

Maastricht, the city, the maquette and the collection at the Palais des Beaux-Arts in Lille (France)

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Willem Beex

During the CHNT 2017, while having a beer in Café Bendl, Gilbert discussed with Willem the possibility of scanning a large historical model of the city of Maastricht, dating from 1749 and nowadays exposed in the Musée de Plans-Relief in Lille (France). Willem recognised the nice scientific challenge and immediately knew that this was something Giorgio had to be involved in.

Willem suggested a collaboration between his agency and the Dipartimento di Architettura (Architectural Department) in Florence, Italy, to start what was clearly a nice, involving, not easy and fascinating research and work, centred on this large maquette (about 6x7 metres) representing the old Maastricht. In the middle of 2018, the project was going to be supported financially by the Maastricht Municipality and soon there would be the need for an operative proposal and an effective presence in place to bring on the survey and the following post processing. Willem announced the possibility to start the surveys on June 2018, it was the start of a very interesting adventure with a very specific cultural heritage subject.

The so called "plan-relief" collection at the Palais des Beaux-Arts in Lille is an annex of the famous Dôme des Invalides in Paris where a lot of models are kept. The collection in Lille is a precious archive of maquettes hosted in a specific hall of the major museum. At the time of their making the purpose of these exemplary artisan works was military (Quellier, 2008). The high level of details, the accurate representation of each building, of all the walls and fortifications, with a great attention to the countryside, with all the trees, terrains, rivers, waterways, channels, stones, roads and paths, was due with the aim of allowing a perfect comprehension of the areas. All the cities and towns represented in this rich archive were settled in a geographic area with very complex borderlines, where the traveller was continuously passing (as it still happens now a day) between the borderlines of Netherlands, Belgium and France. Such a neuralgic area was not far from possible military operations and possessing such a collection of maquette was equal to possessing a clear knowledge of all the strategic issues and possible troop movements around this area. The physical 3D model as a tool for planning "virtual" intervention of soldiers, armies, cannons (Ubachs, 2005). In the time of peace and in the age of the European Community, the collection became a patrimony to protect and exhibit because of its incredible artistic value, showing the skill of many artisans who realized it and capable to tell a rich story about countries, past aspect of the cities, their former relationship with the territory (Buisseret, 1998). In between the numerous maquette: Lille (itself), Namur, Calais, Oudenaarde, Maastricht (Tapié, 2006). A total of 14 cities, (six from French, seven from Belgium, one from The Netherlands) composed of wood, printed or painted paper or cardboard, silk, tissues, sand and wires, on the scale of 1 to 600. low, they depict their subjects as they were from the 17th to the 19th centuries.

The first tasks in this part of the research were all pointed to the creation of a digital twin of the Maastricht maquette. 13 pieces with various sizes, from which those representing the old town centre, with a very dense urban tissue were two, all the other 11 were dedicated to the city fortifications and to the surrounding countryside. The ongoing restoration at the time of the survey was making things easy, while all the parts were separated and easily accessible. Defining the best digitalization solution took an accurate reflection, Willem was looking for the best possible result, but it was clear that time was influencing the costs, and transportability of the tools for the survey was not a secondary factor. It was then decided to proceed by S.f.M./I.M. photogrammetry (Guidi et al., 2015) using a high-resolution medium format camera, a Fujifilm GFX-50s equipped with a Fujinon 32-64mm zoom lens, so to have one of the top-quality choices about image quality at the time. A first shooting test was made in July 2018, then, after seeing the final quality of the results and getting well satisfied with it, the second campaign was planned in September 2018.



Fig. 1. One of the pieces of the maquette during the test shooting in July 2018 (© DIDA/Maastricht Municipality).



Fig. 2. The same piece of the maquette in digital model version (© DIDA/Maastricht Municipality).

