and dwellers in terms of space and services, see Fig. 21, p. 109.

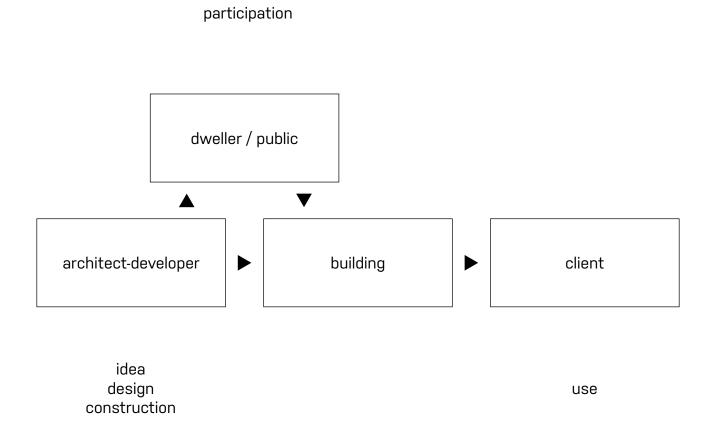


Fig. 21: architect-developer led building process including the public and dweller participants

#### financial control

Architect who is an initiator and developer of the project has the full responsibility, is in charge of the design and building process as well as in charge of the finance.

#### "The control over the financial part gives power of making decisions and a power of choice where to invest the money."

(Self 2016)

Combining this with the social responsibilities of the architect such a building should not only be of a higher quality and value but also of higher contribution to the dwellers, neighborhood and city.

#### typology

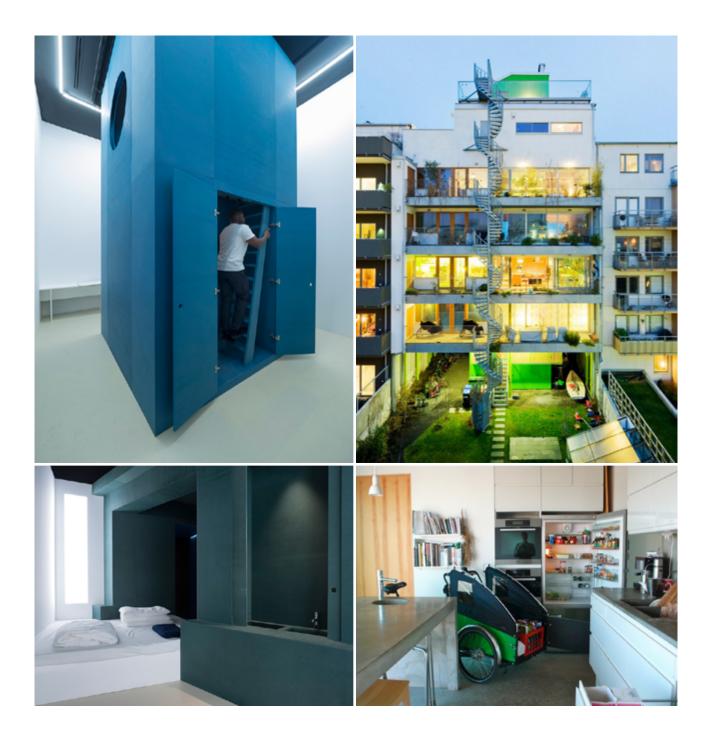
Furthermore, architects as well as architects-developers as creative and open minded are more likely to follow how people live nowadays and

# experiment with housing typologies

even though it may be a longer process and a legislative struggle. The final outcome of such a process may be more of a use for future owners.

Architects who collaborated on the British Pavilion at the Architectural Biennale this year show that it is also important to start thinking about our dwellings not only in terms of space, but also of time. Dwellings designed according to how much we spent in them and how much time we spend doing what is of the interest of the British Biennale (Self et al. 2016).

In the urbana villor in project by Cord Siegel in Malmö is each floor different and elevator which goes through the middle of the house allows to arrive with a bicycle full of groceries to the kitchen.



