

Dendrochronological dating of paintings and sculptures in Lithuania: application and perspectives

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Although dendrochronological dating of paintings has been practiced in Western Europe since the late sixties of the last century, in Lithuania only in 1997, Teodoras Bitvinskas and Jonas Karpavičius have published the results of the primary dendrochronological analysis of Aušra Gate's painting. It was the first time when the dendrochronological technique was used in collaborating of several occupation specialists – art historians, restorers and dendrochronologists (restoration in 1993). T. Bitvinskas and J. Karpavičius compared tree rings from the fifth board with oak chronologies of Hamburg and Württemberg. Unfortunately, this was the first and the last attempt of such collaboration. Since then, no single attempt was done to date the paintings on wood by dendrochronological methods. It is important to point out that the tradition of pictorial techniques in Lithuania differs from the techniques of Western and Central Europe. Lithuanian pictorial techniques of the 15–17th centuries are related to eastern schools. Paintings on wood have been mostly painted on lime panels, several on oak and only few on pine panel. In comparison at the same period, Netherlandish painters used only oak panels, and only in the 17th century, they started to use lime panels and cedar wood. In almost all German artistic schools and centres, the lime panels have been used, except Cologne and Tyrol, where oak and pine were used. The French painters used oak (57%), walnut (18%) and poplar (11%). In Portugal, oak (82%) and sweet chestnut were used, in Spain – pine (42%) and poplar, in England – oak. Because lime chronologies are not available, it is not possible to date the paintings on lime panels by the dendrochronological method at present. However, I would accentuate painting of the 16th century on oak from St. Michael the Archangel Church so called Madonna of Sapieha family and painting of the 17th century of Our Lady from the Tytuvėnai church. They were and still are the well-respected miraculous paintings of the Holy Mother of God having essential importance in the history of Lithuanian Christianity and in the Lithuanian history of art. Both paintings were painted on oak panels and it was a possibility to do dendrochronological analysis of theirs oak panels during their restoration. The Holy Mother with Child from Tytuvėnai church was under restoration most recently in 2003-2006. Unfortunately, such collaboration of art historians, art restorers and dendrochronologists has not been initiated. The aforementioned dendrochronological dating by T. Bitvinskas and J. Karpavičius of Aušra Gate's painting could be revised because much more well-replicated oak reference chronologies exist at present.

Another aspect of my presentation covers the question of dendrochronological dating of sculptures. Almost all sculptures in Lithuania with few exceptions were carved from lime wood. However, some of them have precise dates of carving, e.g. the sculptures of St Joachim (1680), St Anna (1680), Pieta (1722), St Agatha (1739), etc. I wish to pursue a discussion on the possibility to create the lime chronologies based on the known precise dates of carving, and estimating the approximate period of wood desiccation before the usage of wood for painting or carving.