The Journal of Computational Literary Studies 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

0

Revision

Revision

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

CCLS - Conference

- Community Meet Up
- Open Peer Discussion
- Peer Suggestions from Conference
- LaTeX Version (03)

Publication

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

Versioning Example

particular type of narrative'' \autocite[par.~5]{huhn.2013} without direct reference to events II} is the possibility to identify only certain \textit{events I} as relevan Here, the concept of tellability provides a possibility to operationalize the way events are foregrounded by the narrative discourse itself''\parenc also to disc incident int parameters (discourse fea narrative''. with regard This is an al something(s) at some time f furthering c characters, approach bet narrativity. 34 We will now s narrativity. 7 • \section{Oper 2 Our approach general type c narrativity 44 The differen state as well state. Since a change of event types or solution we c one by \te which are ofte distinguish d have the high We additiona texts.\fo unpredictable, iterative (cf categories and steps and th 7 The annotat i.e., the que these in the words which ca 48 The determinat entails that t

The prerequisite for building an understanding of <u>narrativity</u> as property ``integral to

Towards an Event Based Plot Model "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 tellable event, but the tellability of a story can also rely on purely contextual parameters 19 (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 20 tells someone somewhere that someone did something(s) [to someone] somewhere 20 at some time for some reason"). While we consider their definition of narrativity 20 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 200 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 209be combined. We will now show how we put into practice our approach to modeling plot based on 211 events and their narrativity. 3. Operationalizing Events and Narrativity 3.1. Narratological Operationalization of Events Our approach to the annotation of events considers events as "any change of state 215 explicitly or implicitly represented in a text" and is therefore based on event I which is 216 "the general type of event that has no special requirements" (Hühn 2013, par. 1). In our 21 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 21 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 223 nor a change of state), we consider it sensible to use all three criteria and base three 224 different event types on them: states, processes in time and changes of state. With this 22 more fine-grained solution we can incorporate more theoretical positions in our event 22 operationalization such as the one by Prince (2010) or the consideration of processes 22 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

non-events as category for enabling the comprehensive annotation of texts.³ Cf. Vauth and Gius (2021) for a detailed annotation guideline.
 We also use additional properties derived from the criteria in Table 1 and additionally determine whether