Left: British Pavilion, La Biennale di Venezia, Architectural Exhibition, 2016, Dogma, Home for Months, Hesselbrand, Room for Decades, image source: http://www.dezeen.com/ Right: hauschild-siegel architect, urbana villor, Malmö, image source: http://www.hauschild-siegel.com/

# 331 case studies: projects by the architect-developer









case AD.01

<u>architect:</u> DN2M <u>developer:</u> DN2M <u>project:</u> loft town houses, Winterthur, Switzerland <u>image source:</u> http://www.dn2m.ch/

case AD.02

<u>architect:</u> hauschild-siegel architect <u>developer:</u> hauschild-siegel architect <u>project:</u> urbana villor, Malmö, Sweden <u>image source:</u> http://www.hauschild-siegel.com/

case AD.03

<u>architect:</u> Deadline <u>developer:</u> Deadline <u>project:</u> Bender - Slender, Berlin, Germany <u>image source:</u> http://www.deadline.com/

case AD.04

<u>architect:</u> Petr Hájek Architekti <u>developer:</u> David Adamec <u>project:</u> House with Blinds, Prosek II, Prague, Czech Republic <u>image source:</u> http://www.hajekarchitekti.cz/ In case of case studies in the architect-developer section, an interview has been conducted with developers Marc Holle and David Adamec who were in charge of project in Winterthur, Switzerland and in Prague, Czech Republic. The project in Winterthur has been visited personally, the project in Prague is in the construction preparation phase. The urbanvillor project in Malmö by hausschild-siegel architects is evaluated based on a lecture given by Cord Siegel in Malmö and the Slender Bender project in Berlin by Deadline Architects is based on a blog written by Matthew Griffin, co-author of the project.

By studying the projects created by architects-developers I would like to prove the possibilities the real estate development has if the architect is involved. It provides wider variety of solutions and more options for the dwellers.

Exterior, interior and typological properties of the following case studies will be discussed to compare those with projects done by regular real estate developers.

In the shown case studies it is possible to observe:

. non ordinary site selection

. individual approach towards the dwellers and their comfort

- . material variety
- . cost saving solutions
- . spatial generosity
- . spatial variability and adaptability
- . spatial use and reuse
- . mix of functions

. separation and connection between private and public spaces

## adaptation of an existing building

case AD.01 <u>architect:</u> DN2M <u>developer:</u> DN2M <u>project:</u> loft town houses, Winterthur, Switzerland <u>image source:</u> http://www.dn2m.ch/

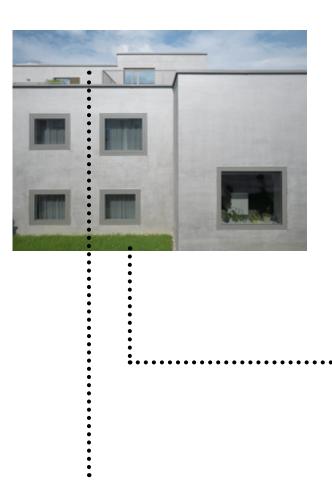


. each of the houses have a single entrance from the street





. while some are connected and some are separated the entrance atmosphere is always different and the entrance space is designed carefully . window openings in facades were adapted to a dwelling use (enlarged, closed, new) . the shell of the house was renovated and insulated Adaptation of a supermarket into five loft town houses. The given volume has been maintained and extended with an attic floor with a set back.



. each house has an attic floor through which the roof terrace can be accessed



. a garden belongs to every townhouse, it is connected to the entrance with a gate and is intimately protected by the trees from the street



. the size and shape of every garden differs, but the connection between the exterior space and the interior space is always maintained through a wooden porch

## adaptation of an existing building



. the previous shopping area of 4 m height provided an extraordinary spacious living space for each town house





. around these living spaces is a spatial structure with a private rooms on a split level and attic floor and terrace entrance

. the private spaces are placed on a new bearing structure built after part of the floor of the old supermarket was demolished . connection between private and collective space of the house creates besides visual connection an exceptional character of the house typology





