# **UC Merced**

**Proceedings of the Annual Meeting of the Cognitive Science Society** 

# Title

How stories shape us, and how we shape stories

### Permalink

https://escholarship.org/uc/item/8hj2g7vx

### Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 42(0)

### Authors

Nyhout, Angela Venkadasalam, Vaunam Oatley, Keith <u>et al.</u>

## **Publication Date**

2020

### **Copyright Information**

This work is made available under the terms of a Creative Commons Attribution License, available at <u>https://creativecommons.org/licenses/by/4.0/</u>

Peer reviewed

#### How stories shape us, and how we shape stories

Angela Nyhout<sup>1,2</sup> (a.nyhout@kent.ac.uk), Vaunam Venkadasalam<sup>2</sup> (vvenkada@gmail.com), Keith Oatley<sup>2</sup> (keith.oatley@utoronto.ca), & Raymond Mar<sup>3</sup> (mar@yorku.ca)

<sup>1</sup>School of Psychology, University of Kent

<sup>2</sup>Department of Applied Psychology and Human Development, University of Toronto <sup>3</sup>Department of Psychology, York University

**Keywords:** fiction; narrative; discourse; text; perspective-taking; development; evolution.

#### Introduction

Humans spend a great deal of time engaging with narrative fiction in the form of novels, picture books, films, television shows, podcasts, and video games. Television viewing alone accounts for over 5 hours per day-totaling over 76 days per vear-for average American adults (Koblin, 2016). On the surface, this behavior is quite puzzling. Why should we spend so much time being involved with people who are not real and events we know have not occurred? The answer may lie in the fact that stories are not just an enjoyable escape from the real world but may help provide insight into the realworld. Stories often deal with uncomfortable and upsetting themes, for example, and these can prove enlightening (Gottschall, 2012). A reader may experience fear as a character walks through a dark forest at night or sadness over the death of an important character. The evocation of these rich emotions seems unique to narrative and separate from our experiences with exposition. Stories involve imagination, perspective-taking, and emotional engagement, which allow us to be "transported" to another time and place (Gerrig, 1993). In this way, stories afford a rich and emotional simulation of the social world, and these simulations can be edifying (Mar & Oatley, 2008; Oatley, 1999).

Underlying the imaginative experiences of reading fiction is the construction of a rich, multi-dimensional representation of what is described that goes beyond the words offered on a page. During narrative processing, individuals create representations not only of the surface form (e.g., word order) and text-base (i.e., the propositional meanings of words and sentences), but also non-linguistic representations of the situation being depicted (Johnson-Laird, 1983; van Dijk & Kintsch, 1983). These representations, known as situation models, enable a reader or listener to draw inferences and predictions, and to monitor the many dimensions of complex situations (Zwaan & Radvansky, 1998). Studies of how individuals process stories have helped us to understand why, cognitively and phenomenologically, fiction is so engaging. Yet they leave open the question of the real-world impacts of fiction: what functions might stories serve, if any?

Recently, researchers have turned to these fascinating questions of why people engage with fictional stories, what moment-by-moment experiences provide for readers or listeners, and what they take away from these experiences. Spoken narratives have existed as a part of daily human life across history in all cultures, and long predate the written word (Brown, 1991). How do we explain this ubiquity of narratives and storytelling? Given that narratives are centered on intentional agents, narrative may provide a simulation of our social world that helps us better to understand real world social interactions (Mar & Oatley, 2008). Indeed, exposure to fiction is correlated with mentalizing abilities both in adults (Mar, Oatley, Hirsh, dela Paz, & Peterson, 2006) and in children (Mar, Tackett, & Moore, 2010). Narratives may also be useful for sharing information and lessons (Rubin, 1995). Given the striking overlap between the themes found in folklore and the domains of information that are relevant to survival (e.g., social relationships, animal behavior, weather), narratives may have helped individuals better to cope with survival challenges in our evolutionary past (Sugiyama, 2001). In these ways, fiction can be seen to provide functions beyond entertainment, shedding light on important concerns relevant for human survival and flourishing.

#### **Workshop Goals**

The primary aim of the workshop is to bring together researchers from a wide variety of disciplines to discuss work on the interplay of stories and story consumers, in order to better understand how fiction shapes our lives. Key questions of focus include:

- What are the key characteristics of stories and how do these characteristics influence readers?
- How do the properties of a text influence and interact with the reader's experience and enjoyment?
- How does the reader's background interact with the narrative experience?
- What impact do the stories we tell, hear, and read have on our lives?

