Porting the "Thirty-Six Dramatic Situations" to a Multilingual Ontology

Thierry Declerck, DFKI GmbH, Multilingual Technologies, Saarbrücken, Germany declerck@dfki.de

Abstract: In this paper we describe our work leading to the creation of a multilingual ontology that represents and extends the seminal work by Georges Polti "Les Trente-six Situations dramatiques". We aim with this formal representation at supporting automated annotation and classification tasks of literary work in the field of drama analysis. In this we extend previous work that has been proposed on ontologizing classical indexation and classification schemes widely used in folkloristics, and we investigate how an integrated ontological framework can help in establishing similarities in the classification of those distinct types of narratives: folktales and drama. As the study by G. Polti was partly influenced on reported findings by Carlo Gozzi, who in the 18th century created dramatic pieces based on fairy tales, we will in a next step focus on such narratives for testing the validity of our ontology for supporting the cross-genres automatic annotation and classification of literary œuvres.

Introduction

In recent years, some works have been dedicated to the formalization of classification and indexation schemes for folktales. Those modelling approaches concerned the work by Vladimir Propp (see [6] and the proposed models in [11] and 12]), the folktale indexation work proposed by Stith Thompson (see [9] and the model proposed in [2]) or the classification system proposed by Hans-Jörg Uther (see [10] and the model proposed in [2]).

We present our work extending such ontologization to drama. Our first step concerns the work by Georges Polti "Les Trente-six Situations dramatiques" ([4]) (*The Thirty-Six Dramatic Situations* ([5])). A direct motivation to consider the Work by G. Polti tackle the work by G. Polti, is that he it assumes the fixed number of 36, which echoes the a similar number, 31, fixed by Vladimir Propp for describing typical functions in Russian fairy tales ([6]). While the approach by Propp is about formulating functions that a reader/listener will find in tales and to suggest a kind of "grammar" (see again [12]) for organizing those functions (together with 7 broad character types that can play a role in tales) in sequences (or plots), Polti describes dramatic situations independently of potential sequential order in a story or theatre performance.

We thus start investigating if we can, in an ontological framework, intertwine the Proppian approach (based on Russian folktales) with Polti's descriptive listing of situations (gained from classical Greek, Latin and French literary works).

The Data Sources

We have access to digitized versions of the work by G. Polti both for the original French version (see [4] for the edition of 1903) and for the English translation.¹

The Structure of the "Thirty-Six Dramatic Situations"

The book by G. Polti is organized in 36 chapters, each of them stating a situation. Each situation is named at the beginning of the chapter, so for example "Crime pursued by vengeance" (situation 3) or "Abduction" (situation 10). "Elements" playing a role are introduced for each situation. It is important to notice that those elements are not necessarily representing characters, although some of those elements are definitely pointing to such characters, like the "Hero", the "Wife", or the "Supplicant". Elements can also be a "Punishment" or a "Problem".

Variants of a situation are also introduced in each chapter. Those variants are classified by the use of a distinctive letter of the alphabet, whereas the items of each variant are numbered by ordinals. It is at first sight not clear which principles are behind the classification of variants in such groups. In some cases, we can see that the gender of the main elements (female or male) in the variant of the situation can be the motivation of the distinction of variants, but sometimes it seems to be just an ad hoc decision behind the suggested classification. Examples of variants, for the situation "Abduction" are "A.1 abduction of an unwilling woman" or "D.2 the rescue of a child". In those short texts the reader can see that we can try to provide more details to the elements named in relation with the situation. In case of the tenth situation, Polti names 3 elements, "the Abductor", "the Abducted" and "the Guardian". The analysis of the variants of this situation allows thus to provide for "instances" of such elements, as for example a child or an unwilling woman can be considered as being instances of the "Abducted".

In every chapter, Georges Polti is adding titles of oeuvres which are giving examples of the situation he is describing, and explains in free prose the reason for naming those specific works.

In general, the presentation of the 36 Situations by G. Polti is very informal, and contrasts heavily with the approach by Propp for describing the functions of tales, but inspire of those differences in the formalization, there are many similarities between Polti and Propp aims, as is also noticed in de Bary ([1]).

Building the ontology for the "Thirty-Six Dramatic Situations"

The building of the ontology for the "Thirty-Six Dramatic Situations" was done in various steps, which are here briefly described.