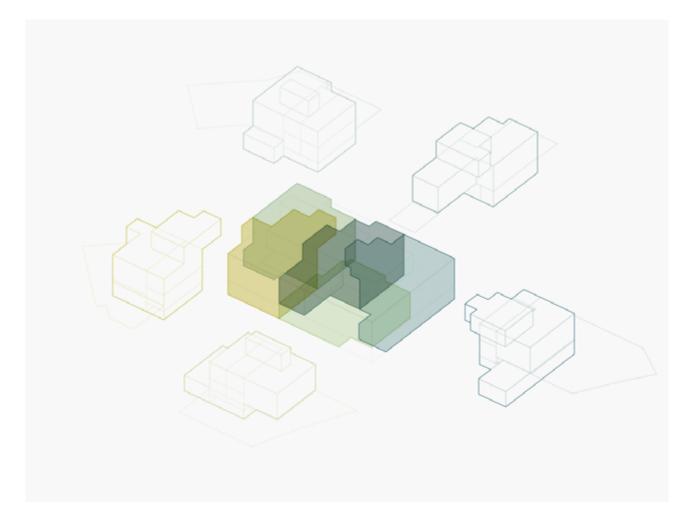
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. the concrete load bearing ceiling beams of the former supermarket were originally kept visible



. but there was also a space for customization of every house in the collaboration with the architects and artist and the new owners which led to differentiation of atmosphere and personal individual personification inside the house

# adaptation of an existing building



. the volumetric study of five townhouses coming together

. split level floor cut into the original structure

•••••• • - market J ľ J J u 7 • .... : ••••••••••

. original remaining structure

. wooden attic structure, roof terraces

. new built-in structure

#### open row house

case AD.02 <u>architect:</u> hauschild-siegel architect <u>developer:</u> hauschild-siegel architect <u>project:</u> urbana villor, Malmö, Sweden <u>image source:</u> http://www.hauschild-siegel.com/



. roof terrace with pebbles that work as final layer and are part of the drainage system





. bike park under the house . free ground floor between the street and the garden, filled with pebbles and greenery Apartment building consisting of 5 dwellings of same floor area but different spatial organization. One floor consists of one apartment, apartments are accessible through a shared exterior staircases which connects the collective and shared spaces, the terrace on the roof and the garden on the ground floor.





. roof garden for the dwellers with a glass house



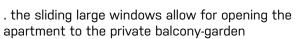
. the only staircase of the house is exterior round metal staircase which connects the garden with the green balconies of the apartments . plants on the balconies ensure the privacy

#### open row house



. through a large elevator which goes through the middle of the house the dwellers can bring their bikes with their groceries all the way in the kitchen









. the ventilation pipes are left visible



. since the ceiling structure is load bearing the electricity cables can be left visible if needed



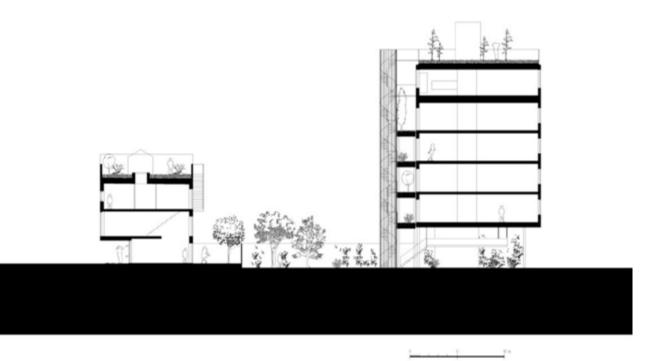
. master bedroom is connected with the master bathroom, natural ventilation and natural light is provided for both functions



. durable and easy to maintain concrete floor

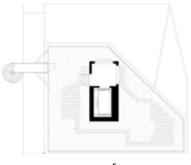
. the load bearing concrete panels are realized as "sicht beton" and left bear, the ceiling construction is stripped to minimum and additional costs for plaster and labor are spared

#### open row house



. private collective courtyard in the middle serves for all dwellers

. variability of typology: floorplan changes on each floor

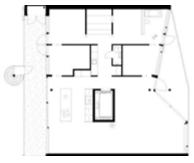








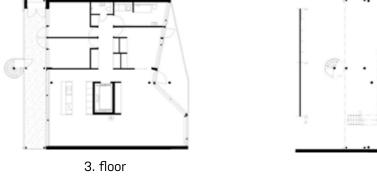
2. floor



4. floor



1. floor



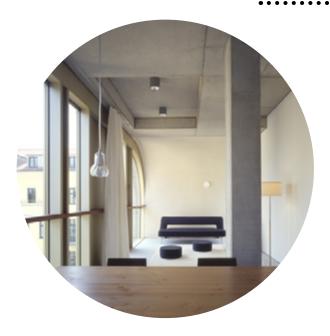


#### narrow site with an existing building

case AD.03 <u>architect:</u> Deadline <u>developer:</u> Deadline <u>project: Bender</u> - Slender, Berlin, Germany <u>image source:</u> http://www.deadline.com/



