Semesterarbeit von Pietro Sircana im Rahmen des Seminars 'Architektur sammeln, dokumentieren und präsentieren - Alexander von Branca im Archiv des Architekturmuseums' im Sommersemester 2019

Alexander von Branca, Riem Flughafengelände

Signature: bra-326 Name of project: Messestadt Riem, München 229 drawings

Built in 1939 the Riem airport was the main civil airport for Munich until its closure in 1992. Already in 1954, this airport was deemed too small for the growing city and the due expansion was considered to be impossible due to its position.

The plane crash of the 17th of december 1960, in which a plane departing from this airport crashed on a tram in Bayerstraße, further proved the inadequacy of the airport and the people requested an airport more distant from the city.

In 1969 an area in Erdinger Moos was selected for the new airport and in 1970 a long planning process started spanning over 13 years.

At the same time a project for the Riem area was needed: in 1991 a private competition was held. Part of it was to be used as a residential quarter and another as a site for the Munich trade fair.

The trade fair was relegated since then to a small site in Theresienhöhe not suitable for the new economic centre that Munich was going

Fig 1: Aerial view of the airport

to be.

One of the competitors for the new design of the Riem's airport area was Alexandra von Branca.

The material presented in the following pages is not only suitable to understand what the project of von Branca was going to look like but also to have an insight of his working methodology.



The early sketches

Since the early conception phases became evident the desire of von Branca to use water to divide the two parts of the site: the residential area on the south and the trade fair on the north.

As it is possible to see in Figure 2 the area was to be divided by two water streams (here in yellow) that would interconnect to form a sort of X shape. Facing this central connection and each other there were going to be two circular square that would act as the hearts of the two districts. Another important feature of this sketch is that it displays the earliest concept for the connection to the city (the red and green arrow on the left side).

Later sketches (Figures 3 and 4) make possible to see how the two sections were to be connected by a bridge standing over the water and the intention of the architect to use a more naturalistic approach to the shapes. With the Figure 5 we can see the final design of von Branca for the water: a single stream going from north-east to south-west that would enlarge into a lake right under the bridge. The east and west shore were going to be part of a bigger park that would further divide the fair from the residential district.

Finally, the Figures 6 and 7 picture the fair square from the other side of the bridge. The

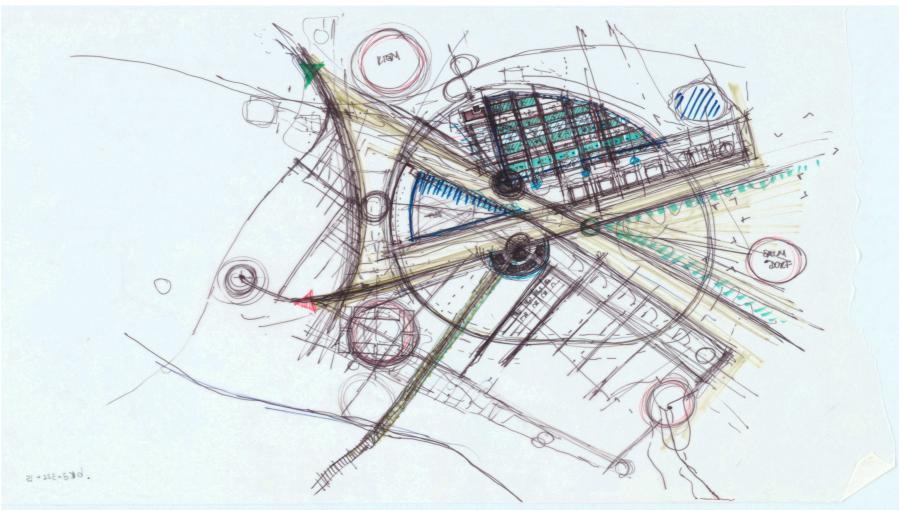
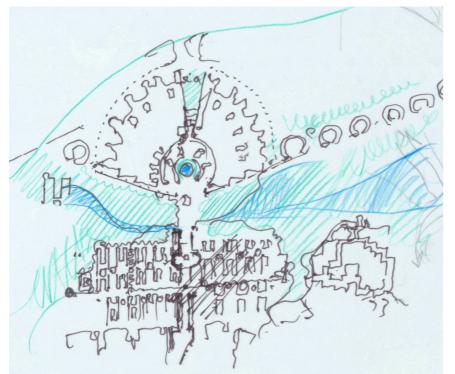


Fig 2 Sketch of the area

shapes imagined by von Branca seem to be reminiscent of the airport that was standing on the area: a low-level building with a grandiose entrance and a tower recalling the control tower of the airport.





