Data-Driven Storytelling: Bridging Knowledge Graphs, GenAI, and Narrative (DDS 2026)

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Abstract

The Data-Driven Storytelling: Bridging Knowledge Graphs, GenAI, and Narrative (DDS 2026) workshop was held in conjunction with ISWC 2026 in Bari, Italy. The workshop brought together research at the intersection of semantic technologies, generative artificial intelligence (AI), and narrative methods for transforming complex data into meaningful and engaging stories. This preface presents the scope of the workshop, its paper selection process, invited keynote, and Program Committee.

Keywords

Data-driven storytelling, Knowledge graphs, Generative AI, Narratives, Semantic Web

1. Introduction

The rise of Large Language Models (LLMs) has brought both opportunities and challenges in generating coherent, context-aware narratives from complex data. While generative models can produce fluent narratives, they often lack semantic grounding, provenance awareness, and narrative consistency. Recent publications have shown how ontologies and knowledge graphs can support narrative modeling, analysis, and generation, for example through ontology- or graph-based representations [1, 2, 3], and semantic infrastructures (mainly KGs) for ensuring the grounding of the generated stories [4, 5, 6].

DDS 2026 explored the intersection of knowledge representation, generative artificial intelligence (AI), and narrative approaches to data access and communication. The workshop considered both computational methods for representing, generating, and evaluating narratives and applications of data-driven storytelling in domains such as cultural heritage, journalism, and education. The topics of the workshop included: Knowledge Graphs and ontologies for narrative representation and generation; Linked Data and semantic annotation for storytelling; LLMs and Generative AI for data-driven narratives; narrative coherence, quality, grounding, and trustworthiness; interactive, participatory, and human–AI approaches to storytelling; tools and platforms for data-driven storytelling; applications in journalism, education, cultural heritage, and creative industries; interdisciplinary approaches combining Semantic Web technologies with NLP, HCI, data science, and narrative studies.

2. Selection Process

DDS 2026 received 18 submissions. Three submissions were desk-rejected before peer review, while the remaining 15 were evaluated by the Program Committee. Each peer-reviewed submission received at least three reviews, and in some cases four. Following the review process, 7 papers were accepted: 5

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long papers and 2 short papers. This corresponds to an overall acceptance rate of 38.9%. The workshop followed a single-anonymous review process. Submissions were assessed with respect to their relevance to the workshop, scientific quality, originality, and potential to stimulate discussion across the different communities represented at DDS.

The accepted contributions reflect the interdisciplinary scope of the workshop, covering methods for structuring and grounding narratives through knowledge representations, approaches for generating and evaluating data-driven narratives, and studies of how narratives can mediate the interaction between data, technology, and their audiences.

The workshop program also featured an invited keynote by **Enrico Motta**, Professor of Knowledge Technologies at the Knowledge Media Institute of The Open University, entitled *A Neurosymbolic Approach to Capturing the Viewpoint Dynamics in Media Representations of Political Discourse.* The keynote presented a research programme on analysing how topics, viewpoints, and political actors are represented across news sources. In particular, it showed how neurosymbolic AI pipelines combining knowledge graphs and large language models can support large-scale analysis of political discourse, with case studies on immigration and AI [7].

3. Program Committee

We thank the members of the Program Committee for their contribution to the review and selection process: Rossana Damiano, University of Turin, Italy ; Marilena Daquino, University of Bologna, Italy ; Belén Díaz Agudo, Universidad Complutense de Madrid, Spain ; Luigi De Russis, Politecnico di Torino, Italy ; Mark Alan Finlayson, Florida International University, United States ; Beatrice Fiumanò, University of Bologna, Italy ; Simon Gottschalk, Leibniz Universität Hannover, Germany ; Antonio Lieto, University of Salerno, Italy ; András Micsik, HUN-REN SZTAKI, Hungary ; Simon Mille, ADAPT, Dublin City University, Ireland ; Alessandro Mosca, Institute for Cognitive Sciences and Technologies (ISTC-CNR), Italy ; Paul Mulholland, The Open University, UK ; Davide Picca, University of Lausanne, Switzerland ; Anisa Rula, University of Brescia, Italy ; Angelo Salatino, The Open University, UK ; Andrea Schimmenti, University of Bologna, Italy ; Andrea Sillano, Politecnico di Torino, Italy ; Blerina Spahiu, Università degli Studi di Milano-Bicocca, Italy ; Sara Tonelli, Fondazione Bruno Kessler, Italy ; Marieke van Erp, KNAW Humanities Cluster / DHLab, The Netherlands

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Declaration on Generative AI

During the preparation of this work, the author(s) used GPT-5 in order to: Grammar and spelling check. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the publication's content.

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