

Genre and Multimodality: Multimodal Analysis of the Dutch National Ballet

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Abstract

The present paper analyzes multimodal features on a theatre website. Anchored in the methodology of John Bateman, the paper employs the GeM model to explore the interconnection of the visual and textual modes present on the Dutch National Opera and Ballet's website, with a special emphasis on the website's layout and its changes induced by the user's navigation across the multimodal document. The paper also focuses on the major issues and constraints of applying Bateman's model, originally created for print media, to the novel genre of theatre websites, and it attempts to determine the optimum and most effective application of the model in this particular genre.

Keywords: genre, institutional discourse, layout, multimodal analysis, multimodality, website

This article is an outcome of the Student Grant Competition grant, project no. SGS20/FF/2016 *Žánry a nová média - Genres and New Media*.

1. Introduction

The vibrant world of theatre and dance has undergone profound changes over the past several decades, both in its artistic development and promotional practices. Once relying mainly on traditional means of attracting potential audiences, such as leaflets or newspaper and TV advertising, theatre and dance institutions have recently adopted the World Wide Web as the primary medium of their promotion. Although theatre performances may not be regarded as typical tradable products, the traditional opera houses – challenged by other forms of entertainment – have now adopted the affordances of new technologies, giving

rise to the novel genre of online presentations of theatres. While the global reach of the Internet enables theatres to engage the interest of more viewers than ever before, it also provides a powerful platform effectively combining textual (verbal) and visual elements and thus introducing new and refreshing possibilities of communication with potential audiences.

The multimodal character of documents, and the gradual decline of the verbal mode's dominance, have motivated extensive research of the typical features and mutual interplay of the modes as well as the new literacies shaped by the facets of web-mediated communication (Kress 2010; Kress & van Leeuwen 2006) and the analytical methods for their description (Bateman 2008; Thibault & Baldry 2006). The present paper applies Bateman's Genre and Multimodality (GeM) model, as extended by Hiippala (2013), as the most suitable analytical tool for exploring multimodal websites; the research aims to contribute to the further application of the model, which has so far been used primarily for analyzing static printed documents and films.

2. Corpus

The present article analyzes the characteristic features and constraints of applying the GeM model to the new, emerging genre of opera house websites – which are represented in the article by the Dutch National Opera and Ballet's website. The analysis of the website is limited to the English versions of two “gateway” pages, i.e. the Dutch National Opera and Ballet's main homepage (referred to below as the theatre's homepage) and the ballet company's homepage (see Figure 1); this enables us to take a unified approach to what is otherwise a very heterogeneous website structure and to carry out a more detailed qualitative analysis of selected data. The choice of webpages was also motivated by the expected high occurrence of multimodal features and combinations of graphic and textual elements; these seem to be most prominent on the “gateway” pages, where the content of the website is presented in the form of concise graphic and textual “appetizers”.



Fig. 1: The theatre's homepage

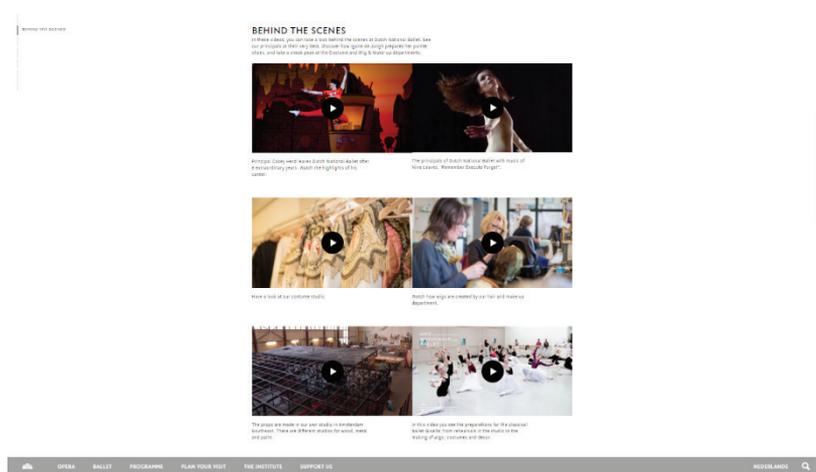


Fig. 2: Ballet company's homepage – due to the length of the scroll, only the “Behind the scenes” section is presented

3. The Genre and Multimodality Model

Although originally created for printed documents, Bateman's Genre and Multimodality (GeM) model attempts to offer a single set of analytical tools for describing the structure of any multimodal document and observing its deployment of semiotic modes. Using genre as its foundational notion, the GeM model strives to provide reproducible and evaluable analyses of diverse multimodal documents based on an empirical approach (Bateman 2–15).

The Genre and Multimodality model relies on four principal layers (each with their own basic units) and their mutual relations, enabling the analyst to systematically explore and describe the document from various perspectives and providing identifiers for further cross-referencing analysis:

- a) the base layer, which attempts to identify the basic elements that occur on the webpage and are to be analyzed in other layers;
- b) the layout layer, which studies groupings of base units and their structure, location, as well as their typographic and graphic features;
- c) the rhetorical layer, which describes the roles and relations of rhetorical segments and draws on Rhetorical Structure Theory by Mann and Thompson, later extended by Bateman (see section 3.3);
- d) the navigational layer, which analyzes how the reader is navigated throughout the document using navigational elements such as pointers or indices (Bateman 108).

