Annotating Patrick White's 'The Solid Mandala' with Semantic Features to Unravel Stylistic Devices

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Linguistics and Narrative

Computational narratology

- Studying narrative through information processing
- Linguistics, narratology and information technology

Choosing a topic

Patrick White and 'The Solid Mandala' (1966)

- Relevance of the author
- Peculiarity of the style
- ► Theoretical resources for a practical approach "tailored" to the target

Theoretical premises

G. Collier's research on White's style ('The Rocks and Sticks of Words', 1992)

- Account of critical reception of White's works
- Attempts at finding a clear definition of White's style
- Application of narratological and linguistic principles to the text of 'The Solid Mandala'

First results

 Recognition of 'narratological keys' (i.e. fundamental stylistic devices)

Twice-told and parallels, role of indirect discourse, relation between fabula and sujet...

Identification of "White-related" linguistic categories

'Seeming' expressions, psychological and modal verbs, pseudo-concessives, performative will...

Exploratory research: objectives

Confirm or dismiss
Collier's theories
through a
qualitative and
quantitative
analysis of the text

Provide a semantically annotated version of 'The Solid Mandala' with two purposes:

- Current research on Patrick White's style
 - Prototype for semantic annotations of narrative texts

Establish a methodology for the quantitative evaluation of data extracted from the annotated text

Annotation process

Annotation Story units Considerations on Selection of the text parameters Subdivision in Manual annotation narremes

Textual and narratological characteristics

- ► Four sections, three main characters

 In the Bus Waldo Arthur Mrs. Poulter and the Zeitgeist
- Dialogues subject to internal focalization
- Memory: fabula and sujet do not coincide, chaos of episodes

Subdivision in narremes

Narreme (Collier, 1992): basic story unit (microstructure) covering one independent event. Single or multiple point of view (twice-told).

Arbitrary abstraction, useful for narratological purposes

Collier's reconstruction of the fabula (1992), but with textual fragmentation (131 narremes total)

Collier's version: **2.** A. on sea-voyage from England (after Capetown; A215-216, A218)

New version: **2.** A_A+MrsB (*modified*; from A215 I.1 to A216 I.15 - from A217 I.39 to A218 I.14); A. on sea-voyage from England

Selection of annotation parameters

Textual

- Narreme
- Paragraph
- Sentence

Stylistic*

Uncertainty

Seeming, gnomic, concessive, conditional, defeated desire, modality

Subjectivity

Psychology, emotionality, inclination, security, satisfaction

Judgement

Social esteem, social sanction

Negative

*Obtained combining Collier's theories (1992) with the Appraisal Theory (Martin and White, 2005)