. top loft offers miniature exterior space which is a suspended balcony



. the generous open typology allows for variability and adaptability through time and provides natural light inside the apartment



. the building itself due to its shape and chosen materiality is eye catching, the contrast between old and new may by some be questioned

. the building tried to communicate with the street with a little shop at the street front

The building sits on a long narrow site, and is attached to the existing building (Slender) in the back. It is 7 stories high, 9m wide and 14m deep. The entrance, and a tiny shop form the two feet on which it stands; between these are four parking spaces. Bender is of a new typology that integrates a lively mixture of programmatic functions on a very small site including: short-term 'miniloft' apartments that function as an alternative to hotel rooms, office space, long-term apartments, a shop, and parking.





. the narrowness of the house is visible and can be experienced through the whole house

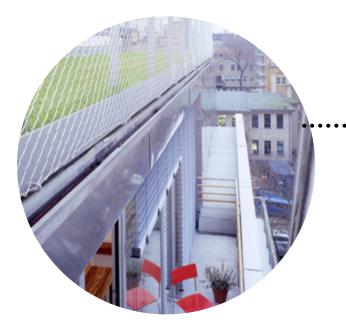


. the metal facade cladding in combination with glass windows in aluminum frames are very durable and require minimum maintenance

•••••

### narrow site with an existing building

case AD.03 <u>architect:</u> Deadline <u>developer:</u> Deadline <u>project:</u> Bender - Slender, Berlin, Germany



. connecting interior with exterior, maximizing the use of exterior space, roof garden is accessed through a narrow balcony





A house for one family on a narrow building in the middle of a city. Below the apartment mini lofts are integrated just like in the Bender project. Together they form one building.





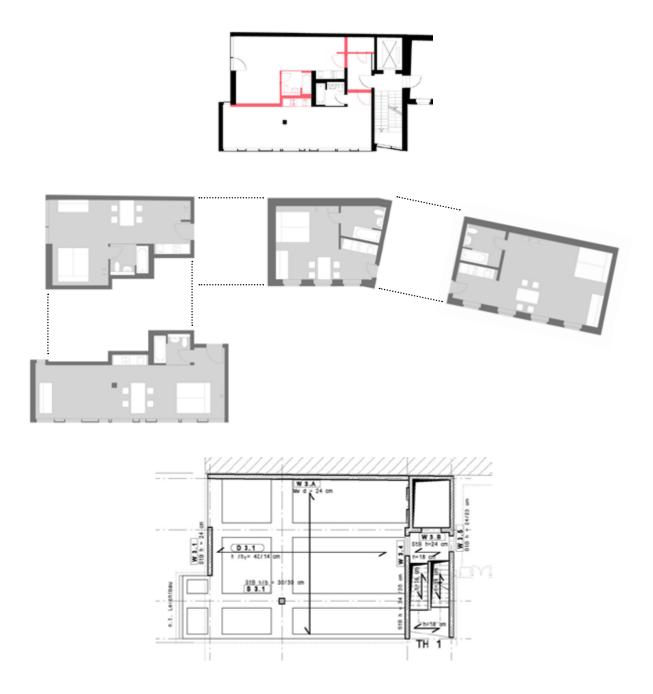
. the spatial generosity of the apartment can not be overlooked



. the individualization of the apartment is higher than expected in regular real estate development but it provides an answer how contemporary living can be arranged

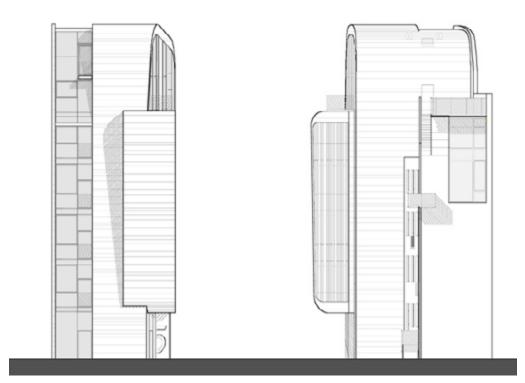
#### narrow site with an existing building

. utilities core is placed to the middle of the floor plate; this way two independent miniloft units per floor are built . relocating the core makes the space more flexible for future uses. It, for example, enables make one large apartment or office space per floor.



