# A Discourse-first Approach to Visual Narrative Generation through Operationalizing Comic Panel Transitions Paper type: Technical Paper

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#### Abstract

This abstract is so awesome.

#### Introduction

- What are we trying to do?
- What is our approach?
- Talk about how creative the discipline is
- Why does discourse-driven help creativity in narrative generation?
  - Creative potential is bigger in discourse-driven approach, principle of least-commitment in the fabula don't need to simulate a portion of the narrative universe which is never revealed which may impose limitations on future narrative generation. [RCR: Example!]
  - Focusing on the telling may leave aspects of fabula unspecified, which may broaden the interpretation of the story in the minds of story consumers. [RCR: Example!]
- Why are comics a great domain for computational creativity?

#### **Related Work**

- Talk about Understanding Comics (McCloud 1993)
- Talk about Visual Language of Comics (Cohn 2013)
- Talk about the MEXICA System (Pérez y Pérez and Sharples 2001) and how we're different
- Talk about the departure from traditional narrative generation work
  - Talk about the pipeline model of narrative generation (primarily simulation focused)
  - We're exploring an alternative account focus on the telling of the story, let story consumers "fill in the gaps"
  - \* Gricean Maxims
  - \* Closure principle Saraceni Third aspect of "relatedness", depends on not what is overtly explicit in the narrative's surface code, but also on inference. "Closure" comes from Gestalt principles.
  - \* Gestalt principle

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Historically, the computational generation of narrative has followed what Ronfard and Szilas (2014) term the *pipeline model*: a narrative artefact is computationally generated by first simulating the story world as a collection of events, and then piping the story world information to a discourse generator, which generates a selective presentation of story world events in a particular medium. Current work in the computational creativity community has primarily pursued this pipeline model for narrative generation. Work by León and Gervás (2014) has...

[RCR: There are several papers to cite here, but the gist is: pipeline model is pervasive.]

As Ronfard and Szilas argue, the pipeline model is neither *necessary* nor *sufficient* for the successful generation of narrative structure, but rather represents one paradigm of narrative generation.

[RCR: Present one example of why it's not necessary, and one example of why it's not sufficient.]

Our work presents a departure from the pipeline model, opting instead for a *discourse-first approach to narrative generation*. In this model, the story world is simulated inasmuch as is necessary to support the telling of story events in the discourse. The work we present here is a first step in this discourse-driven model, focused on understanding how the discourse of visual language narratives enforces constraints on the underlying story worlds they represent, and how these can further guide subsequent choices for discursive presentation.

Narrative authors design their narratives to affect audiences in specific ways (Bordwell), and authors care to structure discourse to achieve specific narratological effects. This is achievable in the pipeline model, but reasoning about discourse first helps you catch things that are not realizable in a specific target medium (e.g. identity for murderers in thrillers.)

## Acknowledgments

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## References

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Pérez y Pérez, R., and Sharples, M. 2001. MEXICA: A computer model of a cognitive account of creative writing. *Journal of Experimental and Theoretical Artificial Intelligence* 13(2):119–139.

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