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Telling Stories:
Analyzing Text to Understand Personality, Social behavior, and Narratives

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# Narrative Processes

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<th>Narrative process</th>
<th>Linguistic markers</th>
<th>Examples</th>
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<tr>
<td>Setting the stage</td>
<td>Articles, prepositions</td>
<td>The, to, for</td>
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<tr>
<td>Plot progression</td>
<td>Pronouns, auxiliary verbs, negations, conjunctions, adverbs</td>
<td>I, wasn’t, and, really</td>
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<tr>
<td>Cognitive tension</td>
<td>Cognitive process words</td>
<td>Realize, because, certain, perhaps</td>
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# Initial Corpora

<table>
<thead>
<tr>
<th>Narrative Type</th>
<th>Mean Words per Text (SD)</th>
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<tr>
<td>Novels (N=2,524)</td>
<td>74,034 (47,861)</td>
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<tr>
<td>Short Stories (N= 2,108)</td>
<td>3,528 (3,150)</td>
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<tr>
<td>TAT (N=14,527)</td>
<td>326 (60)</td>
</tr>
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</table>
RQ1: What are the narrative arcs of traditional stories?
Narrative Arcs: Staging
Novels, short stories, and TATs
Narrative Arcs: Plot Progression
Novels, short stories, and TATs

Plot Progression

Corpus
- Novels
- Short Stories
- TAT

segment
Narrative Arcs: Cognitive Tension
Novels, short stories, and TATs

Cognitive Tension

Corpus
Novels
Short Stories
TAT

segement
1 2 3 4 5
RQ2: Do good stories have different arcs than bad ones?

Romance novels (N = 703)

Movie dialog (N = 19,973)

Ratings split into three groups:
   Below average
   Mid-range to good
   Very good to excellent
Staging

Staging: Romance Novels
Plot Progression: Romance Novels
Cognitive Tension: Romance Novels

Staging: Movies
Plot Progression: Movies
Cognitive Tension: Movies
RQ3: Do all narratives share a similar arc?


Supreme Court opinions (N = 1,480)

TED talks (N = 2,226)
Comparison of Arcs: Novels

Unfolding Narrative Structure: Novels

Narrative dimension:
- Staging
- Plot
- Cognitive

Segment: 1 2 3 4 5

Values: -0.600 -0.400 -0.200 0.000 0.200 0.400
Comparison of Arcs

Figure 3: Unfolding Narrative Structure by Genre

Note: Graphs represent the three narrative processes across the five segments for Novels (A), New York Times articles (B), Supreme Court opinions (C), and TED talks (D).
Comparison of Arcs

Figure 3: Unfolding Narrative Structure by Genre

Note: Graphs represent the three narrative processes across the five segments for Novels (A), New York Times articles (B), Supreme Court opinions (C), and TED talks (D).
Comparison of Arcs: Novels

Unfolding Narrative Structure: Novels

- Staging
- Plot
- Cognitive

Narrative dimension

Segment 1 2 3 4 5

Comparison of Arcs: Novels