## The Summary of the Doctoral Dissertation:

## Recurring Expression Patterns in the Byzantine Icons

My doctoral research is based on a grammar-like analysis, which takes into account quantity proportions and geometrical recurring patterns related to the golden section ratio, harmonic polygons and musical consonance. The results of all this are to be presented in the theoretical part.

The internal construction of the Byzantine icons provides the work with a unique poetry. By using the numerical and geometrical harmonies, the icon makers created compositional structures with a better representation of the perfection of the divine nature.

In this research of the Byzantine icon, I have chosen the most important periods from three countries belonging to the Christian-Orthodox cult. I have started with Greece, which is the most important country in my analysis, as it is the birthplace of the Byzantine icon and possesses by far the most well-preserved monuments. I have chosen the Greek icons from the 13<sup>th</sup> and 14<sup>th</sup> centuries, as they represent the last centuries from the Byzantine Empire's existence. From Russia, I have selected icons from the 14<sup>th</sup> and 15<sup>th</sup> centuries, while from Romania, where recently, the conditions of preserving icons have met optimum parameters, I have considered the 15<sup>th</sup> and 16<sup>th</sup> centuries. For each country, I have extracted 400 icons, to which I have added geometrical networks and identification data. Then, I have classified the database in 9 religious representations: St. Apostles, St. Archangels, St. Hierarchs, St. Martyrs, Virgin Mary, the Savior, The Holy Trinity, St. Emperors and Prophets.

This analysis aims to find the archetypes representative for each country and to prove the unity of the Byzantine style, which has been so well preserved along centuries. For this reason, I have used the filters of the computer software 3A (Archive of Artistic Archetypes) in order to characterize every image in question. This software consists of a register with terms, where different formulas can be composed. As a result, the software delivers a result with similar harmonic features in the shape of a cluster. Cluster is a group of similar images (in Physics – a small group of atoms or molecules). The cluster analysis is a special technique to analyze the statistical data.

The chromatic analysis goes into smallest of details, as it establishes how much of the analyzed image contains blue, red, black or white on 2, 4, 6 levels and so on. The geometrical analysis tracks down the skews, the axes which belong to the golden section, the diagonals, Fibonacci's rhythm, as well as the horizontals, verticals of the third of the frame, the fourth or the half of the frame. At the end of this research, I will be able to identify 27 archetypes out of these nine categories belonging to the three countries mentioned above. What distinguishes this research

from others, is the large number of similar data which can be met in icons coming from completely different countries. Greece is perceived as the cradle not only of the European civilization, but also of the Occidental one. Romania lies at the border between Orient and Occident, while Russia is situated on the Oriental Continent called Asia. These similarities are due to the unity of the Byzantine artistic style, which can be scientifically and statistically proven in this doctoral research.

This compositional analysis of the structure will reveal what happens in the thinking of the Byzantine artists, which is sometimes very spontaneous. Behind most religious compositions, there lies a math-like thinking. There are just few fields in the art history which can be compared by extension in time and space with the Byzantine painting. In this respect, I think that there was enough time for a geometrical thinking to take shape.

In order to complete the doctoral dissertation, it is necessary to have a theoretical part in which I am going to argue the results derived from the previous two parts (the geometrical and chromatic analysis) from a historic and dogmatic perspective. In this very part, I am going to bring forward the defining elements of the Byzantine style in connection with the historic context in which they appeared and took shape. The aesthetic role of these artistic images leads the train of thought to the spiritual universe and in this way, it stimulates contemplation. This is the very point, from which a cultivation of the ideal model, of the divine archetype derived and then, an aesthetic canon - which has proved to be very persistent in time - came to life. All this will be accompanied by the "Personal Project", which is compulsory to a professional doctorate.