# **CONCEPTUAL PROCEEDING**

From theory to practice: new design practices in residential buildings

# Andrea Jany<sup>1</sup>, Iris M. Reuther<sup>2</sup>

<sup>1</sup> Dipl.-Ing. Dr. techn., TU GRAZ, Institute for Architectural Theory, the Arts, and Cultural Studies, Technikerstraße 4, 8010 Graz, Austria, jany@tugraz.at

#### **ABSTRACT**

Given the rapid rise in land prices, dwindling land and space reserves, and the urgent need for affordable housing in urban areas, a strategic realignment of zoning and development policies is underway in Germany. Conceptual proceedings as a public service tool for ensuring high quality and development for the common good will play a central role facilitating low-threshold access to urban living space for all segments of the population, especially with regard to the provision of social housing. Various residential projects following this principle are currently underway in Germany, with Berlin, Munich, and Hamburg taking the lead. All three cities have already had initial experiences with this process. In Hamburg, this process was used on the recently completed *martini 44* project.

Until 2011, the site in Hamburg was home to the hospital known as Krankenhaus Bethanien, which the city was able to sell for conversion after the merger of several hospitals. Thanks to the intensive involvement of a neighbourhood group, the city opted not to look for the investor who could make the highest bid for the property in the high-end Eppendorf district, but instead issued, for the first time in the city's history, a call for tenders in which the best quality concept would win.

This research generates and disseminates new knowledge of alternative concepts in housing. Principal results are the successful implementation of the process, using the example of *martini 44* in Hamburg. Literature research and qualitative interviews are the main research methods. Major conclusions are the transfer to other cities and regions of Europe to address the urgent need for affordable housing in urban areas by using conceptual proceedings as a public service tool.

**Keywords:** Housing, design process, participation, community involvement, framework conditions

<sup>&</sup>lt;sup>2</sup> Dipl.-Ing. Dipl.-Ing. (FH), Würzburg-Schweinfurt University of Applied Sciences, Faculty of Architecture and Civil Engineering, Röntgenring 8, 97070 Würzburg, Germany, iris.reuther@lehrbeauftragte.fhws.de

# 1 INTRODUCTION

Cities are booming. They are living places with the goal of improving the social and economic lives of individuals. To meet this goal, today's cities not only need to operate efficiently within the rule of law and with effective policymakers, but also provide a liveable environment and affordable housing. But the latter is increasingly difficult to find in the face of urbanisation, defined as the increasing number of people living in urban areas. 2008 was the first year in which more than half of the world's population, some 3.3 billion people, lived in metropolitan areas (Jany, 2017). These shifts require strategies to ensure that every new resident in the world's cities is provided with housing. It is important to consider these questions not only on a quantitative basis, but also to pay attention to the quality of the urban development being considered. The current use of concept-driven planning processes in Germany is one such instrument for ensuring quality in residential construction.

# 2 CONCEPTUAL PROCEEDING

German constitutional law gives each municipality sovereignty in its planning authority. This guarantee also gives municipalities the responsibility for drawing up guidelines for land use. Land use guidelines can be divided into two types: on the one hand, these are land use plans, which generally cover the entire municipal area, but are not yet binding and therefore represent the long-term vision of the planners. On the other hand, communities can create development plans based on these land use plans. These are limited to a subarea of the municipality and contain binding regulations and specifications for future development. The development plan can regulate the types and dimensions of the structures that can be built as well as the placement of infrastructure. Similarly, public and private green spaces can be defined in a development plan.

In 2004, the Bavarian State Building Authority determined that the quality of an individual project cannot be prescribed by the guidelines for land use. The authority said that the guidelines for land use are not sufficiently detailed to ensure the urban planning, architectural, usage, and social aspects of construction projects (Oberste Baubehörde, 2004). Building on this finding, a concept-driven planning processes, called conceptional proceedings have been developed in Germany. This is a process that attempts to close the gap between quality assurance and urban planning processes. Essentially, a conceptional proceeding ensures that, in the event a property is sold, that it is not necessarily the highest bidder who wins, but instead the project proposal that will make the greatest contribution to the quality of the neighbourhood being developed. In the course of creating the projects, the creativity and innovation of project developers are used in cooperative planning processes (Temel, 2018).

In general, there are two main reasons for the increased use of concept-driven planning processes in Germany. On the one hand, they allow the project to be addressed from an urban design perspective and the so-called *Baukultur*. In terms of content, this includes the mix of uses, what kinds of open spaces to provide, sustainability concerns, and the involvement of future users throughout the planning process. Any user involvement will increase their satisfaction and thus makes the long-term use of the buildings more likely (Reuther, 2018). On the other hand, affordable housing has been a major issue since at least

the financial crisis in 2008. To implement concept-driven planning processes, there are two basic requirements: on the one hand, municipalities must own suitable plots of land or be able to grant leaseholds for them. On the other hand, the expertise and resources must be available both internally and externally to carry out such concept-driven planning processes. A major advantage for German municipalities is the greater flexibility available to policymakers and bureaucrats compared to traditional direct contract awarding and bidding procedures (Temel, 2018).