| 229 | | | | | | | |
|-----|--|--|-----|--|--|--|--|
| 230 | | uilding an understanding of <u>narrativity</u> as property ``integral to a You: Quisque congue nunc non ornare | | | | | |
| | particular type of narrative'' \autocite[par.~5]{huhn.2013} without direct reference to dapibus. Proin sit amet portitor erat, | | | | | | |
| | \textit{events II} is the possibility to identify only certain \textit{events I} as relevant. | | | | | | |
| 231 | Here, the concept of tellability provides a possibility to operationalize the way events are ' ligula ac enim cursus molestie. Feb 23, 2023 10:38 AM • Edit | | | | | | |
| | foregrounded by the na | rrative discourse itself''\parencite[par.~1]{kukkonen_plot_2014} and thus to | | | | | |
| | relate events | Ti to plot Tollability just like plot is not only connected to story but HitEnterto reply | _ | | | | |
| | also to discourse: ``Ţ | | | | | | |
| | `noteworthiness.' [\do | | | | | | |
| | into a tellable event, | | | | | | |
| | (e.g., the newsworthin | CONFERENCE Towards an Event Based Plot Model | | | | | |
| | features, i.e., on the | | | | | | |
| | \autocite[par.~1]{baro | | | | | | |
| | the very representatio | "Tellability [refers] to features that make a story worth telling, its 'noteworthiness.' [] | 105 | | | | |
| | alternative to the con | | | | | | |
| | (``Someone tells someo | The breaching of a canonical development tends to transform a mere incident into a | | | | | |
| 232 | at some time for some | tellable event, but the tellability of a story can also rely on purely contextual parameters | 197 | | | | |
| | furthering computation | (e.g., the newsworthiness of an event). [] Tellability may also be dependent on | 198 | | | | |
| | characters, time, plac | discourse features, i.e., on the way in which a sequence of incidents is rendered in a | 199 | | | | |
| | approach before being | narrative". (Baroni 2012, par. 1) This possibility of defining tellability with regard to the | | | | | |
| | straightforward to app | | | | | | |
| | narrativity. On the lo | ······································ | | | | | |
| 233 | | the concept of narrativity developed by Piper, So, and Bamman (2021, p. 3) ("Someone | | | | | |
| | We will now show how w | tells someone somewhere that someone did something(s) [to someone] somewhere | 203 | | | | |
| 234 | narrativity. | at some time for some reason"). While we consider their definition of narrativity | 204 | | | | |
| 235 | all activity. | helpful for furthering computational approaches, it entails the development of a series | 205 | | | | |
| 235 | | of approaches (to characters, time, place, action, representation mode, etc.) that need to | | | | | |
| |) | | | | | | |
| | Operationaliz | | | | | | |
| 238 |) | contrary, our approach is more straightforward to apply since it is directly based on the | 208 | | | | |
| | Narratolog | representation of events and their narrativity. On the long run, both approaches should | 209 | | | | |
| 240 | subsec:Annotati | be combined. | 210 | | | | |
| 241 | | | | | | | |
| 242 | Our approach to the an | we will now show now we put into practice our approach to modeling plot based on | 211 | | | | |
| | | aplicitly represented events and their narrativity. | | | | | |
| | type of event that has | | | | | | |
| | operationalization we | | | | | | |
| | analysis and we classi | 3. Operationalizing Events and Narrativity | 213 | | | | |
| | <pre>vauth_michae</pre> | | | | | | |
| 243 | | 3.1. Narratological Operationalization of Events | 214 | | | | |
| 244 | The differentiation of | S.I. Narratological Operationalization of Events | 214 | | | | |
| | <pre>\autoref{tab:eventdef}</pre> | Our approach to the annotation of events considers events as "any change of state | 215 | | | | |
| | as well as being a pro | explicitly or implicitly represented in a text" and is therefore based on <i>event I</i> which is | | | | | |
| | Prince also introduces | "the annual time of any title the and an addition of the 2012 and 1). In our | | | | | |
| | state), we consider it | | | | | | |
| | them: states, processe | operationalization we further differentiate between event types in order to provide for | 218 | | | | |
| | incorporate more theor | narrativity analysis and we classify the events according to their representation. ² | 219 | | | | |
| | <pre>\textcite{Prince.2010}</pre> | | | | | | |
| | often not considered e | The differentiation of event types is based on the first three event criteria listed in Table 1, | | | | | |
| | different levels of na | namely being a state, a process in time and a change of state. Being a state as well | 221 | | | | |
| | highest level of narra | as being a process in time are typically considered prerequisites for changes of state. | 222 | | | | |
| | additionally introduce | Since Prince also introduces the notion of a stative event (which is neither a process | 223 | | | | |
| | <pre>texts.We als</pre> | nor a change of state), we consider it sensible to use all three criteria and base three | | | | | |
| | and additionally deter | 0 <i>n</i> | | | | | |
| | mental or | different event types on them: states, processes in time and changes of state. With this | | | | | |
| 245 | iterative (cf. <mark>\textcit</mark> | more fine-grained solution we can incorporate more theoretical positions in our event | | | | | |
| | annotation categories | operationalization such as the one by Prince (2010) or the consideration of processes | 227 | | | | |
| | <pre>\textit{event II} dete</pre> | of speaking, thinking and movement which are often not considered event candidates. | 228 | | | | |
| | and thus beyond the sc | Moreover, we also provide a possibility to distinguish different levels of narrativity | 229 | | | | |
| 246 | | according to the three arent times. Changes of states have the highest level of narrativity | | | | | |

t levels of narrativity 22 ighest level of narrativity, 23 processes in time have lower and states lowest narrativity. We additionally introduce 23 non-events as category for enabling the comprehensive annotation of texts.³

