SESSION : Cadastres and representations of the cities (XVIII-XIX centuries)

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Cadastre Maps and Views of the City of Vienna (late 18th - early 19th centuries)

Maps and Views basically serve the same purpose: to typify geographical areas with an interest in environment and vicinity, which is often motivated by the exercise of authority or developed simply as the means for securing one's own property rights. Both media owe their origins on the one hand to the phenomenon of the growing interest in space and surrounding areas since the Early Renaissance Period, on the other hand to the evolution of the theoretical basis as well as the practical tools, e.g. the methods of central perspective and the progress of cartographical methods and knowledge. Maps and Views have attracted the attention of researchers as well as the broader public since a long time, whereas the attractiveness of the presentations is also of great importance. During the recent past Historical Iconographic Research ("Historische Bildkunde") has witnessed a considerable progress. The term "iconic turn" summarizes this in a precise keyword. The respective research is characterised by some threads that can be differentiated from each other very clearly: besides the traditional publications focusing on a defined geographical area, e.g. a specific city, or on an outlined territory, e.g. the cities of a defined region, there are studies integrated in a broader context of cultural history dealing explicitly with the meaning and the interpretation of pictorial sources.
If we focus on the topic of "Cadastres and Representations of Cities (18th –19th centuries)", we are selecting a period at the end of a long-term tradition of Cities' images and representations. Right up until the early 19th century the basic technical principles as well as the artistic concepts had not undergone any fundamental changes since the 16th and 17th centuries. Amongst the techniques of duplication, for example, copper engravings were dominant, and the real outstanding innovations like steel engraving or lithography did not come into existence before the early 19th century. A very similar situation can be found regarding artistic concepts and it was not before the 18th century that a deliberately artistic representation was employed for pictures of the Viennese landscape. Besides the aspects of techniques and the artistic attitude we should also draw our attention to the contents of the

representations: From the 16th until the early 18th century the majority of Viennese Views were total views of the whole city within its fortified boundaries. Starting around 1700 detailed Views became more popular, starting with pictures of buildings of the Inner City, then continuing with the baroque palaces of the suburban zones. Research in the field of Art History has called this "the decisive breakthrough towards the second phase of artistic City Views".

The improvement of the artists' training by the establishment of respective Academies – especially the so-called "K.K. Kupferstecher-Academie" (Imperial Academy of Copper Engraving) of 1766 as a proper school for the sketching of landscapes – is of greatest relevance for all these evolutions. Nevertheless the role of an increasing demand of the public for Views, the delight to have the interiors of one's daily living quarters furnished with pictures is also evident. In a paper by Stana Nenadic (University of Edinburgh), published in 2001, the author demonstrates, within a Scottish context, that especially portraits dominated the "domestic picture collections of the urban middle ranks", but also landscapes (often copies of classical, mostly Dutch or Italian landscapes) were to be found as artistic decorations within the domestic surroundings. Due to the great number of editing houses existent in Vienna since the second half of the 18th century, e.g. the famous Artaria editing house founded in 1770, we can assume that their products, especially Cities' Views, sold briskly. Even in the 19th century this success continued, when parallel to the development of the new medium of photography, outstanding artists, like the members of the Alt family, drew up Views of impressive quality. The revival of total representations in the form of the so-called "long-sight" of the silhouette of the City is, by the way, an interesting phenomenon of the same period.

A short survey of the development of the numbers of Viennese Views or Cycles of Views from the 16th to the 18th century may provide a closer insight:

Period	**Number of Views/Cycles of Views for the total City/Vienna**	**Number of Views/Cycles of Views for parts of the Inner City/Vienna**
16th century	**1**	**–**
17th century (1660-50)	**7**	**3**
17th century (1651-99)	**14**	**10**
18th century (1700-50)	**18**	**15**
18th century (1751-99)	**9**	**10**
19th century (1800-50)	**66**	**45**

18th century (after 1850)	**22**	**80**

Taken from: Ingo Nebehay – Robert Wagner, Bibliographie altösterreichischer Ansichtenwerke aus fünf Jahrhunderten. Bd. 1-3, Nachtrag, 2. Nachtrag, Register (Graz 1981-1984), here: Register sub voce „Wien".

