# Co-Writing Screenplays and Theatre Scripts with Language Models An Evaluation by Industry Professionals

Докладчик:

Федорова Анна, БПМИ-191

#### Схема сюжета

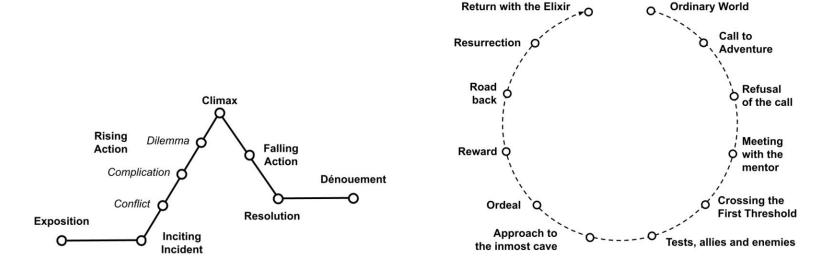


Fig. 2. Illustrations of two narrative structures employed in this study. Left: Gustav Freytag's pyramid. Right: Hero's Journey or *Monomyth* using Vogler [110] formulation.

## Иерархическая генерация в Dramatron

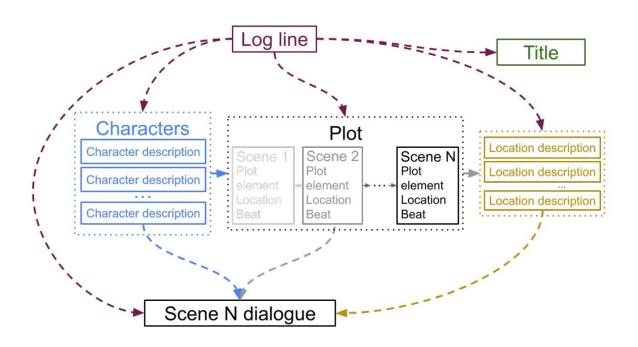


Fig. 1. Dramatron's Hierarchical Coherent Story Generation. Dramatron starts from a log line to generate a title and characters. Characters generated are used as prompts to generate a sequence of scene summaries in the plot. Descriptions are subsequently generated for each unique location. Finally, these elements are all combined to generate dialogue for each scene. The arrows in the figure indicate how text generated is used to construct prompts for further LLM text generation.

## Пример работы Title Prompt в Dramatron

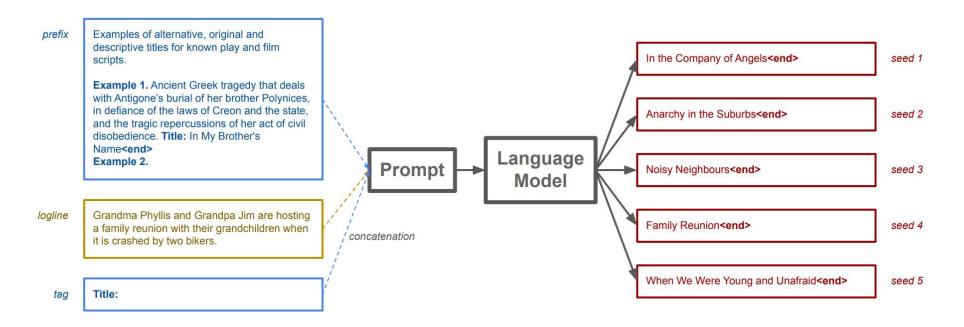


Fig. 3. Illustration of the prompting setup for the language model, with user- or Dramatron-generated prompt being concatenated to a *prefix* and decorated with *tags*. Several title outputs are generated for different random seeds, each ending with *tag* <**end**>.

# Оценка работы Dramatron

Краудсорсинг

Стандартная оценка сгенерированного текста

Оценка экспертов

#### Положительные моменты

- Многим экспертам понравилась система иерархической генерации, а также возможность и активно участвовать, и просто позволить системе генерировать, исправляя недочеты в конце.
- Может использоваться для вдохновения, помощи в построении мира, генерации шаблонных сценариев.
- Некоторых экспертов заинтересовали сбоев, повторения и циклы в диалогах.