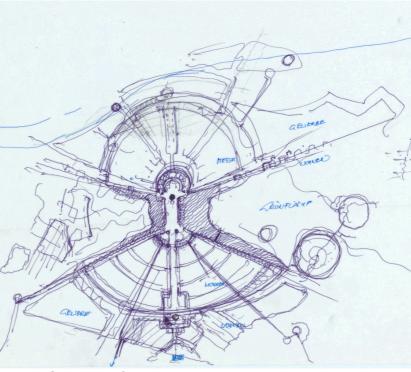


Fig 4 Sketch of the area

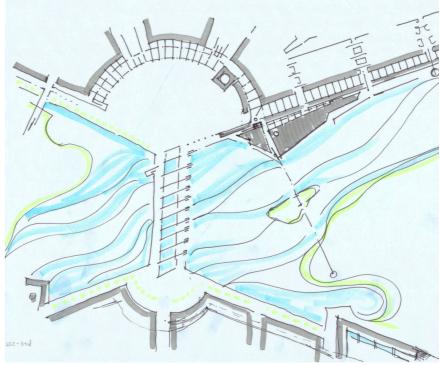
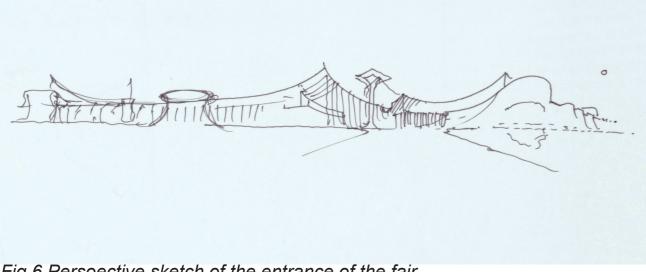


Fig 5 Sketch of the bridge



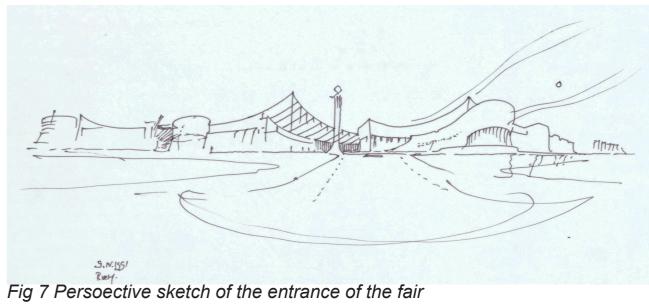


Fig 6 Persoective sketch of the entrance of the fair

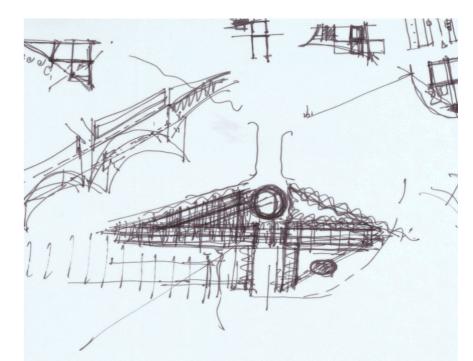
Shaping the residential area

The design of the area didn't come to von Branca immediately. Even though its position and distribution were quite clear from the start it is possible to see that the exact shape was difficult to achieve going back and forth to some different designs. In particular the two main possibilities for the residential area can be found in many different sketches. The first (figure 8) had a completely circular square at its end of the bridge. This design was later discarded in favour of the second one (figure 9), probably due to the fact that even if it would have looked good in plan, it would have resulted in major waste of space in reality.

In figure 9 the shape of the square that von Branca settled in for is clear: two semi-circular squares facing each other from the two sides of the bridge. Furthermore, it is evident in this drawing how the architect already intended for the residential area to "spill out" from the circle containing the shape of the trade fair on the east side.

Even though the images listed before serve the purpose of showing the design possibilities that von Branca had looked into, they don't give the same insight to its working process as the complete plan sheets. These (figure 10 to 12), from which the figures 8 and 9 were extrapolated, demonstrate well the continuous

work of von Branca in his task to achieve a well suited shape: on the same plan sheet there can be both possibilities in plan and different designs for possible elevations, options for a west-side spill opposed to the east one, and variations for different grids for the streets.