Manifold are the links and interdependencies between Views and Maps, the two pictorial media, which form the subject matter of our paper. The first early highlights of cartography in Vienna go back to the period of the construction of the new fortifications after the first Turkish siege in 1529, the origins of the respective Maps are closely linked to the activities of the building engineers of that time. The way Bonifaz Wolmuet, one of these engineers, combines a Map of the City's territory within the walls with Views in the manner of vertical sections of the suburbs located immediately adjacent to the fortifications is of substantial interest for the tradition starting at that period. Exactly this manner of combining Views with Maps within the context of the so-called "Bird's-Eye Views" became one of the most popular forms of pictorial representations of Cities. Without discussing these evolutions in more detail, we would like to point out, that it is of greatest interest that the famous Viennese Bird's-Eye View of Folbert van Alten-Allen of 1683/86 was taken as a master-copy by the painter Domenico Cetto, when he was commissioned by the City Council in 1689 to create the first official portrait of the City (canvas in oil) to be put on display inside the City Hall. Similar traditions were still prevalent in the 19th century when some individuals tried to do business by the sale of cartographical/pictorial products of that type; respective examples are the so-called "Perspective Map" of Lower Austria including Vienna by Franz Schweickhardt or the Maps of the Viennese Police Districts by Count Carl Vasquez, which also show Views of important buildings of these zones; even in 1873 during the World Exhibition in Vienna examples of these types of such very representative representations can be found.

Sometimes there exist real parallels or even combinations between Maps and Views/Bird's-Eye Views. Besides examples for real mixtures of Maps and Views, e.g. the Vienna Maps edited by the Nürnberg editors of Homann's Heirs in the 18th century, the most famous examples in this respect are two opuses commissioned by Maria Theresia and Joseph II: the City's Map by the Court's mathematician Joseph Anton Nagel and the so-called "Scenography" (a Bird's-Eye View) produced by the army officer (Obristwachtmeister) Joseph Daniel von Huber practically during the same years (1769/70 sgg.). – These genuine highlights of the Viennese cartographical/pictorial production of the 18th century may serve as a starting-point for dealing in more detail with the second media mentioned initially, the Maps, especially the Cadastre Maps. As an introduction a short glimpse to the development of

the Vienna Maps since the early 18th century: The extension of the look across the fortified City's boundaries to its surroundings, a phenomenon already mentioned with regard to the Views of that period, can also be stated for the City's Maps, in some aspects it is even correct to speak of a new start. Once again, in close connection with the construction of the fortifications and the technicians, who were active in this respect, the first Maps showing the City together with its suburban zones in a more detailed way (bigger scales) were drawn and partially also engraved in copper during the first decade of the 18th century: the works by Leander Anguissola and Johann Jakob Marinoni as well as Werner Arnold Steinhausen.

In fact very precise large-scale Maps were achievements, which did not exist within the geographical/cartographical sciences before the 18th century. The importance of the Habsburg initiatives in this regard can be demonstrated by looking at the evolution of the first Cadastre set up in connection with special Cadastre Maps. The term "Cadastre", derived from the Middle Greek (Byzantine) „katástichon" (note book, journal) via the Middle Latin "capitationis registrum", later "capitastrum" and finally "catastrum", ever since indicates registers of the public authorities for the purpose of taxation. In German territories we have evidence for this term since the early 17th century (Württemberg, 1624). The main basis of the system can be seen in the creation of allotments as well as classifications of standard rates. In the Habsburg Monarchy the system was first used for the duchy of Milan, which was attached to the Empire after the Spanish War of Successions. In 1718 the „Giunta del nuovo Censimento per la Misura Generale dello Stato di Milano" was established. The already mentioned Johann Jakob Marinoni was included in the deliberations and it was him who emphasized the necessity of surveying and depicting all pieces of real estate in Maps as an indispensable requirement for fair real estate taxes. Despite the lack of a common triangulation the Milan Cadastre established a high standard, which is underlined by the judgement of the leading national economist of the 18th century, Adam Smith: "The survey of the duchy of Milan … is esteemed one of the most accurate that has ever been made."

The merits of the excellent, Italian-born cartographer Johann Jakob Marinoni. who gave the right advice in a forward-looking manner cannot be prized high enough. It is not by chance that this man was at the same time the first director of the new Engineers' Academy being established at the initiative of Prince Eugene of Savoy. Although for the Milan Cadastre the officials acted upon Marinoni's advice, this remained an isolated case and in the core-provinces of the Habsburg Monarchy similar concepts were not implemented for a long time. Apart from the difficulties of implementing a state's system of taxation against the opposition of the estates of the realm the high costs were also a great obstacle. The two other Cadastres

of the 18th century, the so-called "Rectification" of taxes of the period of Maria Theresia (1748-56) and the "Regulation" of taxes during the reign of her son Joseph II (1785-89/90), were not combined with a "mapping", the making of respective Maps.

