

# Chapter 7

## Using Reverse Engineering to Define a Domain Model: The Case of the Development of a Metadata Application Profile for European Poetry

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### ABSTRACT

*This chapter presents the early stages of a metadata application profile (MAP) development that uses a process of reverse engineering. The context of this development is the European poetry, more specifically the poetry metrics and all dimensions that exist around this context. This community of practice has a certain number of digital repertoires that store this information and that are not interoperable. This chapter presents some steps of the definition of the MAP Domain Model. It shows how the developers having as starting point these repertoires, and by means of a reverse engineering process are modeling the functional requirements of each repertoire using the use-case modeling technique and are analyzing every database*

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*logical models to extract the conceptual model of each repertoire. The final goal is to develop a common conceptual model in order to use it as basis, together with other sources of information, for the definition of the Domain Model.*

## **INTRODUCTION**

Comparative literary studies have always been a source of new discoveries which enlighten the perspectives of other related disciplines, such as history, archaeology or sociology. It is sometimes difficult, however, to get results in the philological field, as the sources to compare are uneven, follow different historical, linguistic and literary traditions and do not have many elements in common to take them as a reference or starting point.

Poetry studies have suffered from this reality, as each different cultural tradition has followed an independent way, where no standards were adopted for terminology or classification. Each literary school has modelled a different system that looked to be the most suitable for its own problems. Communication between different languages and literatures has been almost scarce, even from the critical point of view. The result is a fragmentary puzzle which includes different traditions, languages, literary and poetic schools not possible to analyze using the same methods and straightforward paths to compare poetic forms.

From the point of view of literary analysis, the studies on metrics and poetry were first linked to grammar and rhetoric, and were not considered independent as “ars metrica” or “ars poetica” until the 14<sup>th</sup> century (Gómez Redondo, 2001). During the Middle Ages and the Renaissance, the powerful influence of Latin as the language of culture made scholars inherit the terminology of Classical treaties and apply it to Romance languages, regardless of their different way of structuring. When vernacular theories start to arise, each particular school makes up its own terminology and classification system. This multiplicity leads to paradoxical and complex situations, such as the creation of conceptual genres that only exist in some literatures.

A special case to illustrate this problem is the phenomenon of metrical repertoires, catalogues which aimed at gathering all poetic and metrical features in any of the different literary tradition. They show the way in which researchers measure and classify poems, counting syllables, accents, rhythm and rhymes to define the essential elements of the poem structure, its musicality and the type of contents that it shapes. A digital poetry metrics repertoire is a tool that gives account of metrical and rhythmical schemes of either a poetical tradition or school gathering a long corpus of poems, which are defined and classified by their main characteristics.

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