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## WINNING OR NOT – IN COMPETITION, THE JOURNEY IS THE REWARD

### Volkhard ANGELMAIER

Member of the Executive Board  
Leonhardt, Andrä und Partner  
Beratende Ingenieure VBI AG  
Stuttgart, Germany

[volkhard.angelmaier@lap-consult.com](mailto:volkhard.angelmaier@lap-consult.com)

### Summary

The design of structures, especially of bridges, is a very intensive creative process. This process takes place within an individual him or herself, as well as within a group of individuals, the team. In design competitions these teams are often formed of different protagonists like engineers, architects, landscape architects with different ideas, desires, expertise and skills. This creates an extremely heterogeneous situation that holds a high potential of creativity but also a high degree of explosive power. This lecture will outline this design process presenting three examples under different aspects, a process that also includes an analysis of the outcome – the decision of the jury.

**Keywords:** aesthetics; structural concepts; planning

### 1. Design Competition Lohtor Bridges Heilbronn

In the course of restructuring the local recreation area “Neckarpark”, it was intended to link the area eastward of the Neckar to the Island “Hefenweiler” and a newly planned museum there.

We came to a rapid agreement about the design of the landscape. Its curved shape of an S assimilates itself harmonically into the Park’s design under highest preservation of valuable tree stock. The decision-making process regarding the right superstructure turned out to be more difficult. The curved path in plan entails a solution with a ring carrier. However, there were different opinions about a stiffening girder – whether it should be expressively, shaped like an arch or restrained, simply shaped as a balustrade. None of both solutions prevailed and led to an intense vote with a scarce decision for the most expressionist outcome.

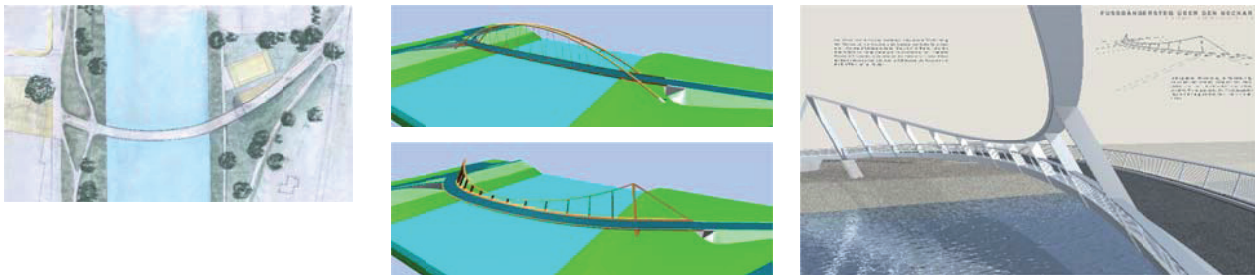


The outlook of the structure was designed under good harmonization between engineer and architect, which impacted the layout of the plans. The bridge was awarded with a second prize.

## 2. Neckar Bridge Stuttgart-Mühlhausen

A new bridge to connect Mühlhausen to leisure and sports facilities on the opposite river side has to be built.

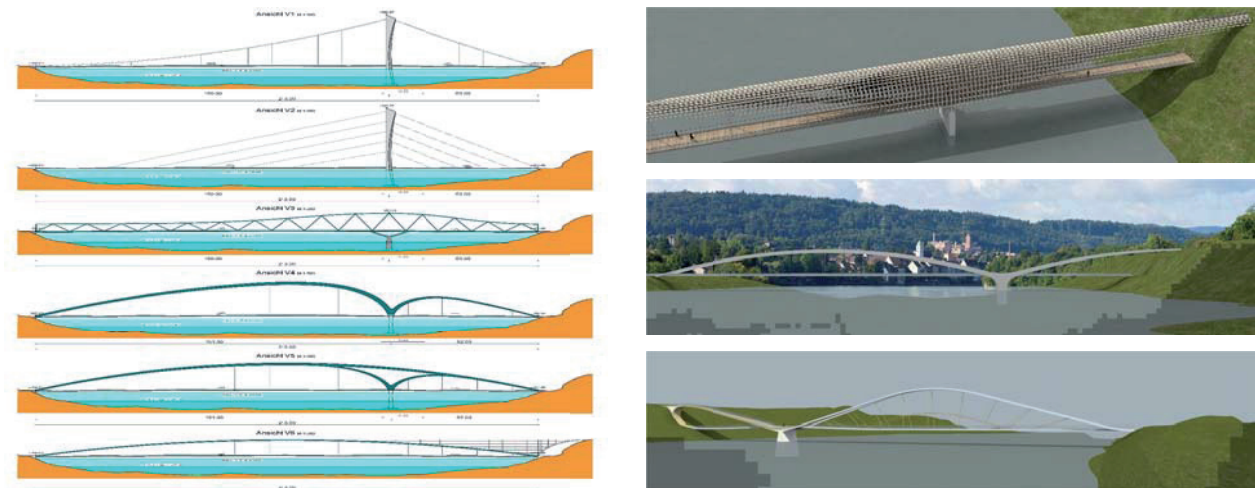
Here again, the team consisted of engineers and architects and landscape architects. While planning the superstructure, we had two methods in mind: a traditional arch and a modern ring carrier. The architects discovered this truly new idea of a ring carrier when providing themselves with a rigid impression of form and method about the cut guidance. The engineers divided the system in its individual parts until they were sure that it functions as a whole. Calculations, pre-dimensioning, constructive realization and the implementation of urban development were going hand in hand – among fierce pressure of time. All decisions were made unanimously. This speaks for the harmony within the team, which is convinced to be on the right path. In the end we won a second place.



## 3. Design Competition Pedestrian Bridge Rheinfelden

Due to the high amount of cross-border traffic between German Rheinfelden and Swiss Rheinfelden, an additional pedestrian bridge was needed. The river bank on the German border is steep, the Swiss border is mostly flat, and we estimated a total length of the bridge of 215,00 m.

To find the right superstructure has been priority. The cupped construction appeals likewise our French architects. Even though the special shape leads to the question, if there will be an easier way. There was. Our architects went even a step further and completed the design on the German side perfectly. Now we, the engineers had the task to construct a stable semi-circular arch. For us, it was a special competition full of dynamic and intensity. However, we can't conceal some disappointment about the 2nd place.



## 4. Conclusion

Those presented examples show perfectly how fascinating a designing processes during competitions can be. The focus was not only on the result but also on the journey to the achievement. All three contributions intended to create something extraordinary. Regarding the winning design, whether it was helpful or not, stays in the hands of the beholders. This leads us to the fact that, objectively and without any evaluation of the first place, we can draw the conclusion that the winning design is not always the one and only which is aesthetically convincing.