The forerunners of today's concept-driven planning processes can be seen in the construction of public housing projects in Tübingen/Germany, where similar procedures were already in use in the 1990s. In particular, construction groups became partners in these processes as they developed new neighbourhoods with the best possible usage-related and social qualities in an urban setting. The groups were recognised as being particularly dedicated and innovation-oriented project developers and were consequently granted easier access to land as part of these processes, thus offsetting their structural handicaps on the property market. At present, this kind of access is gaining in popularity throughout Germany (Initiative StadtNeudenken, 2019).

As in Tübingen, construction cooperatives also have a long tradition in Hamburg. This development was given renewed momentum when the Agency for Construction Cooperatives set up a separate funding programme and a 20 % quota for construction cooperatives in 2003. As a result, concept-driven planning processes have been increasingly used for public housing projects. Since 2010, the concept-driven planning processes have also been applied to urban properties (Temel, 2018). A wide variety of methods have since developed across Germany's regions. There is currently an attempt underway to systematize these methods in order to develop general guidelines for concept-driven planning processes (Temel, 2018).

# 3 BEST-PRACTICE-PROJECT: MARTINI 44

Nevertheless, even in 2019, such processes are "much-discussed solutions that are only used hesitantly" [1]. The following example from Hamburg's Eppendorf district shows how such a concept-driven planning process was considered more than 10 years ago and realised until 2019. About 5 km north of the city centre, Eppendorf district has a considerable number of historicist and Art Nouveau structures.

# 3.1 History: Bethanien Hospital

By the end of the 19th century, industrialisation had led to a population explosion in Hamburg. This was accompanied not only by new prosperity, but also by more poverty and disease. In 1889, a municipal hospital was opened in Eppendorf, on the outermost edge of the city. That hospital was a forerunner of today's University Medical Center Hamburg-Eppendorf. Several affordable neighbourhoods for older and poor people were then successively built in the immediate vicinity by several foundations [2] as well as the Bethanien Hospital in 1893. The city made the property on Martinistraße available to the Methodist Deaconess Society free of charge on the condition that it be used as a hospital (Geschichtswerkstatt Eppendorf, 2019).



Figure 1: Historical photo of the main building on Martinistraße (from: Bethanien Hochbaulichfreiraumplanerischer Realisierungswettbewerb, p. 8).

The hospital was expanded in 1928, before a new patients' wing was built in 1958. By the late 1970s, the hospital's focus had gradually shifted to geriatrics while the German healthcare system was undergoing significant changes for economic reasons. This led to the merger of several church-sponsored hospitals in Hamburg with a new building at another location and the final closure of Bethanien in 2011.

# 3.2 Neighbourhood network: martini-erleben

In 2006 it was announced that the hospital would close and that the property would revert back to the city. Eppendorf is considered a good residential area close to the city centre (Freie und Hansestadt Hamburg, 2011) with good transport connections. Neighbouring residents feared the not uncommon fate of its being sold off to an investor who would seek to maximise profit by converting it to or replacing it with exclusive flats and lofts. Such would have changed the character of the neighbourhood significantly and would be in contrast to the small apartments that were home to approx. 600 senior citizens in the adjacent quarter to the north between Martinistraße and Frickestraße. To the southeast of the hospital, there is a church with parish hall as well as a retirement home together with the Deaconesses' Motherhouse. The site adjoins the campus of the University Hospital to the west, while there is a public park to the south.

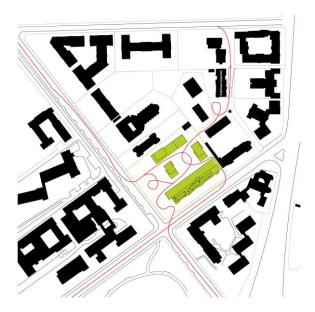


Figure 2: Figure ground plan with new and former hospital building as built (light green) and access paths (red) (Source: ABP Architekten, Hamburg).