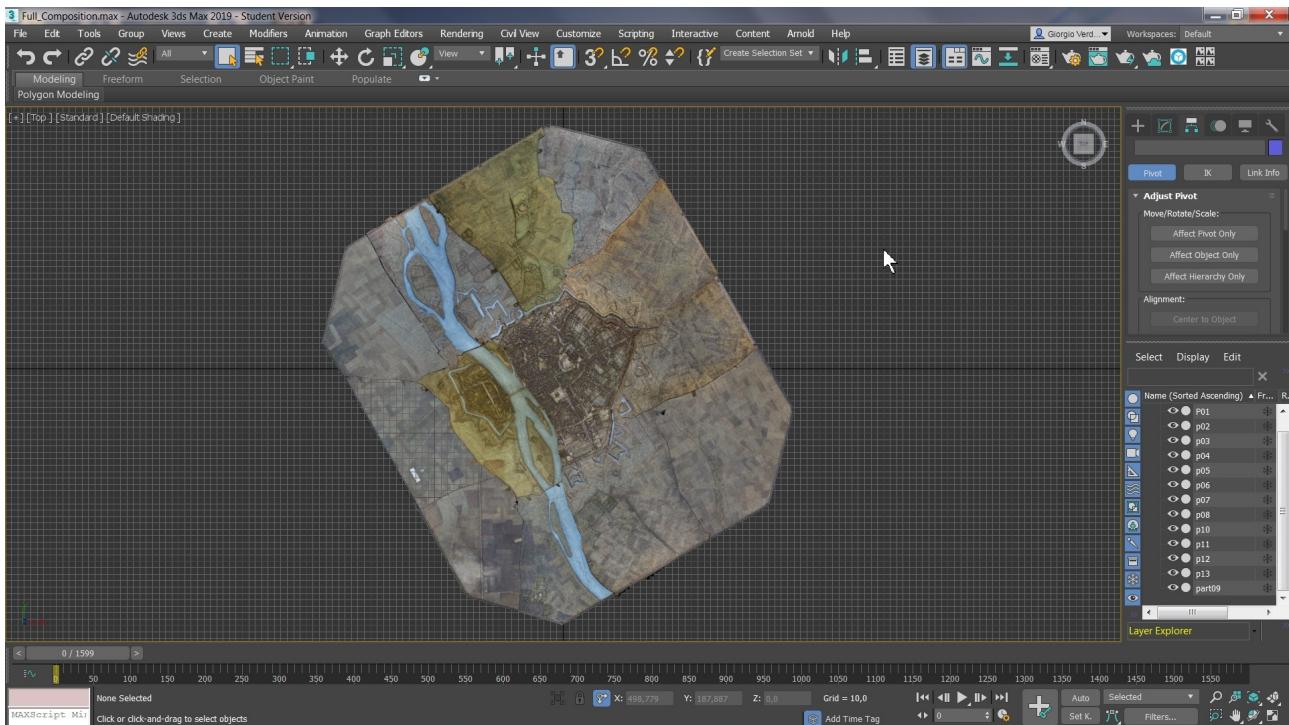


Fig. 3. First reunion of all the parts into a single digital model (© DIDA/Maastricht Municipality).

When all the pictures were processed and the 3D model done, a final session of shooting, to integrate the existing datasets was accomplished in January 2019. But at the end of January Willem left us and the work was brought on and to its end without him, still feeling his strong guide to bring on seriously and tirelessly the project with a proper level of quality. The first version of the digital twin of the maquette from Lille was presented in Maastricht on the 14th March 2019, a date defined time before with Willem, just in coincidence with the re-opening of the “Plan-Relief” room at the Palais-de-Beux-Arts which took place on the 16th March. Willem told us in January that he had great new ideas of how to use the digital data of the maquette for presentations to the public and that he would share them with us at our meeting in March. Sadly, we will never know what these ideas were.

The paper and presentation proposed here will tell the story, methods, and procedures of this last work with Willem Beex, without him, but in his memory.

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