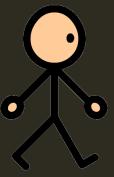


### FOLK AND FAIRY TALES ONTOLOGY

Yasar Mahomed Abbas Franziska Pannach Danielle Russell Yuvika Singh



### OBJECTIVE AND MOTIVATION

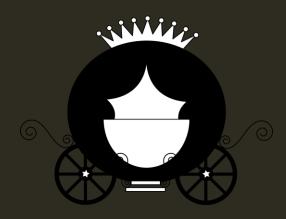


#### BACKGROUND

- Substantial part of oral history.
- Important role in the cultural heritage of regions, nations or cultural minorities.
- Grimm brothers
- African folk tales



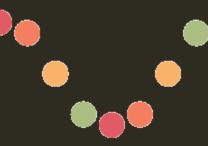
#### AIMS



- African folk tales following
- Russian folklorist Vladimir Propp.
- The ontology contains:
- The Proppian functions and entities encoded within.
- Specic folk tale motifs according to the Aarne-Thompson-Uther Index (ATU).

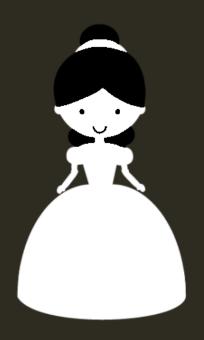


## DOMAIN



#### MOTIFS INDICES

- Folk tales motifs are classified by two motifindices:
- ☐ The Aarne-Thompson Uther index (ATU)
- ☐ The Thompson-Motif-Index (TMI)



#### PROPP FUNCTIONS



- > 4 Axioms:
  - 1. The functions of characters
- 2. The number of functions known to the fairy tale is limited.
- 3. The sequence of functions is always identical.
- 4. All fairy tales are of one type in regard to their structure.



### CONCEPTUALIZATION



#### DEFINITION OF THE ONTOLOGY

- Properties < C,I,A,R >
- c ∈ C set of Classes
- i<sub>i</sub> ∈ I set of Instances
- $\geqslant a_i \in A \text{ set of } Axioms$
- $r_i \in R$  set of Relations





## ANNOTATIONS



#### Metrics

Axiom	1860
Logical axiom count	1395
Declaration axioms count	462
Class count	201
Object property count	39
Data property count	10
Individual count	214
Annotation Property count	1
DL expressivity	SRIQ(D)



# CONCLUSION



### OVERVIEW



- Sophisticated ontology
- Proppian theory
- > Allows users to add more stories
- Ontology can be alone standing or it can be connected to Declerck et.al.'s work
- **►**Long term:
- Modelling the relationship between the functions
- Dramatis Personae

#### FURTHER WORK

- Adding more annotations
- The more fairy tales of different origin added, the more and complex the deductions about the structure and verbalisation of African folk tales can be made.
- Compare these findings about African folk tales to studies of folk tales of different origin

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### ONTOLOGY DEMONSTRATION

