## Robert Fuchs; Doris Oltrogge

Illuminating Bernward - Results from an art technological analysis of manuscripts from Ottonian Hildesheim

Robert Fuchs: Technical questions and conservation problems

**Doris Oltrogge: Art historical implications** 

Bernward of Hildesheim (c. 950/60 – 1022) was one of the most influential ecclesiastics of the Ottonian Empire. After his appointment as a bishop of Hildesheim he started an ambitious ecclesiastical and artistic program to embellish his see. He founded the Benedictine Abbey of St Michael, he commissioned the building of the abbey church and he initiated the execution of two of the earliest medieval monumental cast bronzes, the doors for the cathedral and a huge column with scenes from Christ's passion.

Illuminated books, too, played an important role in Bernward's pursuit of eternal and temporal memory. He donated some precious manuscripts to his cathedral and to St Michael, some of which fortunately are still preserved in the Cathedral Museum of Hildesheim. In summer 2017 an art technological study was carried out with portable instruments in the museum which gave valuable insights into workshop methods, material and technical peculiarities and conservational problems.

From an art historical viewpoint the question of the scriptorium is crucial. On the one hand we know that the scribe Guntbald who signed one of Bernward's Gospel books came from Regensburg, on the other hand a strong influence of the style of the Corvey scriptorium on the illumination in Bernward's manuscripts has been stated. The investigation of the painting technique helps to understand the interrelationship and the individual peculiarities of the different illuminators. Furthermore, it can be shown that the specific purpose of the manuscripts played a role in the choice of painting methods, in particular in Bernward's most personal commission, the so-called "Precious Gospel Book". The illuminators of this manuscript experimented with different types of application of colour and metals to achieve a variety of effects which will be discussed in the presentation.

The palette is not uncommon for Ottonian illumination, however, it is conspicuous that azurite plays a much greater role than usual. This implicates questions of availability as well as of value. Furthermore the green colour material deserve special attention, especially the green copper pigments. Two varieties can be observed, an opaque mat green and a nearly translucent glass like deep green ("bottle green"). The latter shows heavy craquelures and appears to flake off. But certainly it is not a degraded form of the mat green but both are used for different effects. The exact determination of this green material is difficult but some assumptions can be made for its identification.

The fragile status of the green leads to the question of conservation. Gold and silver has been used abundantely in the manuscripts. It is amazing that the silver ink is still brilliant on many pages and the silver corrosion disturbs only the representation or script on the versos. In general the condition of the manuscripts is quite good, but there are some specific problems like a contact corrosion and the stiff binding of some of the codices. Some of these problemes will be discussed in more detail in the presentation.