. the building is carried by three load bearing elements: the north wall, the staircase, and a single column

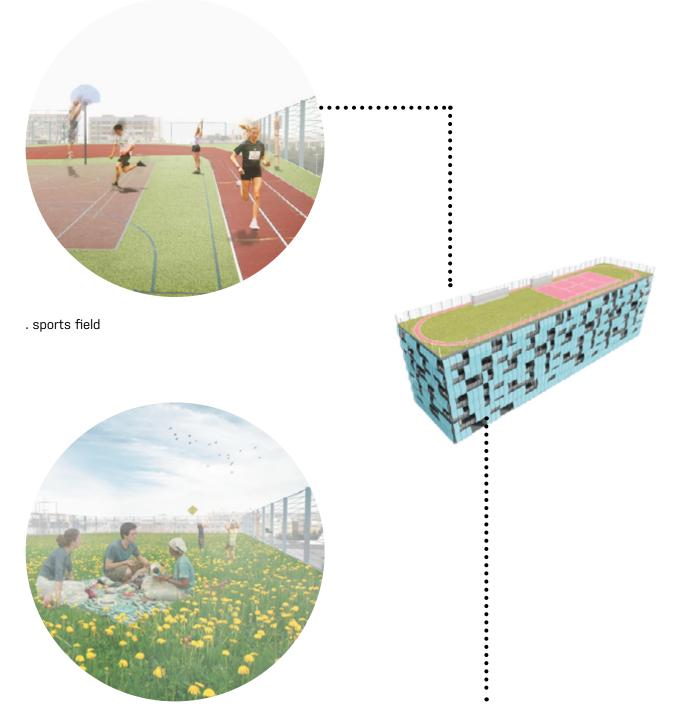
. the floor plate panels between the beam ribs can be removed to create an interior staircase connecting any two floors . each ribbed concrete floor plate cantilevers beyond the column in two directions; this structure makes it easy to create a single loft space by removing the partition wall and one of the kitchen/bathroom modules





### house with an inhabitable roof

case AD.04 <u>architect:</u> Petr Hajek Architekti <u>developer:</u> David Adamec <u>project:</u> Prosek II, Prague, Czech Republic <u>image source:</u> http://www.hajekarchitekti.cz/



. garden

. The facade of the house is fully glazed and equipped with fabric roller blinds.

A apartment building on a place of and old transformation station. The building fills the whole plot completely. The architects made a copy of the site and lifted it up onto the buildings rooftop. The new space could be used independently, it has own entrance and connection to utilities. It can be used for public or private functions. Sports field, wellness, garden, kindergarten.







. poor street front is a disadvantage for such project

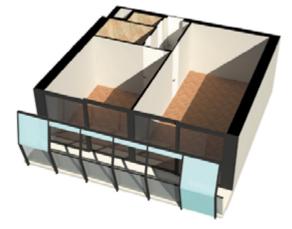
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. housing

### house with an inhabitable roof



. generous connection between the interior and the exterior is enhanced by the metal grid railing through which the dwellers can see through

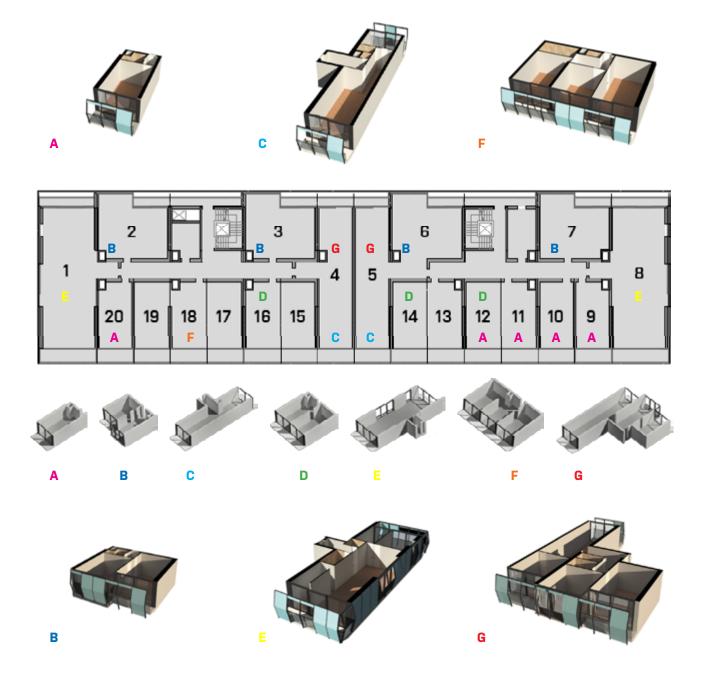




. durable materials such as marble in the bathrooms is designed

. the income from the extra 30 cm of width in the rooms evens the costs of the facade