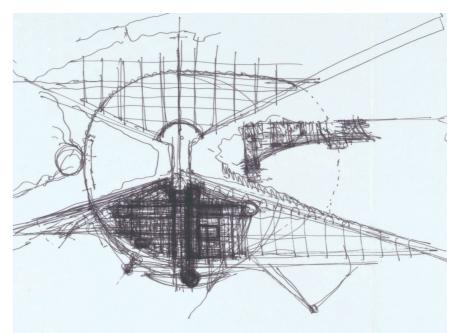
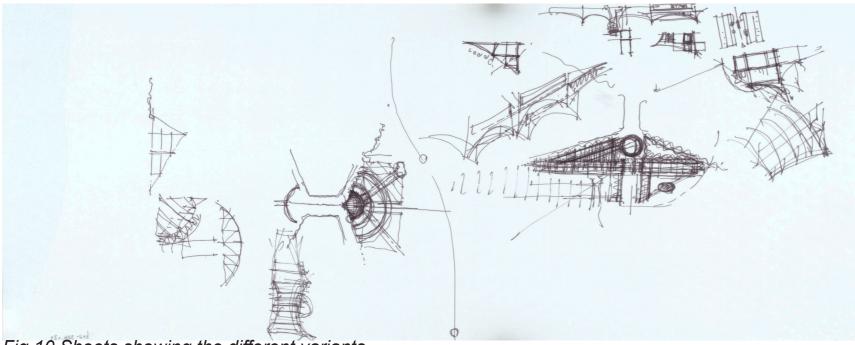
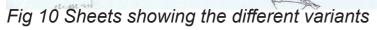


Fig 9 Variant of plan for the residential area

Fig 8 Variant of plan for the residential area





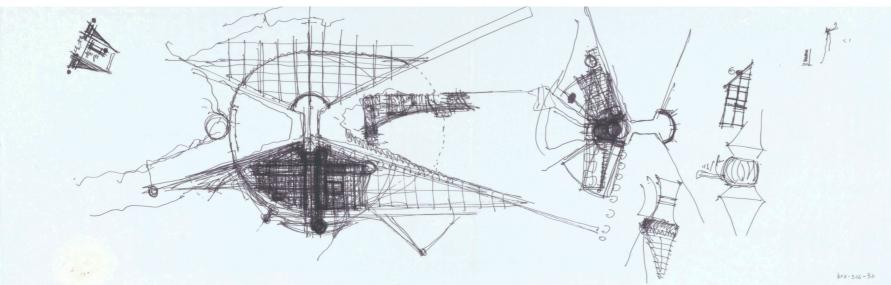


Fig 11 Sheets showing the different variants

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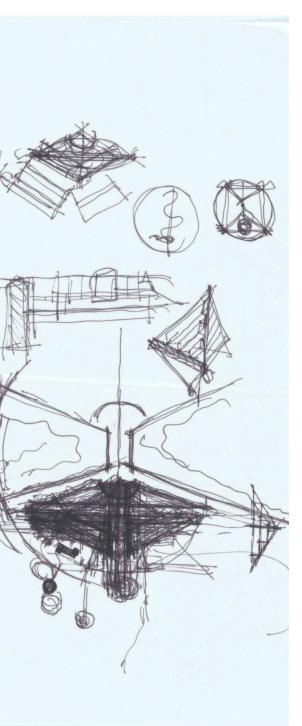
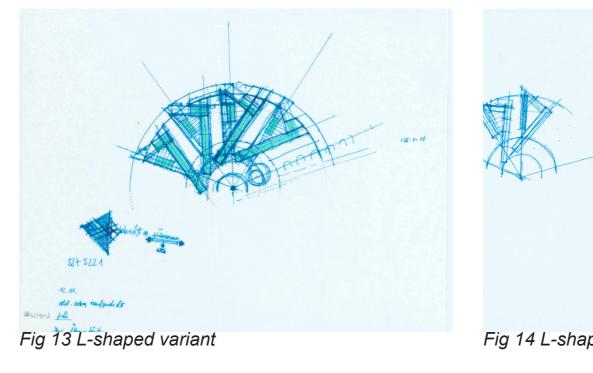


Fig 12 Sheets showing the different variants

Shaping the trade fair

Due to the peculiar shape that von Branca had decided for its design he encountered some problems with the distribution of the trade fair buildings: these are traditionally long rectangular buildings with ample spaces for the exhibition. To accommodate this necessity and to reduce the walking distance between the pavilions von Branca tried different variants: the L-shaped pavilions of figures 13 and 14; the same distribution but with a courtyard enclosed in the space as can be seen in figures 14 to 17; and finally (figures 18 to 20) a distribution along the radiuses of the circle where the pavilions were put in opposing pairs the main variation in these designs was the opening angle around the square that could be either 180 degrees or 140.