## Отрицательные моменты

- У модели есть склонность к сексизму и эйджизму.
- Всё те же повторения и циклы в диалогах.
- Есть проблемы с логикой, мотивацией персонажей, дополнительными смыслами, а также с возможностью поставить написанное на сцене.
- Замечания к стуртуре:
  - Сложно формулировать log line
  - Диалоги генерируются параллельно, из-за чего часто не связаны друг с другом

# Впечатления экспертов в цифрах

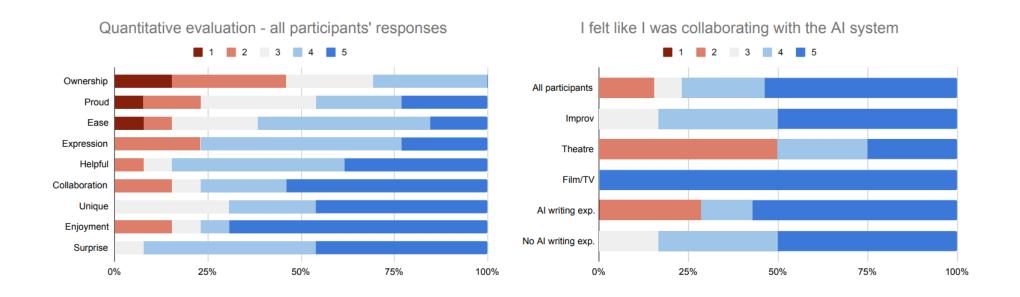


Fig. 5. Participants responses to the quantitative evaluation, on a Likert scale from 1 (strongly disagree) to 5 (strongly agree)

## Изменения экспертов в сценариях

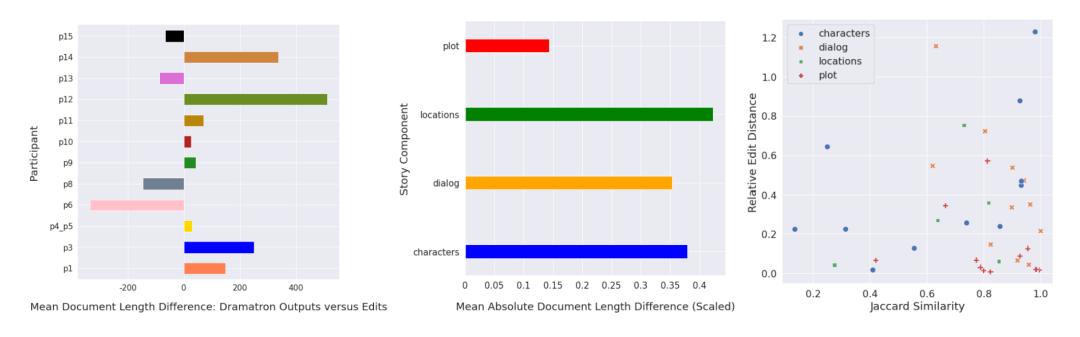


Fig. 6. Left: Mean length difference between Dramatron output and final edit, by participant. Middle: Normalized mean absolute length difference by story component. Right: Scatter plot of relative edit distance and Jaccard similarity for edited texts versus original Dramatron outputs.

## Визуализация сценариев Dramatron



Fig. 4. (LEFT): Concept art used for a narrative test prototype of a virtual actor interpretation of the script *Darren just can't handle the temperature of his soup* created by Participant p13. Used with Permission from Transitional Forms. (RIGHT): Photo of human actors interpreting the script *Cars: The Day The Earth Stood Still* as part of the *Plays By Bots* series of performances of scripts co-written with Dramatron and director Participant p1. Used with Permission from Rapid Fire Theatre.

#### Пример сценария от Dramatron

TEDDY

I think your father-in-law will take care of you.

GERALD

What are you talking about?

TEDDY

Aren't you his son-in-law?

GERALD

Yes, I am.

TEDDY

Well, I'm sure he'll take care of you.

GERALD

What do you mean, he'll take care of me?

TEDDY

That's his business.

GERALD

Stop this! Stop it! What are you getting at?

TEDDY

Just what I said. Your father-in-law will take care of you.

GERALD

I don't get you. I don't get you.

TEDDY

Gerald, Gerald. (He turns
away.)

#### Пример сценария от Dramatron

TEDDY

I don't understand you.

**GERALD** 

You don't? You can't be that stupid.

TEDDY

I'll be what I am, Gerald, and you'll be what you are.

**GERALD** 

You son of a bitch! I'll sue you! You'll pay for this! I'm not going to take any more shit from you!

TEDDY

You're going to take a lot more from me, Gerald.

GERALD

What's that supposed to mean?

TEDDY

Just what I said.

GERALD

I'll sue you.

TEDDY

I don't think you will, Gerald. You're not going to sue anybody.

GERALD

I will.

TEDDY

Why are you going to sue me?

GERALD

Because I'm not going to take any shit from you.

TEDDY

You're taking it from me right now.

**GERALD** 

You son of a bitch! And I'm not in the habit of being stolen from by my own cousin.

LOLA

Your cousin?

**GERALD** 

I'm Teddy's cousin. Didn't you know?

TEDDY

This is gonna be a hell of a day.

SCRIPTS RUNS OUT HERE - REST OF PLAY IS IMPROVISED BY ACTORS