The fully glazed facade of the house allowed for extra space of 30 cm width to the apartments which is profitable for the spaciousness of the apartments and therefore dwellers, as well as is the valuable exterior space which in summer together with the fabric blinds creates natural sun shading



. the regular grid of the load bearing structure allows for a variability between apartments and their sizes during the construction and also through the time which gives the developer and the dwellers to react to the market and personal demands

## 338 discussion on the architect-developer

The textbooks as well as developers with whom I have conducted the interviews agree on the importance of the involvement of the architect since early stages of the project. Even though the developers sometimes prefer to do some of the work during the initial phase alone (site selection and rough volumetric calculations) they can not imagine not to collaborate with the architects and be open to their ideas and proposals.

But that is not the case of all developers, and if the architect in reality is not naturally involved in the building process since the initial phase the architects should take the initiative and try to be involved in the process since the initial phase. The figure of the architect-developer could than be a tool how to approach the initiative. From the conducted research it comes out that if the architect is involved in the building process since the initial phase of the project he can influence decisions about the location selection, function, program and building volume. These are precisely the phases which influence the project mostly through which the complete vision of a building of the architect can be realized.

The architect-led design-build scheme as Thomas Gluck states have a potential of being constructed with fewer problems. The condition of only one person being responsible for the whole construction creates a situation in which the responsible person is very careful and gives high importance to quality not only of the building construction but also the planning and the preparation phase (Gluck 2014).

Higher quality of materials and more precision in detailing can provide longer durability of the building with less maintenance issues.

The architect-developer scheme in reality follows the same scheme of architectled design-build. The architect-developer is responsible for the project from the initial phase until the building is sold or rented out. A top he is responsible for the financing of the project. This scheme predestines possibilities for creating a positive impact in the built environment by creating more durable buildings therefore longer lasting buildings. Such buildings can contribute more to the physical space of our cities since they maintain their original appearance and do not weather fast.

Besides creating buildings which can contribute to the quality of physical appearance of our cities the architect who is acting as a developer is predestined, since architects are used to work in different contexts, to contribute also to the social aspects of our cities. With such approach there is a chance for creating buildings which do no only exploit the present conditions but also contribute with new inputs to the community needs. Such building can also support the future development of the whole location.

This statement goes hand in hand with the financial control and feasibility of each project. The question of favoring spatial quality over the project revenue still remains. Is it possible to create a public space in a private commission? Investments in public space or the surroundings of buildings are not anyhow financially profitable, the profit that may come from such investment is more speculative and remains at the level of popularity of such building. I would like to try to answer this issue with my design.

Last but not least the power of architect and developer in one figure is the possibility to react to the present needs of dwellers very quickly. More elaborated typologies for more variability and adaptability of a individual dweller in time and space are needed. Being in a closer touch with the clients can reflect faster their contemporary needs. As David Adamec is selling the projects to his clients personally to see what they demand, the same possibility is here for the architect-developer. The architect developer can even go further and while pre-selling the property get involved in the discussion with the future dwellers. And trying to foresee the unpredicted and creating flexible typologies, which can be done either by the dwellers themselves or with a professional assistance, can extend the lifespan of a building, giving the architect-developer another trump in his hand.

339 discussion on the case studies in the section architect-developer

140

The intention of the case studies in the architect-developer was to show the possible difference approaches to the built objects.

First it is important to mention that the project done by architects-developers are of much smaller scale due to the financial means they had available as well as experience they are in this field gaining. Most of them are just starting to work in this field. One exception is a project in Prague, which is financed by a small size developer, David Adamec, who just collaborates with architects closely.

DN2M and Deadline architects have chosen a more complicated site than others. An existing supermarket building in Winterthur, Switzerland and a narrow plot with an existing building in Berlin, Germany and show that the site does not need to be a constrain but an advantage to create an unordinary development.