This clearly shows one of the most problematic features in the design of von Branca: the trade fair buildings generally are designed on a rectangular grid, due to their hosted functions. The best shape for the enclosures is that of large straight boxes that don't fit well with the fan-like shape imagined by von Branca.



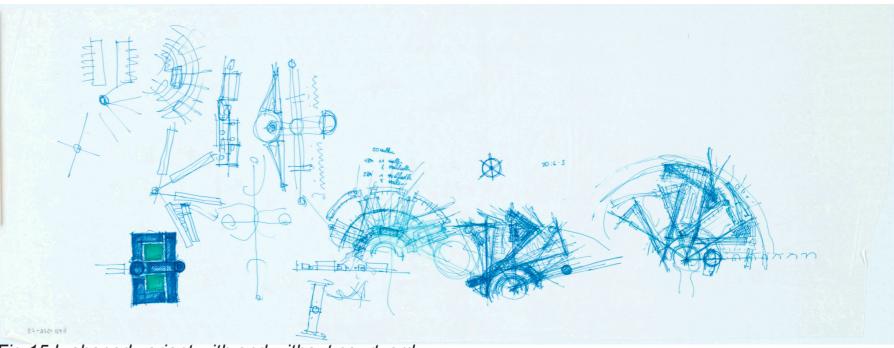


Fig 15 L-shaped variant with and without courtyard

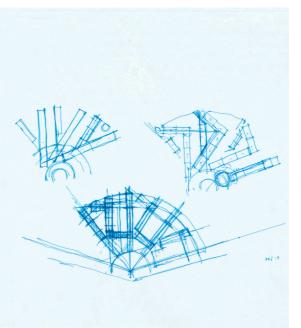


Fig 14 L-shaped variant with and without courtyard

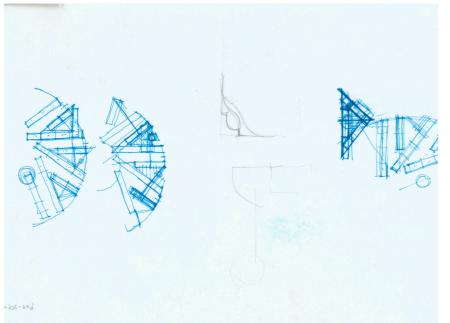
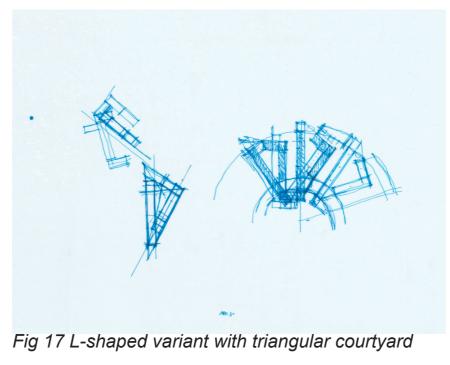


