"Hello, Computer."
Welcoming Computational Modes of Research into the Archive

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Student newspaper visualizations

Montana Exponent

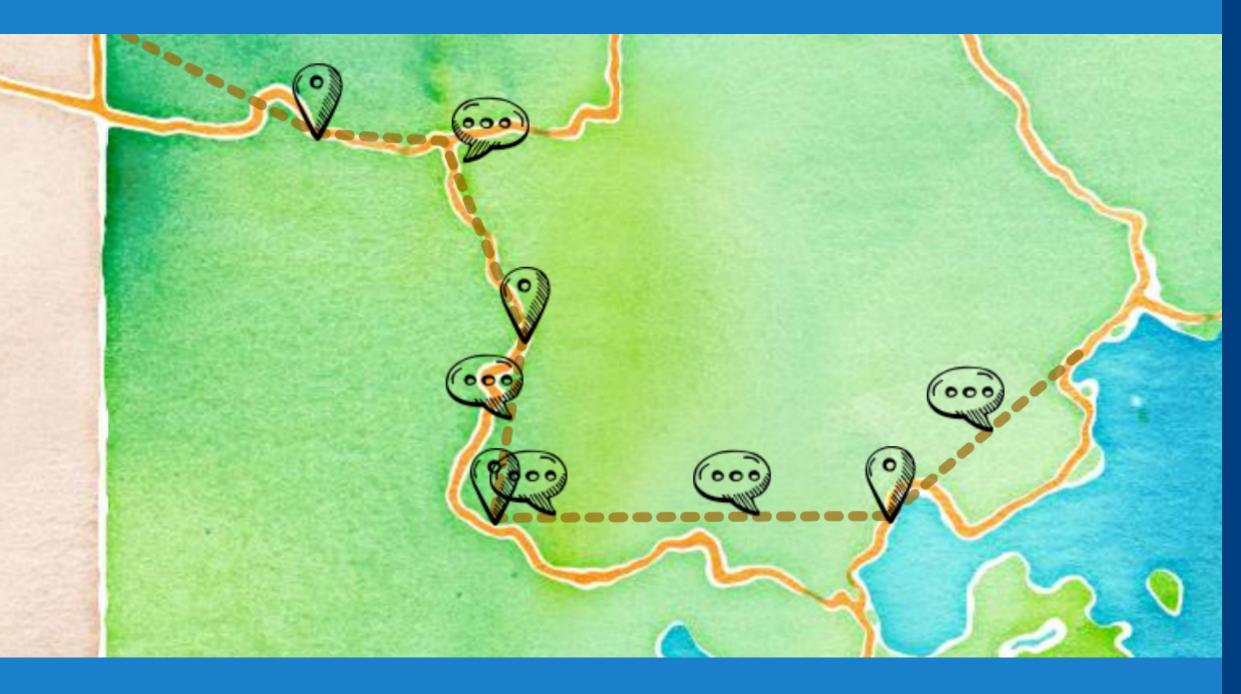BOZEMAN, MONTANA, TUESDAY, JANUARY 26, 1932

- The Exponent has been MSU's student newspaper since the 1890's.
- Dillon Monday used a Python script to clean the optical character recognition (OCR) of digitized newspapers in the MSU Library collection
- Dillon then created word clouds showing word usage in news articles in the 1890's versus 2016.
- The Venn diagram at right illustrates the number of words used in the 1890's versus today, including the number of unique and overlapping words in each era.
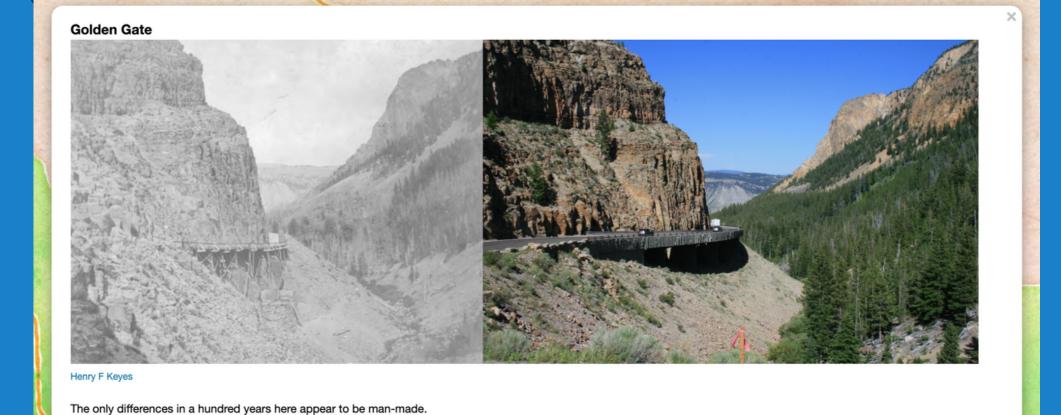

exponent word relations

8074   6647   17853

1890's

2016

Storymap of historical expeditions in Yellowstone

- This storymap walks users through the Yellowstone expeditions of Henry Keyes (1899) and Charles Hoff (1908), showcasing historic photographs of Yellowstone, and Keyes' and Hoff's journal entries.
- Dillon Monday used Leaflet JS to build the app.
- A slider allows users to follow each journey through time and space.

Golden Gate

Henry F Keyes

The only differences in a hundred years here appear to be man-made.

