Opening a Journal Community, Review, and Editorial Workflow in an Open Access Journal

About the Journal

The Journal of Computational Literary Studies...

- provides a publishing platform for the development, the application, and the critique of computational approaches to Literary Studies
- welcomes submissions concerned with:
- corpus creation, operationalization of literary theory, the development, adaption or evaluation of methods, the interpretation, evaluation and reproduction of research results, the debatability of the core concepts of CLS

• is organized as:

- Conference Track: Submissions Deadline (End of the Year)
- Journal-Only Track: No Annual Deadline, Publication in Rolling Issue

From CfP to Publication

Call for Papers • LaTeX-Template Submission Guidelines

Submission Deadline

• LaTeX Submission (01)

• 2 Tracks:

Conference || Journal

Double-Blind Review • Comments and

Suggestions in LaTeX

Notification of Acceptance

Workflow Easy Versioning & Reviewing in Overleaf

 $(\checkmark) \rightarrow (\checkmark) \rightarrow (\checkmark)$

Review Double-Blind & **Open Peer Discussion**



Community Building Conference Track

Openness Diamond Open Access & Open Science

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Revision

Towards an Event Based Plot Model

213

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Revision

The prerequisite for building an understanding of <u>narrativity</u> as property ``integral to a particular type of narrative'' \autocite[par.-5]{huhn.2013} without direct reference to

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Evelyn Gius and Michael Vauth

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tional Narratology Approach

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Gabriel Viehhauser 📀

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the conference track of JCLS. In addition to being peer re-

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Keywords

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jcls. Journal of Computational Literary Studies Article Towards an Event Based Plot Model

Evelyn Gius¹ Michael Vauth¹

event concept.

1. Introduction

A Computational Narratology Approach

Institute of Linguistics and Literary Studies, Technical University of Darmstadt ..., Darmstadt, Germany.

Abstract. In this paper, we introduce a new computational narratology approach

to modeling plot by operationalizing the relationship of narrativity and tellability

Our approach is based on events, or, more precisely, on the narrativity of event

representation at the level of discourse, or the how of narration. For presenting

the approach, we first discuss the notion of event in narrative theory and its

relation to narrativity and plot. We then propose the operationalization of events

and narrativity as a discourse phenomena in accordance to these assumptions.

In the last section, we optimize our approach by relating the parameters for

events and narrativity to summaries. With this we relate the how to the what

of narration and account for a comprehensive notion of plot based on a scalar

In narrative theory events are conceived of as the constituents of narratives, i.e. the source

ingredient from which narratives are built. Events are therefore considered the smallest

units of narrations. Accordingly, models for the so called 'narrative constitution' explain

the genesis of a narrative based on events. These models describe how events are turned

into the text of a narration with a series of (idealized) processes such as permutation

already been automated (cf. Vauth et al. (2021)¹) as well as adapted by Chihaia (2021)

for the analysis of the representation of the Mexican State of Sinaloa in newspaper

reports. Here, we elaborate on the theoretical background of our operationalization

and optimize our parametrization for future applications for text analysis. We consider

this to be a strongly discourse-based addition to the recent important outline of Natural

Language Processing (NLP) approaches for narrative theory by Piper et al. (2021).

At the center of our efforts is the operationalization of the event concept in narrativ

theory. We aim at implementing it for large scale text analysis by building a step by

step procedure from the determination of events in narrative texts to their subsequent

application for the analysis of narrativity and plot. The presented work involves two

separate, but connected steps: First, we outline the concept of events, and the possibility

of modeling plot based on events against the background of narratological assumption

and then operationalize events and narrativity. This results in the convertibility of the

1. For a demo cf. https://narrativity.ltdemos.informatik.uni-hamburg.de/

viewed, it was presented and and linearization. In this contribution, we discuss the possibility to represent plot on

discussed at the 1st Annual the base of events. Our computational narratology approach to event annotation has

foregrounded by the narrative discourse itself"\parencite[par.~1]{kukkonen_plot_2014} and thus t