These are questions that span traditional disciplinary boundaries, and deal with an aspect of human life across cultures and history. Cognitive science, with its diverse toolkit of methodologies and theoretical perspectives, is an ideal meeting point to address these questions. The Meeting of the Cognitive Science Society is therefore a perfect venue to bring together researchers coming from a wide variety of different perspectives. Our invited speakers come from a range of disciplines. including anthropology. communication, education, literary studies, neuroscience, philosophy, and psychology, and we expect the workshop to appeal to a similarly diverse audience. The work presented also focuses on narratives and readers/listeners from a broad

expanse of cultural backgrounds, which will also widen the appeal of this workshop.

#### Structure

We propose a full-day workshop. Each talk will be followed by a question-and-answer session, and the day will conclude with a unifying discussion.

Our confirmed speakers include researchers from all stages of a career trajectory, including 3 graduate students, 3 early career researchers, 5 mid-career and senior faculty, and 2 professors emeriti. Our speakers also span several disciplines, including anthropology, communication, education, literary studies, neuroscience, philosophy, and psychology.

The first set of talks focuses on the role of stories and storytellers:

- **Patrick Hogan** (Professor, Department of English, University of Connecticut): *Stories Come From Feelings: On particular causes and universal genres*
- Michelle Scalise Sugiyama (Senior Instructor, Anthropology, University of Oregon): *To Build a Fire: Fire knowledge encoded in forager oral tradition*
- Gabrielle Starr (President and Professor of English and Neuroscience, Pomona College): *Poetry as Fiction, with a Cognitive Turn*
- Angela Nyhout (Lecturer, School of Psychology, University of Kent): *Children's Understanding of Storytellers' Intentions*

The second set of talks focuses on the dynamic interplay between reader and narrative:

- Kendall Walton (Emeritus Charles Stevenson Collegiate Professor of Philosophy, University of Michigan): Life Experiences and Experiences of Art: Which come first?
- Mary Gabrielle Prezioso (PhD student in Human Development, Harvard University): *Children's Story World Absorption in Avid and Occasional Readers*
- Keith Oatley (Professor Emeritus of Cognitive Psychology, Department of Applied Psychology and Human Development, University of Toronto): *Character in Fiction and Everyday Life*
- Chantelle Ivanski (PhD student in Psychology, York University): Evaluations of Fiction Passages Based on Author Gender
- Matthew A. Bezdek (Senior Scientist, Department of Psychological and Brain Sciences, Washington University in St. Louis): Cognitive Processes in the Moment of Narrative Experience

The final set of talks focuses on learning and behavioral outcomes of engagement with fiction:

- Vaunam P. Venkadasalam (PhD student, Developmental Psychology and Education, University of Toronto): *Does Genre Matter when Teaching Kindergarteners Science Concepts?*
- Lisa Fazio (Assistant Professor, Psychology and Human Development, Vanderbilt University): Learning Correct and Incorrect Information from Fictional Stories: Is fiction special?
- Melanie C. Green (Professor, Department of Communication, University at Buffalo): *Stories for Social Good*

**Paul Bloom** (Brooks and Suzanne Ragen Professor of Psychology, Yale University) will lead a discussion at the end of the day.

#### References

- Brown, D. E. (1991). *Human Universals*. New York: McGraw-Hill.
- Gerrig, R. J. (1993). *Experiencing narrative worlds: On the psychological activities of reading.* New Haven, CT: Yale University Press.
- Gottschall, J. (2012). *The storytelling animal: How stories make us human*. Boston, MA: Houghton Mifflin Harcourt.
- Johnson-Laird, P. N. (1983). *Mental models: Towards a cognitive science of language, inference, and consciousness.* Cambridge, MA: Harvard University Press.
- Koblin, J. (2016, June 30). How Much Do We Love TV? Let Us Count the Ways. *New York Times*.
- Mar, R. A., & Oatley, K. (2008). The function of fiction is the abstraction and simulation of social experience. *Perspectives on Psychological Science*, *3*, 173-192.
- Mar, R. A., Oatley, K., Hirsh, J., dela Paz, J., & Peterson, J. B. (2006). Bookworms versus nerds: Exposure to fiction versus non-fiction, divergent associations with social ability, and the simulation of fictional social worlds. *Journal of Research in Personality*, 40, 694-712.
- Mar, R. A., Tackett, J. L., & Moore, C. (2010). Exposure to media and theory-of-mind development in preschoolers. *Cognitive Development*, 25, 69-78.
- Oatley, K. (1999). Why fiction may be twice as true as fact: Fiction as cognitive and emotional simulation. *Review of General Psychology*, 3, 101-117
- Sugiyama, M.S. (2001). Narrative theory and function: Why evolution matters. *Philosophy and Literature*, *25*, 233-250.
- van Dijk, S., & Kintsch, W. (1983). *Strategies for discourse comprehension*. New York: Academic Press, Inc.
- Zwaan, R. A., & Radvansky, G. A. (1998). Situation models in language comprehension and memory. *Psychological Bulletin*, 123, 162-185.