With the aim of preventing such a land sale, several already existing neighbourhood initiatives joined forces: the Eppendorf Kulturhaus and district archive, the parish of St Martin's, the *Hamburgische Brücke* (a private social work agency), the *Diakoniewerk Schwesternheim Bethanien*, and the *Bauverein der Elbgemeinden* (BVE). The latter is a large Hamburg housing cooperative, which had already built a small, quiet residential complex behind the Joseph-Stift site adjacent to the hospital in 2007. As varied as the focus of each participant was, they came together in a consensus to demand better ideas for this soon-to-be vacant site and to make an active contribution to the upcoming development of the district. The *martini-erleben* district network then used public funds to open an office in the district in 2009 to serve as a contact point for intergenerational projects. It was founded as a non-profit association. It formulated a concrete proposal for the use of the hospital site, collected signatures, and got the public authorities involved, especially the Hamburg-Nord district office (Geschichtswerkstatt Eppendorf, 2019).

# 3.3 Tender and concept

This noteworthy publicity initiative led the city of Hamburg's finance authority to go against its usual practice and offer the land for sale in November 2011 as a planning tender. The financial aspect would only receive 30 % of the weighting, while the qualitative criteria, i.e. the most convincing concept, 70 % (Geschichtswerkstatt Eppendorf, 2019).



Figure 3: Logo and use of the main building on Martinistraße (residential community MARTINIS / residential-care-community / day care / hall / cultural point / district's archive / dementia dock / welfare centre) (from: Geschichte Hausnah – martini 44, p. 21).

Of the 15 planning offers received, BVE's bid won because they knew the needs of the intended users particularly well due to their existing contact with them. The concept provides for 80 publicly funded apartments with one to four rooms each. Of these, 56 are planned in three new buildings at the back of the property, while 24 apartments are planned for the "MARTINIS" residential project, a building cooperative initiated by *martini-erleben*. In the former hospital, a new Centre for Culture and Social Affairs was created and now houses some of the district network's initiatives as well as adult day care and residential care for people with dementia. A small café has also opened in the old building and the newly erected hall next door is available to the residents and initiatives of the district (Geschichtswerkstatt Eppendorf, 2019).

# 3.4 Realisation and use

At the beginning of 2013, BVE was officially awarded the contract by the city's finance department. BVE then opened a planning competition for the site. The task and process were coordinated by mutual agreement with the Hamburg-Nord district office. The six architecture firms invited to participate were each paid for the timely submission of a draft ready for evaluation; plus three prizes for a total of €35,000 were awarded (Bauverein der Elbgemeinden, 2013). The Hamburg office of KBNK Architekten won the commission to design the new buildings at the rear of the property [4]. ABP Architekten Hamburg, meanwhile, was entrusted with the realisation of its design for the old building [5].





Figure 4 and 5: Photos of the construction site at the laying of the foundation stone in May 2017 (Photos: I. M. Reuther).

The planning application was submitted and approved in 2014 and the construction of the new buildings on Frickestraße and the demolition of the old building with the elaborate preservation of the historic hospital façade commenced the following summer, cf. Figure 4 [6]. The spaces for the new uses corresponding Fig. 3 were created behind this façade starting in 2017. [7]. Accordingly, one part was first built to completion and was ready for occupation by early 2019 [5].

The spaces were leased at very moderate prices compared to the average €12 per sqm rent without utilities in Eppendorf in 2010 (Freie und Hansestadt Hamburg, 2011). The average rental price in Hamburg has since climbed to €12.99 per sqm for the entire city and €14.66 per sqm in Eppendorf [9]. BVE, meanwhile, only charges €8.20 per sqm for the martini 44 project [8]. Due to the public funding received by the project, only those eligible for public housing assistance could apply for leases. They need a document, that proves that the future tenants has a low income and it gives them access to social housing. In the course of the planning, it was determined that there will be links to other service and non-profit infrastructure in the neighbourhood, such as music groups, religious communities, and offerings for senior citizens. The village-like setting and the immediate awareness that one of the authors was not a resident when she was taking photographs showed, that there is an intensive sense of cohesion in the neighbourhood.

At the end of April 2019, the semi-public and public areas were formally dedicated and named "Zentrum *martini 44*" in the presence of First Mayor of Hamburg, Dr. Peter Tschentscher. Artistic, musical, culinary, and a wide range of other interesting contributions were made to mark the occasion by the many initiatives and organisations that have found a new home in the building or in the quarter. And not only since this event that the local residents of all ages have found the spaces created increasingly attractive: both inside and out, they are clearly being used by the neighbourhood with an appreciation of the community space within just a few months. Beyond the actual residences, the former Bethanien site has created public living space for residents of all ages. These functioning neighbourly relations are the result of the high commitment of several bodies to a common cause and the political will to make a planning tender for this project possible.





Figure 6 and 7: Photos of the site in use in August 2019 (Photos: I. M. Reuther).

