

## Problems with algorithmic systems

- YouTube demonetizing LGBTQ YouTubers (and not demonetizing violent content masquerading as children's cartoons)
- Algorithmic bias along racial lines in the courts
- The problem of (creative) crowd work

# YouTubers



Chase Ross 🐝 ✨

@ChaseRoss

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DO NOT LET YOUTUBE GET AWAY  
WITH THIS.

I uploaded my video TWICE to see if the word "transgender" would trigger the algorithm... and every step of the way was fine UNTIL I added the word Transgender. RIGHT away, the video was demonetized.

Literally. RIGHT. AWAY.

Team YouTube 🐝 ✨ @TeamYouTube · May 30

Replies to @ChaseRoss

Hi Chase - We reviewed this video and it should now be monetizing. One of our team members will be reaching out to you to discuss the details of what happened. We appreciate your patience while we looked into this!

52 33 773



Chase Ross 🐝 ✨ @ChaseRoss · May 30

Thanks. I look forward to speaking to an actual human about this

7 28 2.6K

# Judicial bias



Brisha Borden (left) was rated high risk. Dylan Dwyer was rated low risk. (Drew Beattie for ProPublica)

## Machine Bias

There's software used across the country to predict future criminals. And it's biased against blacks.

by Julie Angwin, Jeff Larson, Surya Mattu and Lauren Kirchner, ProPublica  
May 23, 2016

**O**N A SPRING AFTERNOON IN 2014, Brisha Borden was running late to pick up her god-sister from school when she spotted an unlocked kid's blue Huffy bicycle and a silver Razor scooter. Borden and a friend grabbed the bike and scooter and tried to ride them

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### SCIENCE

## Courts use algorithms to help determine sentencing, but random people get the same results

Numbers aren't always as impartial as they appear.

By Sara Chodosh January 18, 2018



You wouldn't trust this dude to decide your fate, would you?

iAmMrRob via Pixabay

# Creativity in crowdwork

CSCW '16, FEBRUARY 27–MARCH 2, 2016, SAN FRANCISCO, CA, USA

## Storia: Summarizing Social Media Content based on Narrative Theory using Crowdsourcing

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### ABSTRACT

People from all over the world use social media to share thoughts and opinions about events. However, determining what people mean through their posts has been of interest to researchers, journalists, and marketers alike. However, while automatically generated summaries enable people to quickly scan large sets of data, they often do not provide the context needed for a viewer to fully understand an event. Narrative structures can provide templates for the order and meaning of events. We propose Storia, a crowdsourcing system that are oriented around narrative elements rather than summaries made up of facts. In this paper, we use narrative theory and machine learning to automatically generate narrative summaries. To do this, we designed crowdsourcing tasks to generate summaries of events based on community used narrative structures. We found that Storia generated narrative summaries that people were more emotionally engaged with stories created with narrative structure and were also more likely to recommend them to others compared to summaries created without narrative structure.

**Author Keywords**  
Social computing; crowdsourcing; creative collaboration; storytelling

**ACM Classification Keywords**  
H.3.3 Group and Organization Interface; Collaborative computing

### INTRODUCTION

Social media allows millions of people from all over the world to share and discuss their thoughts about commonly experienced events. There has been increasing interest among researchers, journalists, and marketers alike in using social media to analyze the way people talk about events. A large body of research explores summarizing emotions and reactions as seen on Twitter [23, 17, 5], news articles and blog posts [11, 12, 13], and movie reviews and user ratings [14, 15].

We hypothesize that designing crowdsourcing tasks around narrative elements can help non-expert creative workers collaborate in addressing this challenge. In this paper, we first introduce Storia, a crowdsourcing system for generating narrative summaries. For example, if a name appears in a social media post, we may want to know more about who they are and their significance to the event. Similarly, if a character's name appears in a post, we may want to know more about the story they belong to. This leads to a focus on narrative categories—for example, we may be able to recognize certain words as describing a person or place before the story character. Specifically, we refer to extracting categories [3] as simple Heuristic for structuring social media content with respect to storytelling rules.

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Session: Creativity - Supporting Collaboration

CSCW 2017, February 26–March 1, 2017, Portland, OR, USA

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## Mosaic: Designing Online Creative Communities for Sharing Works-in-Progress

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Figure 1. Mosaic allows artists to share not just completed artwork, but also their creative process. See [Endnote 1](#) for more by mosaic.