In the town house apartments project in Winterthur the height of the ceilings and local regulations led to a generous 4 m high living spaces and a two split floor level private spaces next to the living spaces creating a spatial game inside the apartments and offering great deal of generosity to the dwellers.

In Bender Slender in Berlin the narrow plot lead to a vertical in a way iconic and visible building with transformable typology.

Cord Siegel in the urbana villor project in Malmö, Sweden accepted the ordinariness of the plot but turned the whole site into a carefully designed collective space of high spatial qualities for the dwellers including the roof of the building. By elevating the ground floor and making the roof accessible he adopts Le Corbusier's principles in architecture\*.

The elevated plot on the roof of the House with Blinds in Prague, Czech Republic by Petr Hájek is just a confirmation that the principles of Le Corbusier's architecture can be still applied today and how far the imagination can go and how the roof of the buildings can be used today.

It can be said that the combination of the challenging site and creative approach to the solution all of the projects turned the previous disadvantage into an advantage.

What can be also observed is the spatial adaptability, both urbana villor, Bender Slender and House with Blinds offer different possibilities of typologies and adaptation through time to react to the needs of the dwellers, to support their individuality or to react to the needs of the market to offer different variety of apartments or different functions within the building.

It is also needed to mention the cost saving solutions. In all projects we can see visible bare load bearing structure, which if done properly can add to the value and attractivity of the building. Creating a fully glazed facade in House with Blinds which has contributed to the generosity and attractivity of the project also provided extra floor area and will cover the expenses of the whole facade after the apartments will be sold.

Not to talk only about advantages of these case studies, the House with Blinds shows besides all its advantages an insensitive approach towards the neighborhood and the public space. The garages on the ground floor is an element which I have criticized earlier and have to critique it in this project as well.

Of course all the projects need to find their customers, it can be seen that these projects are probably targeting contemporary and modern families.

\* Le Corbusier's Five Points of Architecture: Pilotis, Free design of the floor plan, Free design of the facade, Horizontal window, Inhabitable roof (Le Corbusier, 1973)

# 399 concluding discussion research part A

I believe that the figure of architect-developer can be seen as a figure which can bring the two worlds, the world of architecture and the world of real estate development, together. Combining the high quality architecture with economical feasibility of a project and contributing to the quality of the built environment, not only in the Czech Republic, seems to be possible.

Financial aspects of any investment are in the today's world omnipresent, the architectural quality not so much. Financing of a building within the limits of a budget and gaining a profit is a very important aspect, without which the building would never be built. In the Czech Republic the situation is even worsened by the low demand for quality in the buildings by the dwellers. With the earned revenue it is important to secure the continuity of ones business. With the good quality work one can secure good reputation among other colleagues or clients. The architect-developer can fill in the niche in the market and merge the two professions of architects and developers.

Merging the architect's abilities to design a building with the concern of the structure, materiality, organization, context of the location, public and dwellers needs with the developer's interest in efficiency and profitability can bring a new dimension to the built industry. Creating high quality architecture and by providing building which can be of a higher quality, besides the fact that the value of such building would increase, the demand for high quality buildings would increase which can lead to the increase in quality on real estate markets not only in Czech Republic. If one is very ambitious it could be said that such model could provide new precedence on the real estate market.

I see a big potential in the financial control over the project. It is usually a domain of the developers who invest their money according to mass market research and build for mases. Though the architect-developer as the case studies show is more free to decide where the finances will be allocated. For example: by leaving the load bearing structure visible and making it part of the design there may be financial means left for some public space. The smaller scale of the case may also allow for more appropriation of the project and play with the finances which would not be possible in the regular project done by corporate developer. Any variations require time and money investment, for a regular corporate developer undesirable, for architect-developer these mean advantage on the real estate market.

Architects-developers are also more likely to experiment or explore the possibilities of the building location and the typologies. By selecting a location which has certain constrains, and would not be selected by the regular developer for the possible constrains, the new development by the architect-developer may be of a trigger for a change in the location and the building itself can help to improve the conditions in the location. DN2M converted an abandoned supermarket into apartment building which was worsening the image of the neighborhood and nobody wanted to buy the building due to the strict regulations in the location. Deadline architects filled in a narrow gap in the urban structure of the neighborhood and Petr Hájek has replaced an unused department store with a house with an inhabitable roof.