Cartographical achievements initiated by the public service were much more prevalent in the field of the land's survey, especially the military forces were very active in this respect. After the end of the Seven Years' War against Prussia (1763) a cartographical registration of the whole territory of the Monarchy was started. The "Josephinian Survey", which was kept secret for military reasons, surpassed all other surveys of the early Modern Period in quality, Vienna at the same time became a centre for cartographical enterprises. Starting in 1806, the Survey on the scale of 1:28.800 was continued under the reign of Emperor Franz I, the second successor and nephew of Joseph II.

During the reign of this Emperor the decisive steps towards a combination of Maps with the Cadastre were undertaken. Yet in the framework of the "Franciscan Survey" the triangulation was carried out in such a way that it could also be used for the necessary surveys regarding the Cadastre. By the Act on Taxation ("Grundsteuerpatent") of December 23, 1817 a common Cadastre for real estate taxes was established. By directly contacting the inventor of Lithography, Alois Senefelder (1771-1834), active in Munich, it was made sure that the new technology of graphic duplication could be used. On a sufficiently large scale – normally 1:2.880 – and based on a common triangulation the Cadastre Maps were made parallel to the enquiries concerning the taxation data undertaken on the spot. In 1861 – more than a quarter of a century after the death of the name-giving Emperor – the "Franciscan (or: Stabile) Cadastre" for Austria (without Lombardo-Venetia and Hungary) was finished, more than 164.000 single sheets of Maps were available, an area of about 300.000 square kilometres was covered; the Act of 1817 was valid until December 31, 1968.

With respect to historical research the fact that the Cadastre Maps of the Franciscan period do not only include the productive, but also the non-productive allotments is of special importance. Only the fact that sometimes buildings used for military purposes were not included in the cartographical representation (or not in detailed form) in order to observe secrecy can be called a drawback. Quasi as a "by-product" these ever so precise cartographical documents form a basis for topographical-historical analyses of extremely high quality which – even on an international level – offers unequalled opportunities. The origins of these so very accurate sources, which go back to a period characterised by the end of the existence of urban fortifications, the upswing of new industrial phenomena of the economy,

and partially also the begin of new means of transportation, raise the value of Cadastre Maps for historical research once again.

Because of the use of an existing cartographical master-copy the case of the Vienna Cadastre Map of the 1820's is characterised by a real outstanding peculiarity: It was Anton Behsel, a trained mason, foreman and draftsman, working for the City's administration since 1812 and acting as the first Viennese "Stadtbaudirektor" (director of the construction works in the City) from 1818 onwards, who by his activities had gained a very deep insight into the details of Vienna's territory. Thanks to his truly outstanding skills in drawing he had literally brought his knowledge to paper, and the grade of accuracy of his opuses (e.g. the survey of the Inner City on 80 sheets at a scale of 1:450) with a plus/minus of 20 centimetres for 100 metres was really amazing. The attention of the public authorities was attracted, Behsel's surveys were examined and in the end the "Stadtbaudirektor" agreed to hand over his Maps to provide the means to ascertain revenues. The main point to be emphasized lies in the astonishing fact that the first Cadastre Map of Vienna was not based on specially executed surveys, but on an existing cartographical master-copy. Nevertheless Behsel's Maps can only conditionally be called "private", ultimately they had their origins within the sphere of the administration of the City.

Coming to the end of my paper – what can be summarised regarding the comparison of Cadastre Maps and Views of the 18th/19th centuries in the case of Vienna? Without any doubt the training at Academies being essentially directed by and being active for the purposes of the military formed a decisive basis for the heyday of the quasi official state-run cartography. At these institutions the most important cartographers of the period were active as teachers, the most excellent cartographers of that time were alumni of these Academies, the military itself with its interest for Maps of highest quality set up initiatives stimulating the common upswing of cartography. With regard to the making of Cadastre Maps the "military expert knowledge" in these fields was made use of; at the same time the benefits of these works of outstanding quality were also used in an economical way. – In the realm of Views and their relation towards contemporary cartographical documents there is one variety, which maintained its popularity across the centuries being en vogue even in the period taken under consideration here: the Views of the whole City in the tradition of Bird's-Eye Views as well as combinations between Maps and (detailed) Views. It is a great pity that due to the actual status of research work the following question cannot be answered with certainty: Is it more than a speculation to presume that the ostentatious tendency towards representations of the landscape or of single sceneries regarding picturesque parts of the urban landscape starting in

the middle of the 18th century shows and has parallels within the contemporary cartographical documentations of urban and suburban agglomerations on larger scales? In this respect it is much too early to give a certain answer, nevertheless it seems as if a field of research which has not been studied in sufficient depth until now could be pursued here in greater detail.