Fig 16 L-shaped variant with triangular courtyard



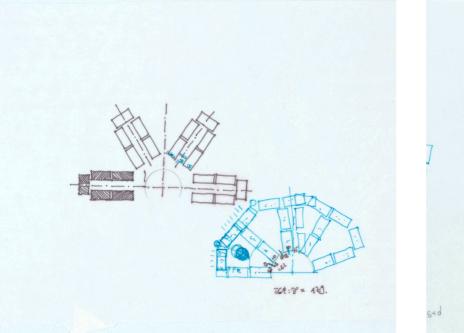


Fig 18 180° radiuses variant

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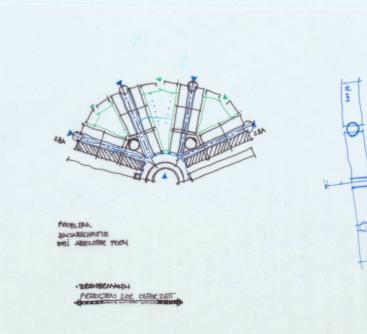
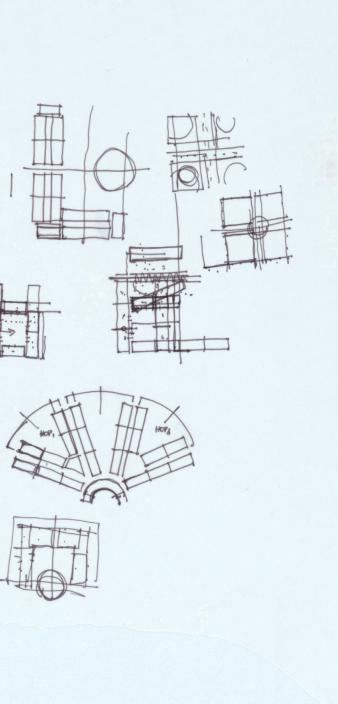


Fig 19 140° radiuses variant







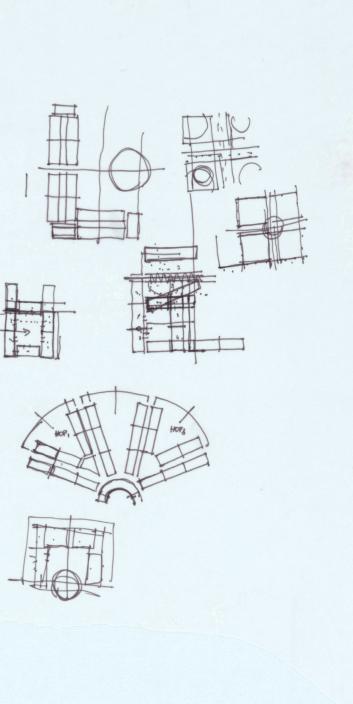


Fig 20 140° radiuses variant

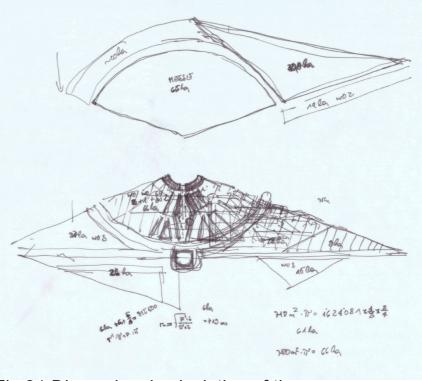
Dimension calculation

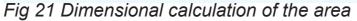
Although the original documents for the competition could not be found it is quite easy to imagine that in the requests there were indicated minimum dimensions for the elements of the project. The following images illustrate the checks done by von Branca and his associates on his design.

In the figures 21 and 22 is the calculation for the planar areas of both the fair and the living quarters: a total of 87,2 hectares for the fair and 115,7 for the residential district.

The competition expected the designers to provide a general planning for the total area and a more precise design for the fair.

The figures 23 and 24 provide some of the dimensional drawings for the exhibition spaces. In the first it is possible to see a functional division of the spaces while in the second is shown the calculations made on one of the definitive plans the buildings. Each one long almost 600 meters would have covered a total area of more than 24 thousand square meters. The figure 25 presents the calculation for the possible design of the residential part: the buildings were not supposed to be over five floors and the streets were divided in a handful of categories the larger streets would serve as the main directories for the general traffic while the smaller internal streets could serve for the





local traffic only and would act as a Woonerf, the typical living street of the Netherlands with a shared space between cars and people. In general, it is possible to see with these drawings the great attention that von Branca had not only for the design but also for the technicalities of architecture.

