

Story Generation

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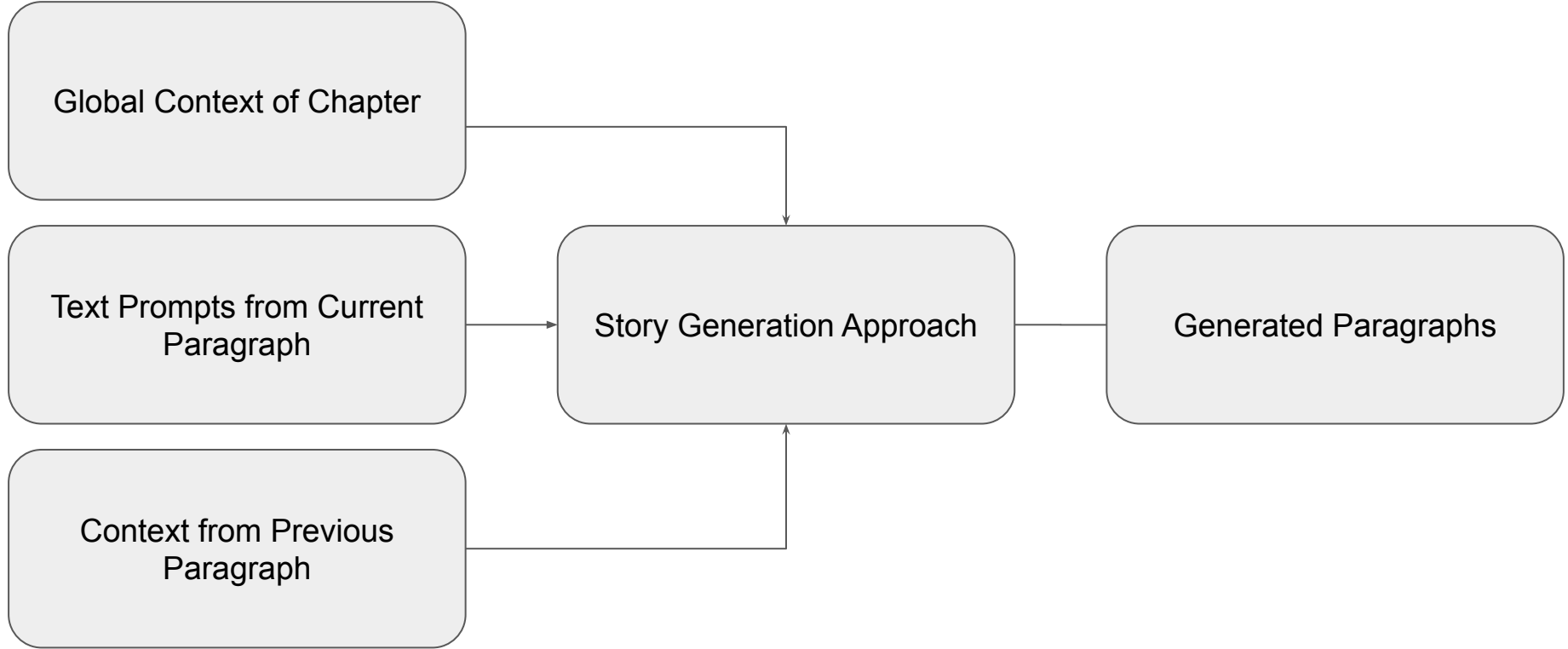
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Discussion Points