ICLS, 2022, Conference



with regard This is an a JCLS. Journal of Computational Literary Studies Towards an Event Based Plot Model something(s) at some time furthering characters, approach be straightforw narrativity. 4 We will now narrativit Evelyn Gius and Michael Vauth to modeling plot by operationalizing the relationship of narrativity and tellability (2022). "Towards an Event Based Plot Model. A Computa Our approach is based on events, or, more precisely, on the narrativity of even tional Narratology Approach In: Journal of Computationa the approach, we first discuss the notion of event in narrative theory and its iterary Studies 1 (1). 10.486 relation to narrativity and plot. We then propose the operationalization of events Date published 2022-11-29 Our approa In the last section, we optimize our approach by relating the parameters for Date accepted 2022-04-04 Date received 2021-12-22 general typ Keywords vents, narrativity, plot, ann narrativi tion, narrative theory The differ CC BY 4.0 @① 1. Introduction state as we In narrative theory events are conceived of as the constituents of narratives, i.e. the source Gabriel Viehhauser 💿 state. Sind Roxana Patras 💿 ingredient from which narratives are built. Events are therefore considered the smallest a change of units of narrations. Accordingly, models for the so called 'narrative constitution' explain event types his paper has passed throu solution we the genesis of a narrative based on events. These models describe how events are turned the conference track of JCLS. In addition to being peer reone by \t into the text of a narration with a series of (idealized) processes such as permutation which are of 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 distinguish have the hi 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 texts. Technical University of Darmiterative (categories a steps and

also to di

incident in parameters (e discourse fea

i.e., the qu

these in the

words which

The determi

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/

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

Here, the concept of tellability provides a possibility to operationalize the way events are

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

events II} is the possibility to identify only certain \textit{events I} as relevan

{events I} to plot. Tellability, just like plot, is not only connected to story,

Evelyn Gius¹ (0) Michael Vauth¹ (0)

event concept

A Computational Narratology Approach

Institute of Linguistics and Literary Studies, Technical University of Darmstadt
 ⁽⁴⁾, Darmstadt
 Germany.