- Conference Reader || Journal Track
- LaTeX Version (02)

CCLS - Conference

- Community Meet Up
- Open Peer Discussion

The prerequisite for building an understanding of narrativity as property ``integral to a

\textit{events II} is the possibility to identify only certain \textit{events I} as relevant. Here, the concept of <u>tellability</u> provides a possibility to <u>operationalize</u> the way events are '' foregrounded by the narrative discourse itself''\<u>parencite[par.-1]</u>{kukkonen_plot_2014} and thus to

Towards an Event Based Plot Mode

"Tellability [refers] to features that make a story worth telling, its 'noteworthiness.' [...] 195

The breaching of a canonical development tends to transform a mere incident into a 196

(e.g., the newsworthiness of an event). [...] Tellability may also be dependent on 198

discourse features, i.e., on the way in which a sequence of incidents is rendered in a 199

narrative". (Baroni 2012, par. 1) This possibility of defining tellability with regard to the 200

very representation of a narrative enables us to focus on event I. This is an alternative to 20

the concept of narrativity developed by Piper, So, and Bamman (2021, p. 3) ("Someone 202

tells someone somewhere that someone did something(s) [to someone] somewhere 203

at some time for some reason"). While we consider their definition of narrativity 204

helpful for furthering computational approaches, it entails the development of a series 205

of approaches (to characters, time, place, action, representation mode, etc.) that need to 206

be combined into one approach before being applicable as narrativity analysis. On the 207

contrary, our approach is more straightforward to apply since it is directly based on the 208

representation of events and their narrativity. On the long run, both approaches should 209

We will now show how we put into practice our approach to modeling plot based on 211

Our approach to the annotation of events considers events as "any change of state 21

explicitly or implicitly represented in a text" and is therefore based on event I which is 21

"the general type of event that has no special requirements" (Hühn 2013, par. 1). In our 217

operationalization we further differentiate between event types in order to provide for 218

narrativity analysis and we classify the events according to their representation.² 219

The differentiation of event types is based on the first three event criteria listed in Table 1, 220

namely being a state, a process in time and a change of state. Being a state as well 221

as being a process in time are typically considered prerequisites for changes of state. 22

Since Prince also introduces the notion of a stative event (which is neither a process 22

nor a change of state), we consider it sensible to use all three criteria and base three 22

more fine-grained solution we can incorporate more theoretical positions in our event 2

pperationalization such as the one by Prince (2010) or the consideration of processes 2

of speaking, thinking and movement which are often not considered event candidates. 22

Moreover, we also provide a possibility to distinguish different levels of narrativity 229

according to the three event types. Changes of states have the highest level of narrativity, 230

processes in time have lower and states lowest narrativity. We additionally introduce 231

2 Cf. Vauth and Gius (2021) for a detailed annotation guideline. 4 We also use additional properties derived from the criteria in Table 1 and additionally determine whether

non-events as category for enabling the comprehensive annotation of texts.³

different event types on them: states, processes in time and changes of state. With this 225

events and their narrativity.

ICLS, 2022, Conference

3. Operationalizing Events and Narrativity

3.1. Narratological Operationalization of Events

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- Peer Suggestions from Conference
- LaTeX Version (03)

Publication

- Diamond Open Access
- PDF, HTML, XML
- Open Data & Code

Versioning Example

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• LaTeX Submission (V01) based on Guidelines and Template

Conference Version

- Revised Version (V02) of Submission
- Anynonymous Reviews
- Suggestions in LaTeX
- Pre-Publication in Conference Reader

Publication

- Revised Version (V03)
- Reviews from Blind-Review Process
- Reviews from Conference Talks
- Publication as PDF, HTML and XML











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4.1 Preliminaries

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6. Data availability

7. Acknowledgements

8. Author contribution

3. Operationalizing Events and Narrativity

3.1 Narratological Operationaliza Events

4. Optimizing Narrativity for Plot Representation

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Introduction

Narratology Approach