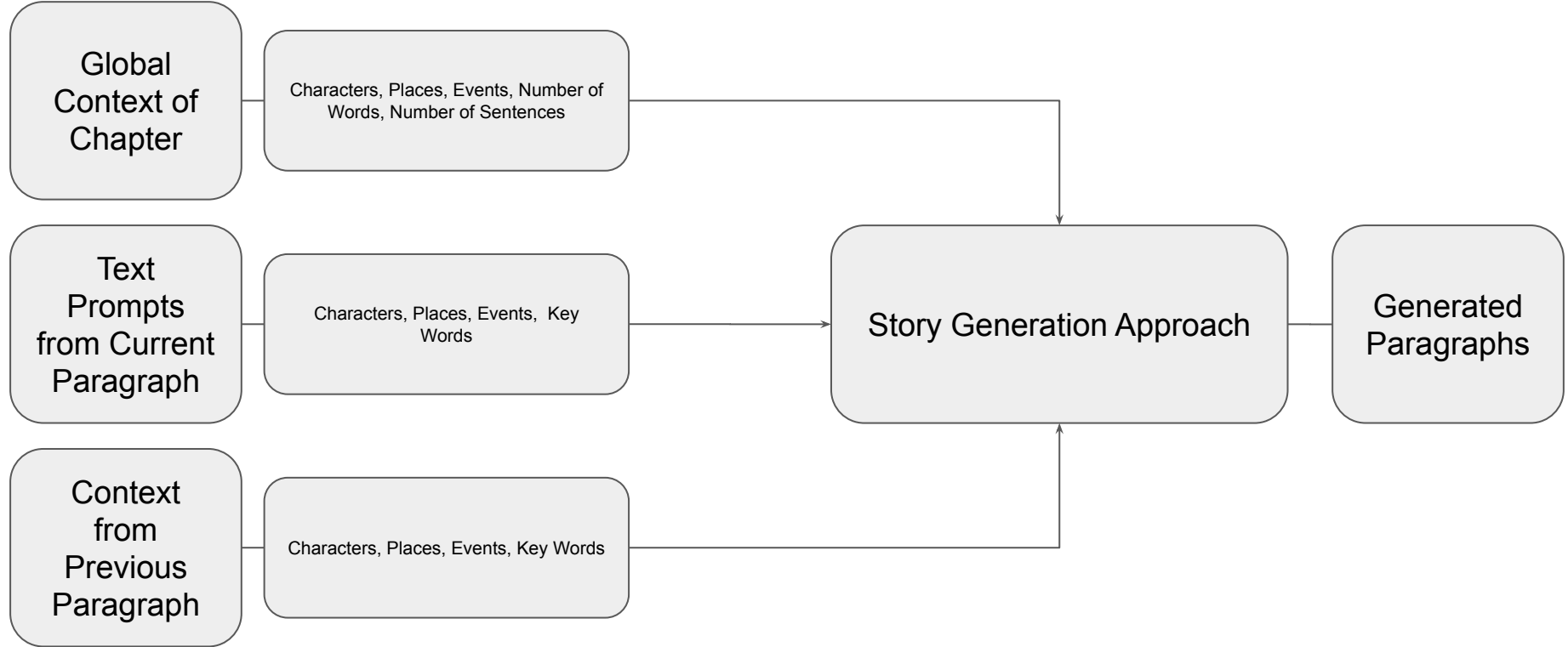
- General System Diagram
 - Underlying Principle of our Approach.
- Methodology
 - How we create models?
 - How we use those models to generate story?
- Key Contributions
 - What we contributed through this project?
- Key Characteristics
 - Why our approach is special?
- Wrap-Up
 - Summary