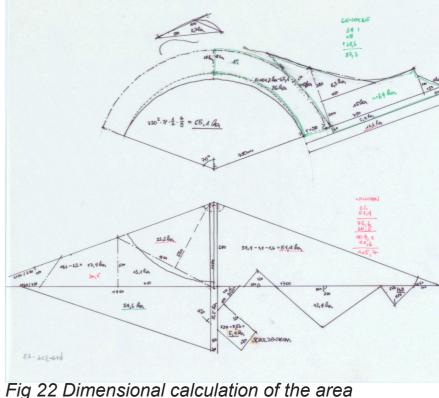




Fig 23 Functional division of the trade fair

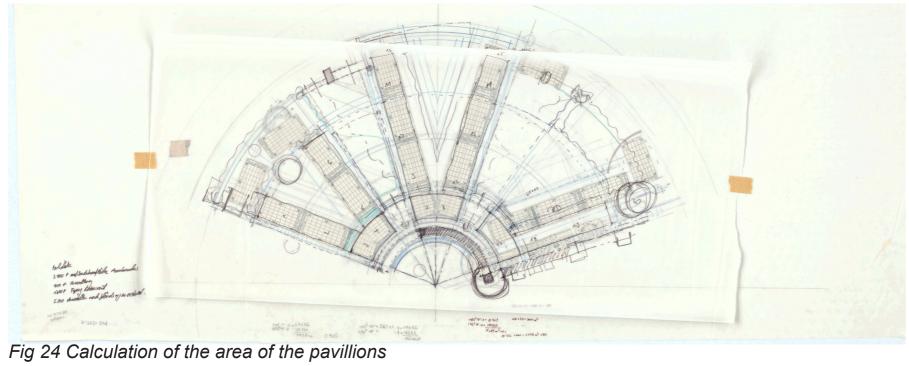


Fig 25 Design for the streets of the living quarter

processing and see 1 Competender 1



Final design

To finalize the design von Branca worked with various options for the distribution of the living quarters. Even if the dimensions were conclusive a few considerations were to be taken regarding the placement of some buildings as can be seen in the figures 26 and 27. Here it is still visible the tape that he used to superimpose a different design over an older version and in fact in person is possible to confront the variants and identify the slight differences that there were between the two designs.

Finally figure 28 displays the architect's design inside the area of the airport and it shows how it was meant to be slightly detached from the existing building to make it possible to create a quieter area distant from the normal traffic of the surrounding ones.