When it comes to typologies, with the creative approach of the architect and correct definition of dweller's requirements and demands for housing there are ways how to achieve unique solutions in terms of typologies, materials or spatial organization. Being architect and developer in the same person and e in touch with the clients can even help to create typologies which would suit the dwellers the best. As the best way for the developer to find out the demands of his potential customers shows to be the direct contact it is a perfect chance for architect developer to engage in bilateral idea exchange. Clients can learn from the architect how to build, architects can learn from the clients what to build. By being in a closer touch with more clients the architect can react to the dwellers needs much faster and also address wider audience of dwellers at a time by building not one family house or apartment, where the close relationship exists, but by building more apartment units at once.

It is also important to say, that the will to experiment and provide unordinary solutions may be related to the size of the projects which are easier to manage, operate and finance than bigger scale development.

I would like to idealize a little bit about the architect-developer's relationship to legislation and how that could contribute to the quality of the built environment in the Czech Republic in the times of obsolete legislation and building standards. Since laws are conventions, it makes sense to fight them and challenge them sometimes (Brandlhuber, 2016). I believe that architects have a will to fight the legislation if they see a different, better path. Not as developers who usually go the path of least resistance. The chance for an architect to intervene in the legislative process is harder in the common building process approach, where the architect is only commissioned a job. And where else is there time and space to fight the legislation when the architect is responsible for the whole project and therefore all the consequences which come out form his decisions? When he is the developer as well.

The architect-developer may also contribute to the improvement of the reputation of the architectural profession in the eyes of not only the developers, but also the public and show that architecture can also create reasonable buildings which are not only costly but can also contribute to its surroundings. And since we have arrived to the stage of relationships when the developers do not trust the architects and are afraid of loosing their money the architect-developer can be a potential to re-consolidate the profession's reputation and be the connector of the two professions.

It is important to say that the figure of architect developer does not assure quality of buildings or better built environment. It is not a job for every architect. As there can be a bad and good architect or developer, there can be good or bad architect-developer. In order to be a successful architect-developer such a figure has to handle, besides regular architectural tasks, responsibilities, have managerial abilities, and be able to understand the financing of the project. That means quite a broad area of activities and responsibilities. Is it manageable for one person to be involved in architecture and real estate development? Such person needs to have a overview of the design, structure or budget and manage the whole building process. I can imagine it is possible to have an overview of all actions only until a certain size of a project. Depending on a size of the project the size of the team and tasks changes and therefore the role of architect-developer changes. The larger scale project the more manager the architectdeveloper must be.

As Marc Koehler explains the architect does not necessarily need to be an expert in all the fields, definitely needs to have an overview, but can act as initiator, creator and choreographer and bring people to work on a project together so the building process, so the final building and the city can profit from their input. And it is also important to leave little room for others to contribute (Koehler 2016). The same can apply to the architect-developer, such figure, if able enough, can orchestrate the whole building process just as good, and hopefully with a better result, as a developer.

Architect-developer should be also aware of certain threats. As Lidija Grozdanic states it may be for architects acting as developers sometimes tough to be successful due to the lack of business experience or that there is a threat of getting caught up in the design and loosing the control over the budget of the project (Grozdanic 2015).

Also knowing that many great projects arose from a conflicting situations between architects and their clients there is a question, which is harder to answer. It is very interpersonal topic. What happens if the other stakeholders involved in the regular building process such as the client - the investor or the developer - the investor, disappear and the architect is responsible for all the actions himself and the only element which is giving him constrains is legislation and budget? Would not the architectural quality be given up for profitability of the project? I also believe that it needs to be mentioned that due to the emergence of architect's new roles within the building industry, it would be wise to integrate or connect the education of architecture and real estate development in the future.

However i believe that with the role of the architect-developer the architects can achieve more within the built environment.

In the case of the Czech Republic the architect-developer can be of a bridge between the obsolete legislation, unprepared municipalities and serve the cities and their inhabitants by providing them with buildings which are not only profit seeking and exploit the given situation but contributes to its surroundings.

As the next step of the research is the research by design and design itself, to proof the meaning of the architect-developer even further, it will be necessary to select, and defend such selection, a challenging site which would not be in the eye of a regular developer. Or it would be but the result offered by a developer and an architect-developer may be significantly different.

And with my design I would like to discover if it is possible to merge high quality architecture which can contribute to the built environment with the economical feasibility of such architectural project.

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