Entering the Park

"Crossed the western boundary of the Yellowstone Park at just 2 P.M. - Rode 4 miles to the Madison River and then turned from the road and camped at its banks"

-Keyes Journal August 2, 1899

A Stunning View

"We then hitched up and started for Mount Washburn. We left the down Ravine Road to our left and went up the hill like pilgrims. We all marveled at the road scored out of solid ledges and wondered what it had cost the government. On top, we found plenty of old snow and some new drifts. Altitude ten thousand and two hundred feet. Yellowstone Lake was in sight. We pulled to Tower Falls and camped."

-Hoff Journal Sept 8, 1908

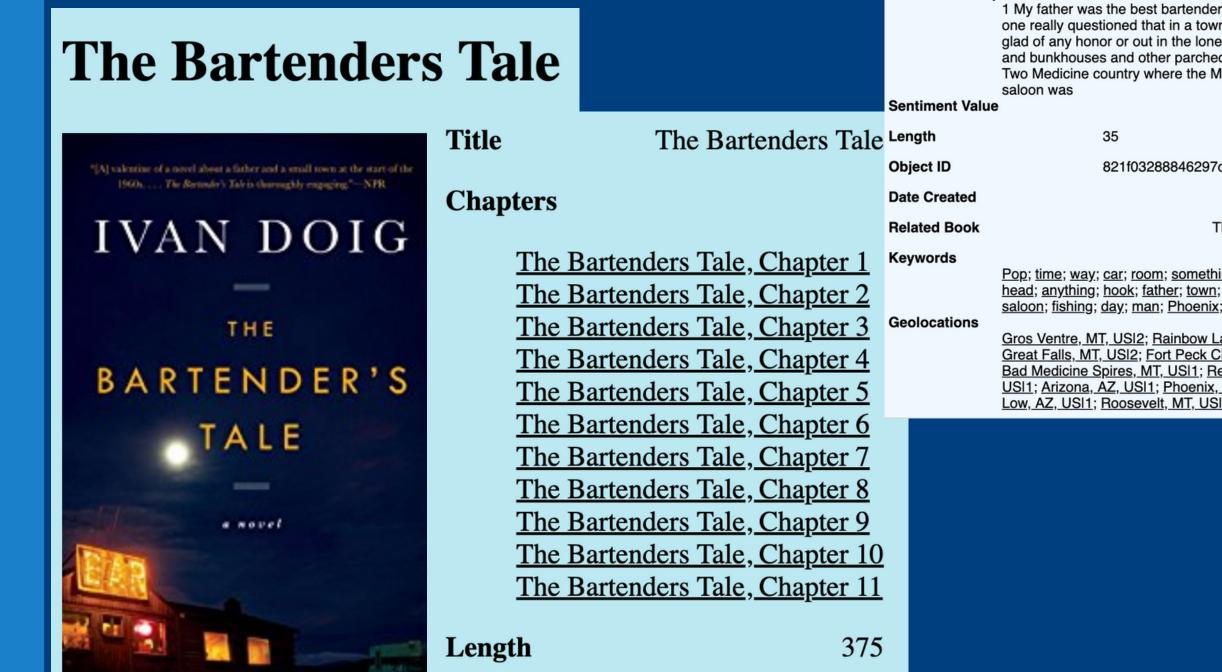## Semantic Analysis of Ivan Doig's Complete Works

Ivan Doig
American author and novelist
Presented by Montana State University's Special Collections

Books
This House of Sky
English Creek
The Whistling Season
Work Song
Prairie Nocturne
Heart Earth

- Daniel Laden brought a number of Natural Language Processing (NLP) techniques into an app that lets you browse Doig's fictional world in unexpected ways
- Character mapping across each book shows occurrences of people in Doig's fictional world
- Sentiment analysis allows users to find chapters that match a feeling
- Entity recognition of placenames/landmarks enabling search for these entities
- Collaborative filtering of works based on keyword, sentiment, character occurrences, landmarks and placenames used to recommend similar works

The Bartenders Tale

IVAN DOIG

THE BARTENDER'S TALE

a novel

Title	The Bartenders Tale
Chapters	

The Bartenders Tale, Chapter 1
The Bartenders Tale, Chapter 2
The Bartenders Tale, Chapter 3
The Bartenders Tale, Chapter 4
The Bartenders Tale, Chapter 5
The Bartenders Tale, Chapter 6
The Bartenders Tale, Chapter 7
The Bartenders Tale, Chapter 8
The Bartenders Tale, Chapter 9
The Bartenders Tale, Chapter 10
The Bartenders Tale, Chapter 11

Length	375
Date Created	May 28, 2018

Title	The Bartenders Tale, Chapter 1
Raw Text Example	1 My father was the best bartender who ever lived No one really questioned that in a town like Gros Ventre glad of any honor or out in the lonely sheep camps and bunkhouses and other parched locations of the Two Medicine country where the Medicine Lodge saloon was
Sentiment Value	positive apathetic
Length	35
Object ID	821f03288846297c2cf43c34766a38f7
Date Created	April 30, 2018
Related Book	The-Bartenders-Tale
Keywords	Pop; time; way; car; room; something; bar; Medicine; head; anything; hook; father; town; things; kind; saloon; fishing; day; man; Phoenix;
Geolocations	Gros Ventre, MT, USI2; Rainbow Lake, AZ, USI2; Great Falls, MT, USI2; Fort Peck Chapel, MT, USI1; Bad Medicine Spires, MT, USI1; Red Saddles, AZ, USI1; Arizona, AZ, USI1; Phoenix, AZ, USI1; Show Low, AZ, USI1; Roosevelt, MT, USI1;

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