### 4 CONCLUSION

The rapid rise in land prices, dwindling land and space reserves, and the urgent need for affordable housing in urban areas ask for a strategic realignment of zoning and development policies. Conceptual proceedings as a public service tool for ensuring high quality and development for the common good can play a central role in facilitating low-threshold access to urban living space for all segments of the population, especially with regard to the provision of social housing. Currently, various residential projects are following this principle in Germany. Berlin, Munich, and Hamburg are taking the lead. All three cities have already had initial experiences with this process. In Hamburg, this process was successfully used on the recently completed *martini 44* project.

The *martini 44* project, completed in Hamburg in 2019, shows that conceptional proceedings not only work in theory. Indeed, this practical example proves that citizen engagement can influence the political will in the interest of creating better residences and social spaces. Even after a relatively short term, it is obvious how rewarding this has been for ensuring a better quality result. In addition to the densely urban landscape, this project also realized a varied and personal neighbourhood, resulting in a lively district with added value beyond one's own living environment. Further to its own residents, the neighbourhood in the district benefits from the new additional services, shops, and events at *martini 44*. The social change, especially by young families' moving into a neighbourhood in the high-priced district of Eppendorf formerly dominated by older citizens, is helping to overcome barriers. Such a social mix in terms of diversity should be sought everywhere.

Specifically, the public interest-oriented added value makes *martini 44* a positive example of a concept-driven planning process. In many municipalities in German-speaking Europe, it may seem to be a long and winding road from a citizens' initiative to the decision and realization of a conceptual proceeding, but as the *martini 44* project shows, new paths can be taken to move from concept to the design and implementation of active neighbourhoods in order to achieve affordable housing and a consistently positive outcome for all. In short, it takes initiative and willpower, but it is quite possible to carry out concept-driven planning processes for urban design in the interest of its future residents and that of the entire district. In the aspect to address the urgent need for affordable housing in urban areas, the recommendation can be made to use conceptual proceedings as a public service tool to create added value for the common good.

### **REFERENCES**

Bauverein der Elbgemeinden eG (2013), Bethanien Hochbaulich-freiraumplanerischer Realisierungswettbewerb. Auslobung. Hamburg

Freie und Hansestadt Hamburg (2011), Wohnungsbauprogramm 2012 Bezirk Hamburg-Nord, Hamburg, retrieved from https://www.hamburg.de/contentblob/3230998/d57bf7568166bc97e59e1df4ee07a6ea/dat a/wohnungsbauprogramm-hamburg-nord.pdf

Geschichtswerkstatt Eppendorf (2019), Geschichte Hausnah – martini44, Hamburg.

Initiative StadtNeudenken (ed.) (2019), *Dokumentation Werkstatt. Konzeptverfahren. Retrieved from https://konzeptverfahren.berlin/*wp-content/uploads/2019/06/ISN\_Dokumentation\_WS\_Konzeptverfahren\_2019.pdf

Jany, A. (2017), Der Wohnbau des Modell Steiermark, Eine geschichtliche Aufarbeitung des Wohnbaus des Modell Steiermark und eine empirische Studie zur Erhebung der Wohnzufriedenheit in ausgewählten Projekten, Hochschulschrift, Technische Universität Graz

Reuther, I. M. (2018), BEST PRACTICE GESUCHT - Strukturen baulichen Qualitätsmanagements im Hochschulneubau anhand exemplarischer Projekte in Österreich, Deutschland und Luxemburg, Hochschulschrift, Technische Universität Graz

Temel, R. (2018), Baukultur für das Quartier, Prozesskultur durch Konzeptvergabe. Retrieved from https://www.bbsr.bund.de/BBSR/DE/FP/ReFo/Staedtebau/2017/baukultur-quartier/Endbericht.pdf?\_\_blob=publicationFile&v=1

### **WEB REFERENCES**

- [1] https://www.dabonline.de/2019/11/06/loesen-wir-die-bodenfrage/ (Last Access: 14.11.2019)
- [2] https://meineppendorf.wordpress.com/2015/06/19/eppendorfs-wohnstifte/ (Last Access: 14.11.2019)
- [3] https://barrierefreieshamburg.de/wp/kultur/martinierleben/ (Last Access: 14.11.2019)
- [4] http://www.kbnk.de/ (Last Access: 14.11.2019)
- [5] https://www.apb-architekten.de/projekte/wohnen/wohnen-am-martinihof (Last Access: 14.11.2019)
- [6] http://neue-nachbarschaft.de/immovielien/martini-44-hamburg/ (Last Access: 14.11.2019)
- [7] https://www.haufe.de/immobilien/wohnungswirtschaft/martini-44-baubeginn-in-hamburg-eppendorf 260 411966.html (Last Access: 14.11.2019)
- [8] https://www.bve.de/aktuelles/2018/vermietungsstart-martini44/ (Last Access: 14.11.2019)
- [9] https://www.wohnungsboerse.net/mietspiegel-Hamburg/3195 (Last Access: 14.11.2019)