General System Diagram

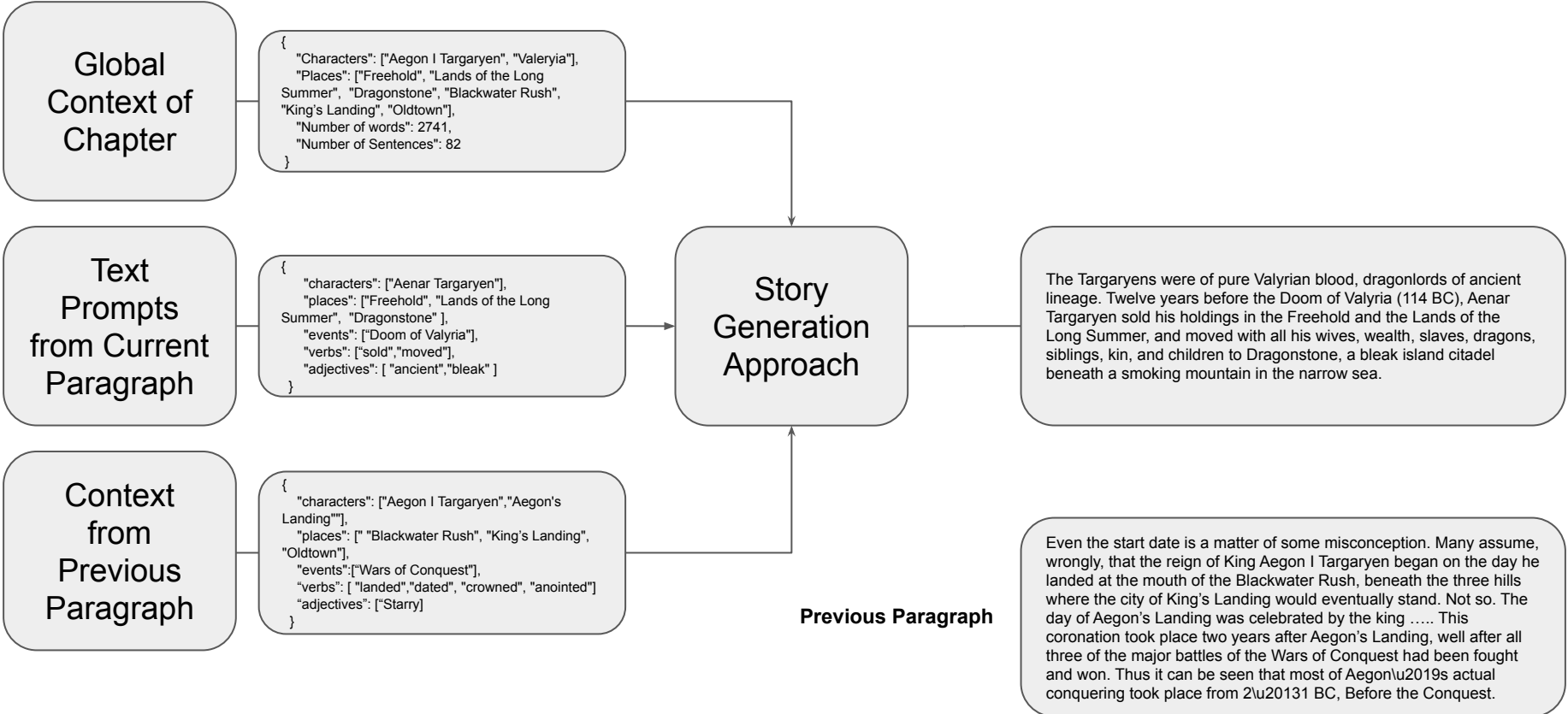
General System Diagram



General System Diagram



General System Diagram



Methodology

Keeping our life Simple

Training Process

Pretrained Model for Story Generation

Dataset - Not Known

Model Architecture - GPT 3.5

Loss Function - Cross Entropy

Metrics - Accuracy

Summary - Blackbox - Not Explicitly Designed
for Story Generation

Generation Process

Current
Paragraph

Previous Paragraph

Context
Prediction Model

Context
Prediction Model

Story Generation Model

Generated Paragraph

Making our life Interesting

Training Process

Fine Tune Story Generation Model with Fire and Blood Book + Wikis

Dataset - Curated Data from Fire and Blood

Model Architecture - GPT3

Loss Function - Cross-Entropy

Metrics - Accuracy

Summary - Fine Tuning of Model is costly and memory intensive but generates better qualitative results

Generation Process

Current Paragraph

Previous Paragraph

Context Prediction Model

Context Prediction Model

Story Generation Model

Generated Paragraph



We will be Fine!

Training Process

Fine Tune Story Generation Model with Game of Thrones Books + Wikis

Dataset - Curated Dataset from Game of Thrones

Model Architecture - GPT3

Loss Function - Cross Entropy

Metrics - Accuracy

Summary - Under Exploration - Would like to Continue our Investigation on this.