In a first step we ported the English and the original French titles of the 36 chapters of the book to an Excel file. Following this step, we included in this Excel file the English and French names used for the elements that are relevant to each situation. Further we added the variants for each situation, with both the English and French descriptions. From web pages describing the 36

¹ See https://ia802707.us.archive.org/9/items/lestrentesixsit00poltgoog/lestrentesixsit00poltgoog.pdf, and for the English translation (1921, translation by Lucille Ray) https://ia801403.us.archive.org/22/items/thirtysixdramati00poltuoft/thirtysixdramati00poltuoft.pdf.

descriptions we added some information, for example a short summary describing what is the "scenario" of the main situation.²

The content of listing below is giving an overview of the information we encoded in the Excel file, for the situation 2 "Deliverance" (in English and French).

```
Situation: 2. Deliverance (Sauveur)
Element: Unfortunate (Infortuné)
Element: Threatener (Menaçant)
Element: Rescuer (Sauveur)
Summary: The Unfortunate is threatened in some way by
   the Threatener and is saved by the Rescuer
Variant: 2.A.1
     Element: rescuer (Rescuer),
     Element: condemned (Unfortunate)
     Topic: Appearance of a rescuer to the
        condemned (Condamné, voir apparaitre un
        sauveur)
Variant: 2.B.1
     Element: parent (Unfortunate),
     Element: his children (Rescuer)
     Topic: A parent replaced upon the throne by his
       children (Être remis sur le trône par ses enfants)
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In the first line, we just name the situation, with its (Polti) number. In the parentheses we have the corresponding French label, taken from the original book. In the three following lines, we have the 3 elements introduced by G. Polti for this situation, again with the French terms in parentheses. The "summary line" is containing a summary that has been imported from one of the consulted additional resources. We introduce then the variants that are described by G.Polti (for this particular situation). The numbering indicates that we are dealing with the second situation, and that we have two groups of variants, labelled with "A" and "B". The variant B is subdivided in 2 cases (for other situations we can have variants going until F or G, and some groups can have up to 10 sub-variants). The "elements" we list for the variants have been extracted by us from the topic text, which is given in the book by G. Polti. The text included in the parentheses of the elements of the variants is referring to one of the elements associated with the main situation. This way we introduce a kind of instantiation mechanism, associating more concrete entities to the elements. The text included in the parentheses of the "topics" is again the French correspondent to the English text.

² Examples of such WWW resources are:

The resulting Ontology

Saving the content of the Excel file in a tab separated file is giving the input to a Python script we wrote in order to generate a file in the Turtle syntax for RDF. In our ontology we have, for example, for the element "Victim" 14 instances, which were not marked explicitly as such by G. Polti. In this we elevate the elements to the same ontological status as the situations, and this allows to bring the "36 Dramatic Situations" closer to the "Morphology of the Folktale" proposed by Propp, who, contrary to Polti, was explicitly proposing a closed list of characters, to be formally linked to the functions. Our formal representation of the "36 Dramatic Situations" is thus making explicit some information that was only implicitly expressed in the original book. The ontological encoding of the "elements" also allows to explicitly marking the distribution of the elements over various situations.

The resulting multilingual ontology, which contains 443 newly created instances of dramatic situations (97 for elements and 346 for situations) can be deployed for supporting the annotation and the classification of related literary works in various languages (the ontology is freely available, at http://www.dfki.de/lt/onto/narratives/36 dramatic situations/).

References

- 1. de Bary, C.: Georges Polti, ou l'anticipation du théâtre potentiel. Poétique (2), 183–192 (2004).
- 2. Declerck, T., Kostová, A., Schäfer, L.: Towards a linked data access to folktales classified by thompson's motifs and aarne-thompson-uther's types. In: Proceedings of Digital Humanities 2017. ADHO (8 2017)
- 3. Gozzi, C., Bermel, A., Emery, T.: Five tales for the theatre. Chicago: University of Chicago Press (1989), includes bibliographical references
- 4. Polti, G.: Les trente-six situations dramatiques. Édition du "Mercure de France" (1903), https://books.google.de/books?id=H7JEAAAAIAAJ
- 5. Polti, G.: The Thirty-six Dramatic Situations. Trans., Lucile Ray, Editor Company (1916)
- 6. Propp, V.: Morphology of the folktale. Trans., Laurence Scott. 2nd ed., University of Texas Press (1968)
- 7. Souriau, E.: Les deux cent mille Situations dramatiques. Paris: Flammarion (1950). Bibliothèque d'Esthétique.

Acknowledgments

I would like to thank the anonymous reviewers for their comments, and especially the second reviewer for the many hints for improving the text.