The methodical segmentation of the data into four layers, as well as the annotation allowing cross-referencing across individual layers, enables us to describe each document from various perspectives and provides the basis for multimodal document corpora.

3.1 Base layer

The structure of the analytical model is grounded in the base layer, whose primary purpose in the analysis is described by Bateman (2008) as follows:

[...] to identify the minimal elements which can serve as the common denominator for interpretative and textual elements as well as for layout elements in any analysis of a page or document. Everything which can be seen on each page of an analysed document should be assigned to some base unit. (110)

The base units represent the smallest units that are present on the page and that are clearly separated from their surroundings by their layout. The clear specification of base units reflects the empirical approach of Bateman's model and enables it to provide a high degree of granularity. The base units thus serve as an indispensable part of the GeM structure and as the primary analytical units which may be easily referred to in other layers of the model. The set of Recognized Base Units (hereafter "base units") includes textual (strictly verbal) elements and visual (graphic, non-verbal) features, as defined by Bateman (110-111) below:

Table 1: Recognized Base Units of GeM

sentences, emphasized text, floating text, running heads
headings, titles, headlines
table cells, list items, items in a menu, list labels, footnote labels
page numbers, icons
sentence fragments initiating a list
footnotes (without footnote labels)
photos, drawings, diagrams, figures (without caption)
captions of photos, drawings, diagrams, tables
text in photos, drawings, diagrams
horizontal or vertical lines which function as delimiter between columns and rows
lines, arrows, polylines which connect other units

Although the selected corpus provides a wide range of base units on both homepages, the segmentation of the webpage into individual base units seems to be more dominant on the ballet company's homepage (see the data provided in the table below), which corresponds to the different roles played by both types of homepages.

Table 2: Distribution of base units

webpage	base units	text (headlines/ sentences)	visual (photos/graphics)
theatre's homepage	16	9 (9/0)	7 (1/6)
ballet company's homepage	111	62 (36/26)	49 (12/25)

While the theatre's homepage functions predominantly as a "shop window" promoting the website's content and enticing the reader to enter the website, the ballet company's homepage serves primarily an informative communicative purpose. Both analyzed homepages demonstrate the multimodal character of the website, which regularly combines textual features with photos, videos and icons. Although the ratios found in both the theatre's homepage and the ballet company's homepage (9:7 / 62:49 respectively) indicate a slight prevalence of textual (verbal) features on the website, the textual units are mostly limited to the section headlines or short titles serving as generic links in navigation bars. Moreover, the theatre's homepage is dominated by a gif covering the whole webpage (see Figure 1) and thus creating the most salient element on the page. It may be argued that the pictures and videos presenting the dancers and performances can be regarded as an essential means of attracting readers, as they arouse the interest of potential audiences and entice them to enter and further explore the institution's website.

The high occurrence of the base units on the ballet company's homepage may be attributed to the presence of longer texts and section headlines with specific links. They do not, however, result in excessive fragmentation of the webpage, as the base units are visually interconnected into larger structures (paragraphs, text-image combinations). The primary purpose of the segmentation of the data into base units thus lies primarily in their clear annotation and their deployment as default units in other layers.

3.2 Layout layer

As the base units are usually grouped into larger structures, the layout layer provides an analytical tool enabling us to recognize how this highly heterogeneous material is placed and visually clustered on a webpage. The layout layer is composed of three main parts (Bateman 115):

- a) layout segmentation, which identifies the minimal layout units distinguishing typographic, graphic and composite layout elements;
- b) realization information, which describes the base units' appearance in relation to their typographic (font family, size, colour, etc.) or graphic features (size or type: image, video, drawing, etc.);
- c) layout structure, which identifies larger structures formed by layout units, including the area model which represents the physical layout of the document, i.e. the exact position of each layout unit on the page.

The Dutch National Opera and Ballet’s homepages confirm the tendency of base units to be grouped into larger structures which are identified as visually motivated chunks through the reduced image resolution of the webpage (for more details see Bateman 2008 and Reichenberger et al., 1995). The resulting organization of the layout units is shown in the layout structure represented by a tree diagram grouping the individual portions of the document. For the purpose of the analysis, the entire webpage is identified as the largest segment – the layout root, which describes the entire document and further branches into layout chunks, represented by the sections of the webpage – and the individual layout leaves, which function as terminal nodes in the layout tree. A model layout structure for a video layout leaf is presented below. Figure 2 represents a part of the “Behind the scenes” layout chunk L1.4 (for the whole layout chunk see Figure 1), which is divided into two layout leaves: L1.4.2.1 (Video1 complex) and L1.4.2.2 (formed by the accompanying text). It was also proposed to record the “sub-leaves” L1.4.2.1a (the video itself) and L1.4.2.1b (the “Play” button) for the purpose of further analysis in the remaining layers.



