Reflection Paper – János Katona
MSc 4, P4 presentation

Aspect 1: The relationship between research and design.

The project I present for the P4 was developed with research through design based on the 3 research questions that resulted from preliminary site and city studies. My research then explored and shaped the proposal for a tech campus where relations - namely **the people and the dwelling**, **the dwelling and the building**, **the building and the city** - acted as filters for identifying effective architectural solutions with respect to the local social context.

Aspect 2: The relationship between the theme of the graduation lab and the subject/case study chosen by the student within this framework (location/object).

The theme of my research is **housing for a tech campus** located at the former Apple Market of Amsterdam where **working and living** - the theme of the graduation lab - are combined. In order to develop this project, I investigated a number of case studies chosen as examples or working or living compounds for a very specific community (the employees of tech companies):

- Google Campus in Mountain View by Bjarke Ingels Group (BIG): this is the most recent example, currently being developed, of a working tech campus and it has transparency at the core. Thanks to its high accessibility external visitors will be able to enter and cross the main areas of the campus, while corporate restrictions will be in place to protect inner processes.
- Facebook Campus in Menlo Park by Frank Gehry (the latest working compound expansion of the company) and its complementary housing complex in Anton Menlo by KTGY Group, a gated community for the tech staff equipped with plenty of facilities for sport and leisure.
- Apple Campus 2 in Palo Alto by Foster + Partners: this recently completed, but highly closed, campus maintains the separation of functions between working and living.
- Tietgen Campus in Copenhagen by Lundgaard & Tranberg Architects: in addition to examples from the largest tech giants of the Silicon Valley - all targeting the specific group I intended the project for - and in order to better understand the developments and the possible future trends of tech campuses, it was necessary to include some references of university campuses in this research as well. University campuses are the concept at the base of tech campuses. Among them, Tietgen offers a housing complex which is more than a simple student dormitory and features facilities for a community with a common workplace and similar interests. At the same time, Tietgen is a reference for how communal functions and private functions are extremely well integrated while remaining clearly distinct: it is a bridge between traditional university campuses - primarily aiming at hosting as many students as possible - and the emerging tech campuses developing new ways of working and living on the same ground. In this perspective this last case study was the lead for my research and a reminder of where new trends originate from so that one can realistically imagine how they can proceed further.

Aspect 3: The relationship between the methodical line of approach of the graduation lab and the method chosen by the student in this framework.

Once selected and analysed a series of case studies, the research compared findings to identify a main trend and the reasons for it in order to get to penetrate this specific segment of architecture which is evolving quickly.

The mainstream solution appears to be a separation of working and living functions, but the analysis of benchmark designs shows that this is the result of certain constraints such as the following:

- *The price of the land* is very high in the cities where tech companies set up their offices: as a consequence, workers often need to travel long distances every day to go to work. Only in very recent times, come companies like Google started to provide affordable housing near the workplace so that performance of employees forced to commute would not be negatively affected.

- At the same time, providing housing on the site of a working campus is a consistent *investment from the side of companies* so that most are reluctant to spend money on it, especially if considering the extremely short term of employment that characterizes the Y-generation working for tech companies: only 1,1 years on average in the case of Google.

- *The size of companies* is another element of interest: large multinational companies focus on efficiency, aim at landmark designs that express a strong corporate identity, expand rapidly, can afford and need large spaces, smaller start-ups, on the other hand, cannot compete with such pace and tend to prefer working-only solutions or even shared office spaces which are fully equipped with everything considered useful to boost performances but does not fulfill living needs.

- Furthermore, the construction of a tech campus within a city implies that an entire district becomes dedicated to a single function, thus altering the urban fabric. While this may not be the best solution for urban areas today, in some places it is the outdated *urban zoning* itself that limits possibilities and rigidly differentiates working and living districts.

The separation of working and living functions is therefore the solution most extensively adopted so far and for a number of good reasons too. Working compounds, however, are clusters in the urban fabric but can never be self-sufficient nor sustainable unless they incorporate dwellings. Integrated approaches are being studied and hint at a possible different direction where the evolution of tech campuses could bring "**innovation districts**" featuring working and living areas that cover one or more city blocks and operate as localized engines for development (as opposed to the declined concept of full-scale research cities). I chose to focus my research on these developments and to present a proposal that can satisfy multiple needs: not only the tech campus requirements but also a balanced relationship of the people and the city with the campus itself.