Manual annotation

XML standard based on elements, attributes and values

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Ex: "Otherwise people <uncertnty
non_factual="possibility">may feel</uncertnty> hurt."
(65. WA_W+A+D+L)
```

List of content-related tags

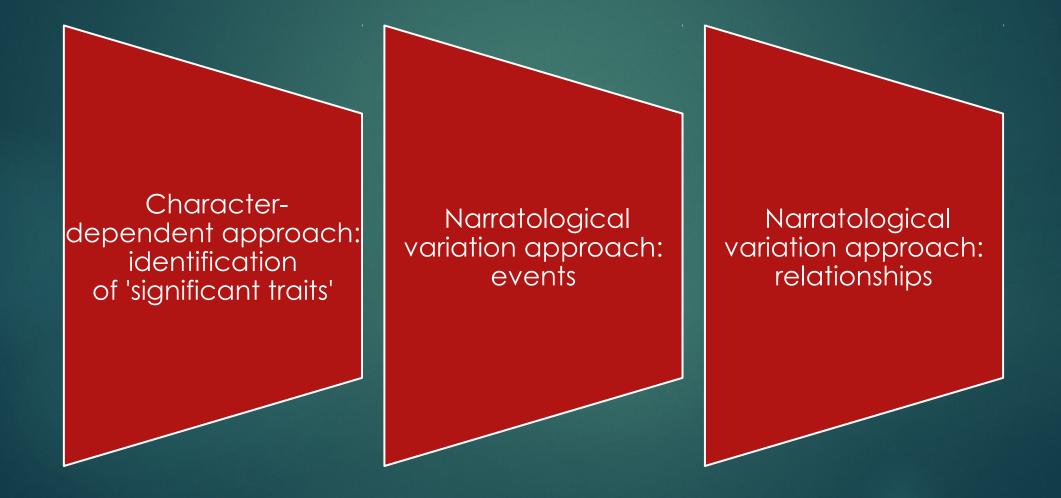
- uncertnty
 - non-factual
 - seeming
 - gnomic
 - concessive
 - conditional
 - defdesire
 - will
 - possibility
 - ability
 - obligation
 - assumption

- subjectivity
 - psychology
 - perception
 - precognition
 - cognition
 - performwill
 - affect_emot
 - affect_inclin
 - affect_secur
 - affect satisf
 - positive
 - negative

- judgmnt
 - social-esteem
 - positive
 - negative
 - social-sanction
 - positive
 - negative

Analysis

Extracting relevant information from the annotated text



Double approach: working hypothesis

Character-dependency

Each character seems to be characterized in the indirect discourse by specific and intentionally placed stylistic choices

Narratological variation

Internal cohesion between similar episodes in different sections seems to suggest the presence of specific features connected to events, relationship typologies and other story-related parameters

Character-dependency: significant traits

Ratio-based (annotations of trait X for given character / total of annotations of trait X)

Waldo's 'best 10'	Arthur's 'best 10'	Poulter's 'best 10'
performative will (0.9286)	defeated desire (0.407)	social sanction pos(0.1538)
possibility(0.7)	inclination pos(0.3333)	gnomic(0.1475)
social sanction pos(0.6838)	ability(0.3288)	social esteem pos(0.1378)
precognition(0.678)	gnomic(0.3279)	possibility (0.1312)
social esteem neg(0.6731)	satisfaction neg(0.3182)	inclination pos(0.1133)
seeming (0.6684)	satisfaction pos(0.3113)	inclination neg (0.1062)
social sanction neg(0.6684)	assumption (0.3051)	concessive (0.1036)
inclination neg(0.6637)	security pos(0.2995)	perception (0.1004)
security neg(0.6556)	concessive(0.2988)	obligation (0.0982)
social esteem pos(0.6539)	cognition(0.2962)	cognition (0.0901)

Narratological variation: events

 Stages of life (childhood and youth, adulthood, old age + Arthur's old age after Waldo's death)

Ex.: Contrary to expectations, Arthur's psychological traits are more numerous in childhood and grow more sparse with the passing of the years, culminating in an almost 'flat' narrative after Waldo's death

 'Significant events' (narremes) particularly rich of psychological traits

Ex: Total of annotations and length of narreme are not always in direct correlation

3. Beginnings and ends of sections

Ex: The beginning narremes of each sections are especially rich of 'significant traits', as in presentation of the character-dependent narrative

4. Lack of occurrences

Ex: The narremes dealing with the retirement of the Brothers Brown are especially poor of psychological traits, signaling the dullness of the new life

Narratological variation: relationships

 Building of a preliminary list of important relationships starting from the significant events

Ex: Waldo's main relationship, according to the traits, is with Dulcie (present in 6 significant events); Arthur's is with Mrs. Poulter (4 significant events)

Using the list as a starting point, analysis of the impact of affect_emot, social_esteem and social_sanction on narremes with interactions between the selected characters

Ex: Positive emotions almost always tend to be much higher than negative ones. The only exception is in the relationship between Waldo and Mrs. Poulter, in which the proportion is 25:22. As for appraisal traits, negative values are almost always higher than their positive counterparts. Only in one case (Waldo and Walter Pugh) the tendency is countered (14 pos, 12 neg)

Conclusions and possible future research

- Better understanding of Patrick White's style through quantitative and qualitative analysis of the extracted data
- Reusable data with different analysis parameters.
- Repeatable annotation process (on similar kinds of texts, e.g. other novels by White); adaptability to other styles in different works of fiction
- 4. Annotated data available as training corpus for automatic annotation

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