Generation Process

Current Paragraph

Previous Paragraph

Context Prediction Model

Context Prediction Model

Story Generation Model

Generated Paragraph

Key Contributions

Key Contributions

Proposed an Approach to Generate Cohesive Natural Stories

Analysis of Generated Stories at Paragraph Level, Chapter Level and Book Level

Manually Cleaned the Fire and Blood Dataset

Extracted, Cleaned and Structured Game of Thrones Dataset

Develop and Optimized Scripts for Fine Tuning of Pre-trained Models

Develop Script for Iterative Story Generation Approach

Curated Dataset

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{  
  "paragraph_id": 0,  
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histories of Westeros have used Aegon\u2019s Conquest as their  
touchstone for the past three hundred years. Births, deaths,  
battles, and other events are dated either AC (After the  
Conquest) or BC (Before the Conquest).",  
  "valid": 1.0,  
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Automation + Manual Verification

Valid = 1.0 Manually Verified

Easy to Expand Other Keys for Example
Nouns, Key Words, Phrases

Key Characteristics

Take a Moment to Guess!!

Guess which one is generated?

Aegon I Targaryen was a warrior of renown, the **greatest Conqueror in the history** of Westeros, yet many believe his most significant accomplishments came during times of peace. The Iron Throne was forged with fire and steel and terror, it is said, but once the throne had cooled, it became the seat of justice for all Westeros.

Aegon I was determined to bring former enemies into the fold in order to **reconcile the Seven Kingdoms to Targaryen rule**. He made great efforts and travelled far across Westeros, urging people at every corner of the realm, from Duskendale and Gulltown to Evenfall Hall and Tarth, to serve him. His famed courage shown through fire and steel had cemented his renown even before he sat on the Iron Throne with Rhaenys by his side. As people witnessed his greatness first-hand, many were encouraged by Good Queen Alysanne's leal pardons or King Jaehaerys' conquests during The Great Council of Harrenhal, so much so that Aegon received gifts from all across - from a Redwyne girl sending Aegonfort's stones for building-up Dragonstone castle, or a bastard born man gifting Visenya's Hill for turning it into a royal residence - as a token of their former loyalties soon turned loyalty to House Targaryen.

Aegon I Targaryen was renowned for forging something greater than himself. He cooled six realms of deadly fire with his sword made from steel, he rode a dragon that had terrorized Westeros for centuries, and on the Iron Throne of Westeros he sat. The significance of his legacy stretched to the far ends of the realm, and **his accomplishments are still remembered as one of the greatest in history**.

The **reconciliation of the Seven Kingdoms to Targaryen rule** was the keystone of **Aegon I's** policies as king. To this end, he made great efforts to include men (and even a few women) from every part of the realm in his court and councils. His former foes were encouraged to send their children (chiefly younger sons and daughters, as most great lords desired to keep their heirs close to home) to court, where the boys served as pages, cupbearers, and squires, the girls as handmaidens and companions to Aegon's queens. In King's Landing, they witnessed the king's justice at first hand, and were urged to think of themselves as leal subjects of one great realm, not as westermen or stormlanders or northmen.

Take a Moment to Guess!!

Generated - Real

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Key Characteristics of Our Model

Theme - Follows general Theme of Paragraphs

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Key Characteristics of Our Model

Creativity - Introduce New Characters and Places in Storyline

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Key Characteristics of Our Model

Consistency - Maintains a Consistent Storyline

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Relations - Develops Relations Between Characters

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Key Characteristics of Our Model

Demonstrative - Develops Storyline to help Imagination of the Fictional World

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Wrap-Up

- Well Thought Approach for Story Generation
- Scripts for Data Creation, Model Creation and Result Analysis.
- Explored GPT2, GPT3 and GPT3.5 Model.
- Key Characteristics of Approach
 - Theme
 - Creativ
 - Consistent
 - Relational
 - Demonstrative
- Quantitative Analysis is Provided in the Report.