

FROM FELIX KLEIN'S ERLANGEN PROGRAM TO SECONDARY GAME: DAN BARBILIAN'S POETRY AND ITS CONNECTION WITH FOUNDATIONS OF GEOMETRY

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For Dan Barbilian (1895-1961), the main interest in mathematics was not the computational side, but the quest for a unifying principle, a generalization to a higher concept, a construction that covers, as sides of the same phenomenon, several various representations of the same mathematical fact. In the present work we show how Barbilian's poetry, of outstanding importance in Romanian literature, is deeply connected to his research in metric geometry developed in the fourth decade of the twentieth century. We conclude that the poetry from the book *Secondary Game* expresses the enunciation of a poetical principle, for which the poetry is a way of exploring and understanding the world in a unitary way. Thus, Barbilian's work embodies many connections between the poetic form and the evolution of ideas in the area of geometry, especially with the evolution of Erlangen's Program and its impact. It is our hope that the present paper will shed new light on the least known part of Barbilian's vision. In particular, the present work points out that one of the important sources of Romanian literary modernism lies in the Erlangen's Program heritage.

1. INTRODUCTION

In his famous essay, *A Mathematicians Apology*, G. H. Hardy (1877-1947) wrote that "it is very hard to find an instance of a first-rate mathematician who has abandoned mathematics and attained first-rate distinction in any other field. There