## Report (task-2)

Paper title: The Role of Underlying Structure in Text Generation

Paper link: <a href="https://aclanthology.org/W90-0114.pdf">https://aclanthology.org/W90-0114.pdf</a>

# **Summary:**

The study offers George, a suggested system that arranges text prior to creation and centers on the functional hierarchy knowledge base paradigm. It makes the case that text structure is essential to meaning transmission and ought to be managed by the message's intended recipient. In his critique of Hovy's strategy, the author emphasizes the significance of communication's underlying structure.

### **Contribution:**

The emergence of George, an expansion of the MACH-III system that guides text structure prior to production using a functional hierarchy knowledge base, is the primary contribution. The study examines the function of text organization and highlights how important it is to communicate the connections between different information elements. It compares and contrasts this with Hovy's technique and suggests an alternative.

# **Methodology:**

George integrates expert system knowledge into a tree-like structure by using a functional hierarchy knowledge base. The selection of Rhetorical Structure Theory (RST) representations for text organization is guided by this functional hierarchy. For the expert troubleshooting system, the system dynamically develops criticisms by arranging information into RST structures, which are subsequently utilized for text production.

### **Conclusion:**

The element attempting to communicate the message should be given priority when it comes to text organization. George is touted as a versatile and efficient text generation system that enables better-flowing content by leveraging functional hierarchy and RST.

#### **Limitations:**

### 1st:

The study acknowledges that it is still unclear which Rhetorical Structure Theory (RST) structure is best for a given message. Although the functional hierarchy plays a major role in the selection process, the choice might be more difficult due to minute differences in the underlying RST representation. The article acknowledges the need for more research to fully comprehend how variations in RST impact surface structure and the factors that drive these choices.

#### 2nd:

The study emphasizes how difficult it is to create texts with several paragraphs. It points out that producing quality content involves more than just piecing together cohesive paragraphs. Determining the

text's overall structure while taking interparagraph interactions and emphases into account is difficult. The study recognizes that while RST may describe intraparagraph and interparagraph structures, there are still unresolved questions about multiparagraph text organization and how it impacts the final piece of writing. **Synthesis**:

George's strategy tackles the difficulties of text production by combining RST with functional hierarchy. It seeks to generate more relevant and cogent content by introducing the knowledge base paradigm into the structuring process. The study outlines the benefits of this method over Hovy's and recommends topics for further study.