### ABSTRACT

Online creative communities allow creators to share their work with a large audience, maintaining opportunities for their work to be appreciated and critiqued. However, sharing in-progress work can be technically and socially challenging in environments designed for sharing completed work. For example, a common challenge in the crowdsourcing process, rather than showcasing outcomes, is the main method of sharing creative work. Based on this, we present Mosaic, a crowdsourcing system for sharing creative works-in-progress snapshots showing how an artwork was completed from start to finish. In an online deployment and observation of the system, we find that users are more successful in improving how they can improve their own creative process, developed a social norm of detailed feedback, and became less afraid to share their early versions of artwork. Through Mosaic, we argue that orienting crowd work around high-level goals may enable workers to coordinate their effort to accomplish complex work.

**Author Keywords**  
Social computing; online creative collaboration; crowdsourcing; storytelling

**ACM Classification Keywords**

H.3.3 Information Interfaces and Presentation (e.g., HCI): Group and Organization interface; Collaborative computing

### INTRODUCTION

Online creative communities today focus on showcasing completed work, creating a climate where creators aim to produce work that is as impressive as possible to attract viewers and potential buyers. While this focus on art [4], writing [10], and design [2], a creator shares outcomes by uploading finished pieces that are rewarded by views, favorites, and comments. However, when a creator uploads a work and comments a submission gets, the more likely it is to appear in front of potential fans and other creators. Complementing this, many online creative communities have forums for cross-oriented spaces aimed at learning new techniques and receiving feedback from others, sharing its progress (work in progress) [3].

But despite these efforts, creators encounter barriers to receiving thoughtful feedback in these online spaces. These barriers include the lack of a clear goal for the work, a lack of unsolicited feedback [35] and a lack of metrics [32]. But most notably, simply posting work in the critique section of

## Mechanical Novel: Crowdsourcing Complex Work through Reflection and Revision

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### ABSTRACT

Crowdsourcing systems accomplish large tasks with scale and speed by breaking work down into independent micro-tasks. These micro-tasks present work in an assembly line fashion, such that workers can complete them quickly such as translation [25], charting [9], voting [26], and other patterns for splitting work [5, 16, 21]. Because these micro-tasks are discrete, the work they produce can consist of work without any leg up about how their workers can reflect and relate. As a result, large goals can be achieved quickly and at scale. However, effective workflows are difficult to create in advance. To design a workflow of micro-tasks, an expert must understand the task and the workers' capabilities, an expensive and time-consuming process when they repeatedly test and iterate on potential workflow designs. Furthermore, the workflow must be able to handle the complexity of the work as design fixates [15], difficulty decomposing work into micro-tasks [17], and four of failing [4]. This process is difficult to do in isolation, as it requires a deep understanding of the domain. While previous work has shown that crowdsourcing short fiction stories on Amazon Mechanical Turk is a field experiment, Mechanical Novel used in higher-level goals than short fiction stories [18]. Our results show that the findings suggest that orienting crowd work around high-level goals may enable workers to coordinate their effort to accomplish complex work without detailing from the intended goal.

In contrast, skilled creators iteratively create and revise goals to develop a sense of what they want [11, 34]. Thus, they know that problems will arise and that they will need to make changes to their work. This iterative process may lead to many attempts before a solution becomes clear. With this in mind, we introduce a technique for understanding and easing the workflow of micro-tasks. Rather than asking the crowd to help decompose a static goal, this technique loops between two phases: reflecting on the current progress and revising the goal to make it more achievable, and revising the artifact by decomposing that goal into actionable, low-level tasks through which workers make adjustments to their work. This iterative process allows the crowd to decide that a story ends too sharply, and act on that in a specific way by broadening a different ending. This new goal is then reflected on and revised again, and so on. This cycle need to change and unlock appropriate parts of the story for editing. Each goal can still be decomposed into micro-tasks, but this approach allows in existing workflows.

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**INTRODUCTION**  
*I know very slowly when I start what's going to happen. I just have a very general idea, and then the thing develops as I write.*—Alison Beale [12]

Crowdsourcing platforms such as Amazon Mechanical Turk bring together millions of people to accomplish complex work at massive scale, allowing the crowd to collaborate on goals such as researching purchases [19], classifying images [20], and translating text [21]. However, the crowd, crowdsourcing systems accomplish these types of work specifically for tackling creative challenges [3].

But despite these efforts, creators encounter barriers to receiving thoughtful feedback in these online spaces. These barriers include the lack of a clear goal for the work, a lack of unsolicited feedback [35] and a lack of metrics [32]. But most notably, simply posting work in the critique section of

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- Lots of work trying to fix these problems, establish baseline ethics, etc...

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- The problem of (creative) crowd work
- Lots of work trying to fix these problems, establish baseline ethics, etc...
- But lacking a generative theoretical framework to guide how we think about the relationships people have with systems