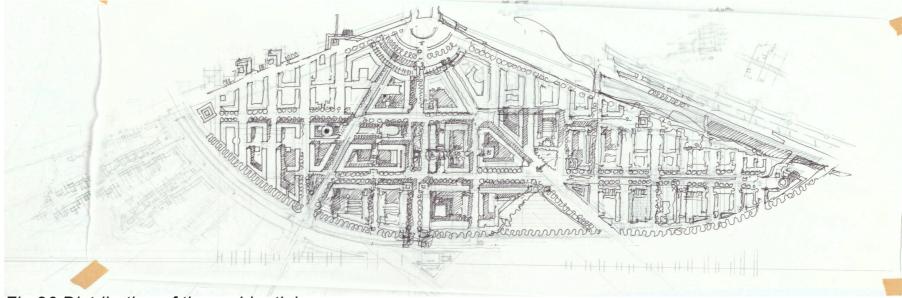


Fig 26 Distribution of the residential area

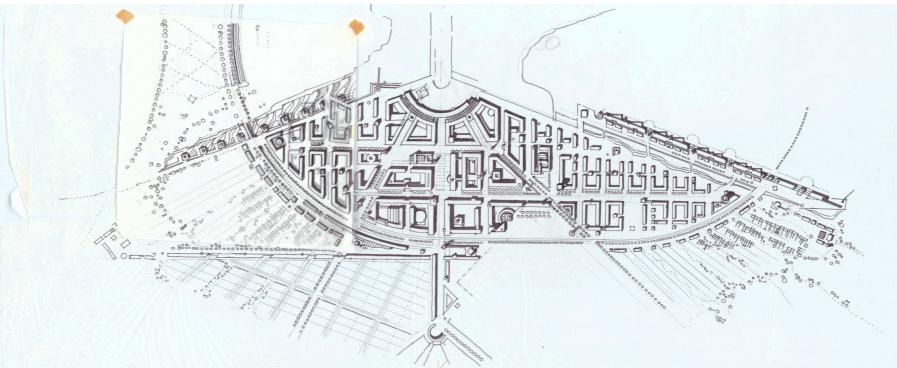
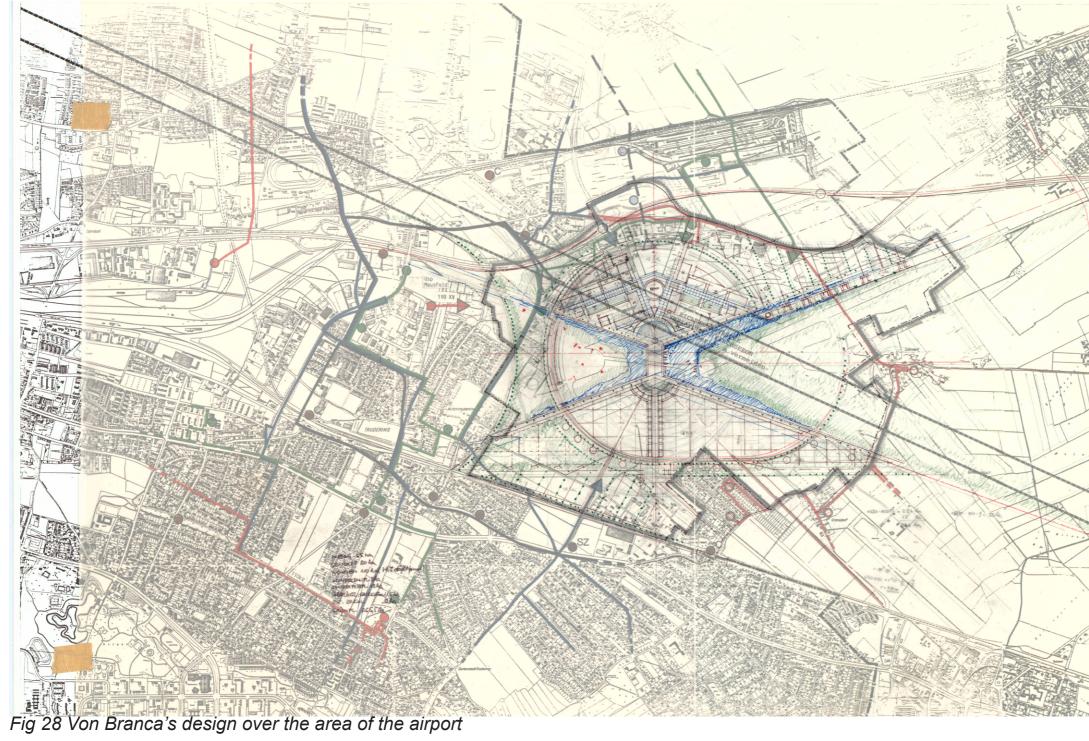


Fig 27 Distribution of the residential area





The competition drawings

The realisation of the competition drawings was a process that required putting together different graphics in a single layout. This can be seen by confronting the figure 29 to the figure 30. The first is the original draft of the plan 1 on which all the drawings were stiched and all the hatchings were prepared for the legends. The second is the final product presented to the Munich muncipality: a copy on an higher quality paper colored to help the reader better understand the project.

The six sheets are divided in two categories: the ones regarding the general plan, with the technical analyses (figure 31), the complete plan (figure 32) and a more detailed plan for the building and the trees surrounding the bridge (figure 33); and the ones dedicated to the buildings of the trade fair, with an analysis of the internal paths and an axonometric drawing of the complex (figure 34), and two detailed plans concentrating around the entrance hall on two different levels (figures 35 and 36)