An important motivation for exploring this direction is the challenge faced by the economic, financial and demographic transformations of the past decade occurred in Amsterdam, just like in the majority of other European centers. On one side, the growing urbanization and the suburban sprawl call for population **densification**, the introduction of mixed work-home environments as well as the increase of sustainable constructions. On the other side, the 21st century working trends - highly competitive and Internet-based so that workplaces themselves are sometimes only virtual environments - expose employees to a great degree of stress and forces them to be more and more career-focused, rapidly losing physical attachment with their actual surroundings. The culture of working from home is expanding, supported by software innovations, and enables equal or sometimes higher performances away from the office desk. The workplace remains a concrete anchor, though, even for tech companies and an ideal setting for working remotely is naturally around the corner. At the same time, overwhelming interconnection and invasive work concepts result in a growing need for personal space where people can express their own identities and connect with their living communities.

As a result, in order to stay relevant within its premises – and not to decline due to population shifts towards new economic centers – the city must not only increase and empower its economic districts but also integrate them in the existing urban fabric and social context aiming at a pleasant and livable environment that fits the future as well as the present needs, without ignoring the traditions and the past onto which Amsterdam is based.

The design research reflected on these aspects and reached a proposal that opposes the dominant trend of separated working and living zones by creating a humane living environment and breaking with the tradition of the dormitory-like housings typical of large universities. The project also intends to present a **permeable block** for workers and citizens with respect for the surrounding host-city.

The first step to achieve this goal was to realize a round of **interviews** with residents in the Apple Market area on their relationship with the place, their likes and dislikes about the current conditions of the area, with a special focus on what is currently missing and what they would like to have there. Interviewed people provided key insights for the project design: their answers pointed at the lack of sport facilities, the overwhelming presence of cafes and the under-utilized car park.

Next, I surveyed the area in a 500 m radius to **map** the presence and typology of activities, including shops, cultural sites, sport and leisure centers, to gain a more specific idea of the current functions distribution to compare with an investigation of the surroundings of existing tech campuses and of the facilities they provide internally.

With these elements the project aimed at assessing what a campus needs to offer so that external people would feel attracted by it while at the same time the workers could enjoy a range of commodities and still want to reach out to the city. The ultimate goal of this process was the tackle the apparent contradiction of combining working and living quarters and to define a proposal that truly serves the local community as an area of public interest for Amsterdam, **a city within another city** living in symbiosis with it.

Models, diagrams and sketches assisted the formulation of spaces at city, building and dwelling level. Case studies - some of which are mentioned above - provided a fundamental support for architecture, building technology and materialization.

Aspect 4: The relationship between the project and the wider social context

There are several reasons for opting for a fusion of working and living functions - the project draws from these and proposes an alternative solution for tech campuses that fits the social, economic and cultural trends of today.

Besides being the logical evolution of the university campus model, integrated working and living campuses effectively address the following issues:

- The price per square meter in the city center of Amsterdam, in the Apple Market area specifically, averages between 5000 and 6000 EUR / sqm. Replacing the existing garage with a working and living compound, the structure could expand beyond the current 70 x 40 m multistory parking lot and generate *a much higher profit* while accommodating vehicles of workers and external citizens under the ground.

- Companies with a large office in cities tend to rely on the market for their workers to find a dwelling, as opposed to businesses operating in remote locations. at the same time, major cities in the Netherlands struggle with the *lack of housing units*. The project is a response to this challenge so that the existence of a large tech campus does not come as a burden for the city. Some tech campuses, such as the Google Mountain View, face difficulties because new residential areas around office districts are impeded by zoning regulations marking them “for commercial use only”. Amsterdam, on the other hand, allows for more flexible and sustainable development opportunities and could host different solution to those adopted in the US.

- Another substantial improvement relates to the size of *available working places* in the city of Amsterdam: generally small and scattered. The design provides a large space that can host up to 600 workers and a total of approximately 350 inhabitants, effectively concentrating a business in a single location.

- At the same time the proposed solution is *future-proof*. Should the main company occupying the campus decide to leave, a flexible organization of the spaces is in place so that the structure can be divided into up to 4 smaller sections, all independent and self-sufficient.

- Less distance between working and living places equals more (effective) time spent at the workplace, virtually uninterrupted working times (canteens and free time facilities being integrated), and leisure activities that do not take time from work.

- A h*igher social interaction* also comes as a benefit and might operate as a tool for refraining people from leaving their jobs so frequently, for improving overall efficiency and promoting a corporate culture based on team building.

- The high *variety of living spaces* accommodates different personal preferences and family needs, while providing an affordable option in a very pricy city.

- Finally, some extra features enrich the attractiveness of the campus and its integration with the surrounding: an unused portion of canals is assigned to sporting purposes, the tower offers a viewpoint on the city center and green spaces enhance a much longed-for biophilia.