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

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

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

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 scala

| <pre>?xml version=' !DOCTYPE artic</pre> | cle PUBLIC "-//NLM// | 8" <mark>?></mark> DTD JATS (Z39.96) Jo | urnal Publishing DTD | v1.2 20120330//EM | V" "http://jats. |
|---|---|--|--|--|--|
| <pre>lm.nih.gov/pub !<?xml-style</pre></pre> | | | "> "?>> | | |
| ath/MathML" 🗙 | <mark>le-type=</mark> "research-ar <mark>nlns:xlink=</mark> "http://w | ticle" <mark>dtd-version=</mark> " ww.w3.org/1999/xlink | 1.2" xml:lang="en" xm " xmlns:xsi="http://w | lns:mml= "http://www.w3.org/2001/XM | /ww.w3.org/1998/ /LSchema-instanc |
| "> front> | | | | | |
| journal-meta> journal-id <mark>jo</mark> | Article | | | | A |
| journal-title journal-title | | Event Based | d Plot | | Authors Evelyn Gius 🌀 (Technical University of |
| /journal-titl issn pub-type | | | | | Darmstadt) |
| publisher> | Model. A computational | | | | Michael Vauth 🔞 (Technical University of Darmstadt) |
| /publisher> /journal-meta | Narratology | ' Approach | | | |
| article-meta> article-id pu | Abstract | | | | |
| article-categ subi-group> | Abstract | | | | DOWNLOAD |
| <pre>subject>Artic</pre> | | v computational narratology appro o of narrativity and tellability. Our | | | Download XML Download PDF |
| /subj-group> /article-cate | 1 | y of event representation at the lev | | | bownodd i br |
| title-group> article-title | | proach, we first discuss the notion t. We then propose the operationa | | | |
| <mark>subtitle</mark> >A Co /title-group> | | ordance to these assumptions. In t | | | |
| contrib-group contrib contr | | ters for events and narrativity to s | | | ISSUE Volume 1 · Issue 1 · 2022 |
| contrib-id <mark>co</mark> | how to the what of narration and concept. | account for a comprehensive noti | on of plot based on a scalar event | | |
| name> surname>Gius< | Keywords: events, narrativity, pl | lot, annotation, narrative theory | | | |
| <mark>given-names</mark> >E /name> | How to Cite: | , | | | IDENTIFIERS |
| email>evelyn. xref <mark>ref-type</mark> | | | | | DOI: https://doi.org/10.48694/jcls.110 |
| /contrib> | | ards an Event Based Plot Model. A al Literary Studies 1(1). doi: https:// | | | |
| contrib <mark>contr</mark> contrib-id <mark>co</mark> | | , , , | | | |
| name> surname>Vauth | 498 | | 94 | | JUMP TO |
| <mark>given-names</mark> >M /name> | VIEWS | | DOWNLOADS | | 1. Introduction |
| x <mark>ref ref-type</mark> /contrib> | | | | | 2. Modeling Plot by Narrativity of Events |
| /contrib-grou | PUBLISHED ON | PEER REVIEWED | LICENSE | | 2.1 Events as Basic Units of Narrative 2.2 From the Representation of Events to |
| aff <mark>id</mark> ="aff-1 tadt < <mark>ext-lin</mark> | 29 NOV 2022 | | CREATIVE COMMONS ATTRIBUTION 4.0 | | Narrativity – and Plot |
| 5n911h24">ROR pub-date publ | | | | | 3. Operationalizing Events and Narrativity |
| day>29 month>11 <td></td> <td></td> <td></td> <td></td> <td>3.1 Narratological Operationalization of</td> | | | | | 3.1 Narratological Operationalization of |
| <mark>year</mark> >2022 <td>1. Introduction</td> <td>n</td> <td></td> <td></td> <td>Events 3.2 Representing Plot as Narrativity</td> | 1. Introduction | n | | | Events 3.2 Representing Plot as Narrativity |
| pub-date pub- year>2022 <td></td> <td>nceived of as the constituents of n</td> <td></td> <td></td> <td>Graphs 4. Optimizing Narrativity for Plot</td> | | nceived of as the constituents of n | | | Graphs 4. Optimizing Narrativity for Plot |
| /pub-date> | - | s are built. Events are therefore co for the so called 'parrative constit | | | Representation |
| issue>1 <td colspan="4">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</td> <td>4.1 Preliminaries</td> | 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 | | | | 4.1 Preliminaries |
| fpage>1lpage>20 <td></td> <td>sses such as permutation and line</td> <td>,</td> <td></td> <td>4.2 Optimizing Smoothing 4.3 Optimizing Event Type Values</td> | | sses such as permutation and line | , | | 4.2 Optimizing Smoothing 4.3 Optimizing Event Type Values |
| history> date <mark>date-typ</mark> | discuss the possibility to represent plot on the base of events. Our computational narratology approach to event annotation has already been automated (cf. Vauth et al. 2021) ¹ as well as adapted | | | | 5. Conclusion |
| day>22 month>12 <td colspan="4">by Chihaia (2021) for the analysis of the representation of the Mexican State of Sinaloa in newspaper</td> <td>6. Data availability</td> | by Chihaia (2021) for the analysis of the representation of the Mexican State of Sinaloa in newspaper | | | | 6. Data availability |
| year>2021 <td colspan="4">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</td> <td>7. Acknowledgements</td> | 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 | | | | 7. Acknowledgements |
| /date> date date-typ | | recent important outline of Natura | | 8. Author contributions Notes | |
| day>04 month>04 <td>approaches for narrative theory b</td> <td>by Piper et al. (2021).</td> <td></td> <td>References</td> | approaches for narrative theory b | by Piper et al. (2021). | | References | |
| <mark>year</mark> >2022 <td></td> <td>operationalization of the event co</td> <td></td> <td></td> | | operationalization of the event co | | | |
| /history> permissions> | | e text analysis by building a step by tive texts to their subsequent appl | | | |
| copyright-sta | | ed work involves two separate, bu | | FILE CHECKSUMS (MD5) | |
| copyright-yea license <mark>licen</mark> | se licen outline the concept of events, and the possibility of modeling plot based on events against the | | | | XML: 87bac879f8093d203261cc1a305a4520 |
| <pre>license-p>The can find the</pre> | | umptions and then operationalize e annotations of these narrative m | | | PDF: d4bd2fb9a22da5cf95d630a1413f3e12 |
| ">https://cre e the copyrig | graphs that encompass whole tex | xts. Second, we present procedure | | | |
| Sopjirg | again by relying on narratologica consider narrativity as a property | | | | |
| | consider narrauvity as a property | y or events and event chains. Tella | onity which is a narratological | | _ |





 LaTeX Submission (V01) based on Guidelines and Template

Conference Version

- Revised Version (V02) of Submission
- Anonymous Reviews

the question whet

the fictional wor

can be assigned to

18 The determination

that the change of

- 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

| Editors: | Editorial Assistants: | Production Developer |
|-----------------|-----------------------|----------------------|
| Evelyn Gius | Svenja Guhr | Dominik Gerstorfer |
| Christof Schöch | Élodie Ripoll | |
| Peer Trilcke | Henny Sluyter-Gäthje | |