Fig 29 Part of the draft for Plan 1

Fig 30 Part of the final Plan 1



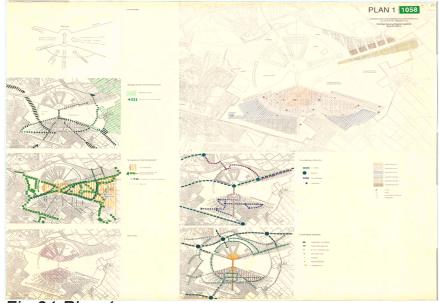


Fig 31 Plan 1

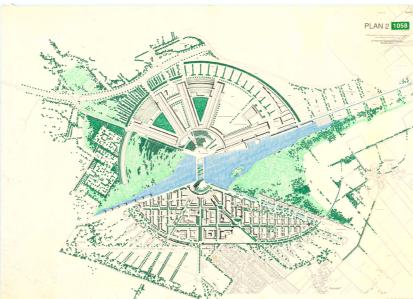


Fig 32 Plan 2

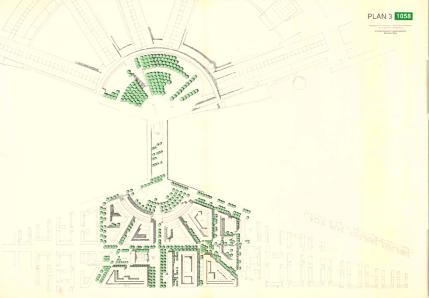
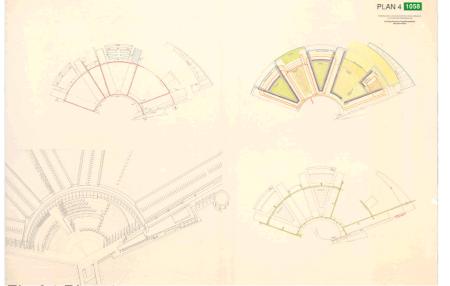
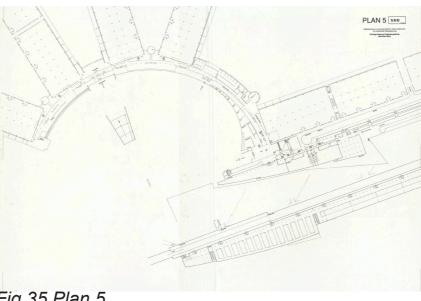


Fig 33 Plan 3





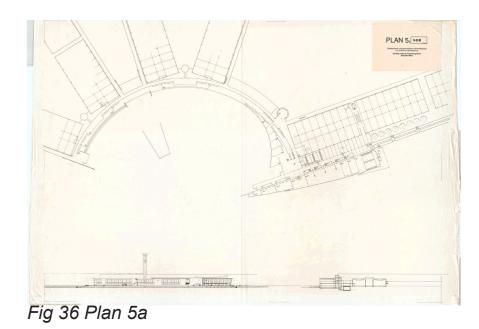


Fig 34 Plan 4

Fig 35 Plan 5

Personal sketch

This sketch is my attempt to design around the area of the Riem airport. As the competition requests I inserted both the trade fair and the residential area. I intended to give to the fair a regular grid to prevent the long distances present in the von Branca's project. And even though the distribution of the axises from east to west is regular I created an opening in the center to create a view cone over the park. The services for the fair and the residential area are placed around a water stream that, as it was in von Branca's design, divides the fair from the living quarters. The project of the architect was an inspiration also in the relationship with the surroundings: a green belt divide the area from the rest and high traffic streets are kept on the ouside. One of the main difference respect to his project is also the presence of multiple bridges to cross in peculiar points.

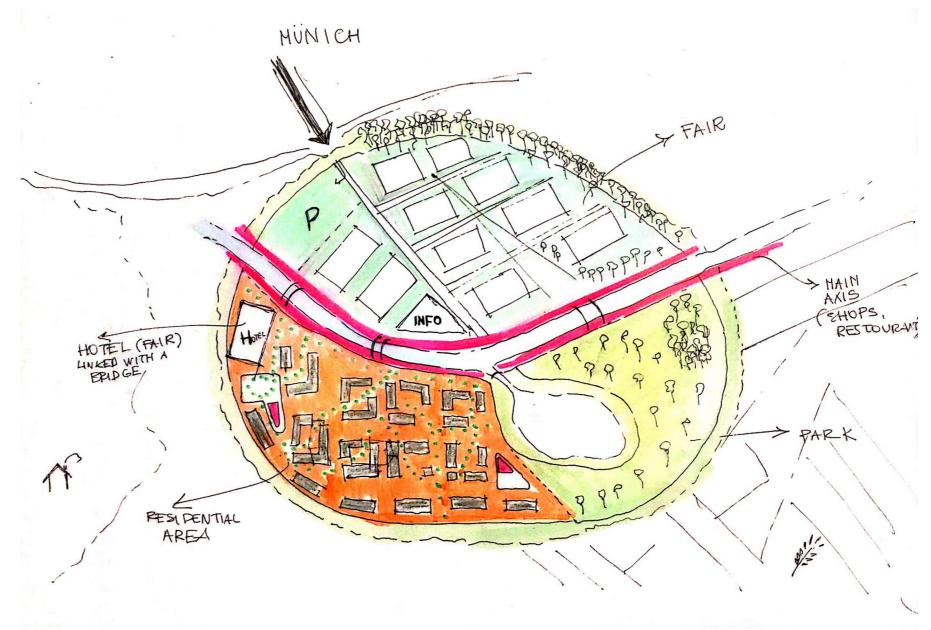


Fig 35 personal sketch

Design: Pietro Sircana