

# Homage to Gheorghe Tzitzeica

Kostake Teleman

In 1973, the Romanian Academy commemorated the centenary of the births of Gh. Țițeica and D. Pompeiu. At this commemoration contributed many Romanian and also guest mathematicians. Among these, the French geometer Vesentini made an exposition of Țițeica's work, which began by mentioning a theorem regarding the congruence of straight lines in Klein's space  $P^5(\mathbf{C})$ , which is associated with the asymptotic lines of non developable surfaces in complex projective space  $P^3(\mathbf{C})$ . The French geometer added that Țițeica's result is the most beautiful theorem he had ever met.

Gh. Țițeica obtained his Ph. D. degree in France with a thesis concerning *the triply orthogonal systems in Euclidean space*, realized under the guidance of G. Darboux.

Darboux is famous in Romania as an analyst, due to his major contributions in Mathematical Analysis. But G. Darboux is also the author of an important treatise, containing three volumes and entitled "*Théorie des Surfaces*"; in this treatise, the author develops and applies *the method of the moving frame*, coming from classical Mechanics.

Thus Darboux was also a great geometer. Actually, mathematicians in the past were frequently named *geometers*, because most of them loved that *more geometrico*, which is almost forgotten in our days.

Gh. Țițeica was a faithful adept of *more geometrico* and his book "*Géométrie différentielle projective des reseaux*" should be read by those mathematicians who feel that Geometry is an art as necessary as any other art, not mentioning the fundamental role it plays in Physics and practice.

Gh. Țițeica was succeeded at the Chair of Geometry of the University of Bucharest by another important Romanian geometer, Gh. Vranceanu. Vranceanu's work was influenced by the French mathematician É. Cartan, who was perhaps the greatest geometer of the last century and who succeeded Darboux in Paris.

While Vranceanu was interested in the fundamental problems of Differential Geometry and Mathematical Physics and was using Calculus as the main tool, Țițeica attacked particular topics, using Calculus as little as possible.

Unfortunately, the important contributions of Țițeica and Vranceanu are now almost ignored in our country. It is our hope that the interest of Romanian geometers in Țițeica and Vranceanu's work will increase continuously.

Kostake Teleman

University of Bucharest, Faculty of Mathematics and Informatics

14 Academiei St., RO-010014, Bucharest, Romania