Fig. 3: Layout structure of a video layout leaf (print screen of the section included)

The reoccurring positioning of both verbal and visual layout units is supported by the underlying grid, which unifies the visual field and contributes to the regularity of the webpage design (Bateman 83). Both homepages deploy a modular grid which divides the webpage using horizontal and vertical lines and thus creates a matrix of cells – modules – where the multimodal material may be placed (Samara 27). The layering of the content of the page also encourages the use of a hierarchical grid, which reflects the flexibility of placement and the dynamic character of the page (see Figure 3).

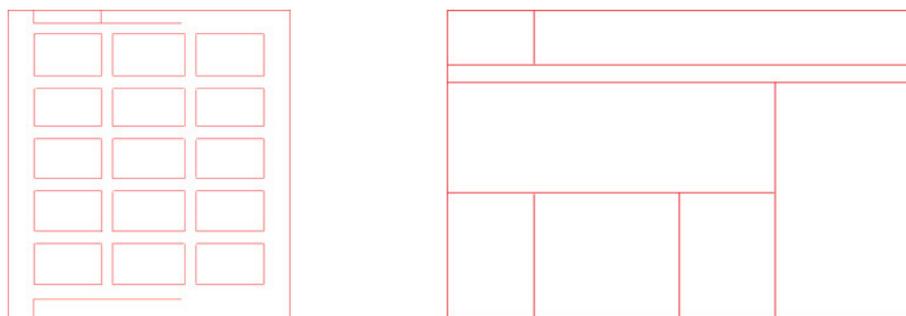


Fig. 4: Examples of modular (left) and hierarchical (right) grids according to Bradley (2016)

The regularity and rhythm of the webpages' layout is additionally achieved by the parallel structuring of the layout units, which prevents the pages from becoming over-segmented (Tomášková 170). The parallel sets of units were more prominent on the ballet company's homepage, which reflects the greater segmentation of the webpage as well as its predominantly informative communicative purpose (the identical navigation bars are not included in the analysis). The ballet company's homepage presents four different sets of parallel layout units (6+2+2+3) which show similarities in their structure: the majority of the units are realized as a combination of textual and visual features (photo + accompanying/descriptive text, video + descriptive text), while the theatre's homepage, due to its very low degree of segmentation, does not display any parallel units at all.

While the use of parallelism and grids contributes to the visual unification of the webpage and primarily helps the readers to identify the relationships among individual units more clearly, the area model provides the information about the spatial organization of the textual and visual units in the layout structure. Unlike social semiotic approaches (e.g. Kress and van Leeuwen), the area model does not predefine any function for a particular layout area, but rather plays a fundamental role in the study of the cross-layer character of the GeM analysis and the rhetorical relations among individual layout units (Hiippala 58–60).

The area model of the "Behind the scenes" section of the ballet company's homepage is characterized primarily by the multilayer character of the webpage. While the superimposed layer of the bottom and side-scroll navigation bars is marked in red (see Figure 4), the surface layer (marked in black) demonstrates a very regular rectangular organization, centred in the middle column of the webpage. The simple and clearly arranged area model reflects the uncluttered design that is typical of the entire ballet company's homepage, which enables the reader to fully concentrate on the information provided.

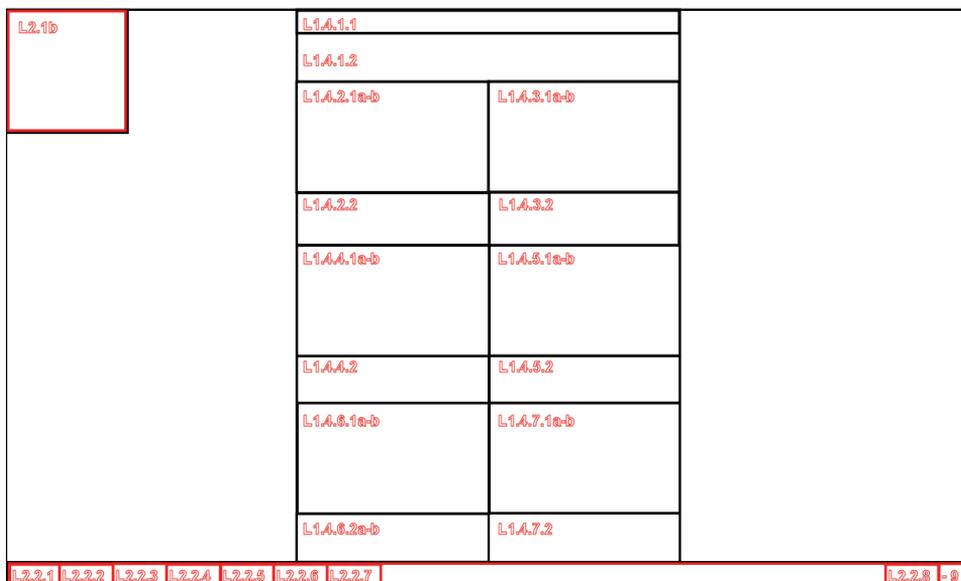


Fig. 5: Area model of the “Behind the scenes” section (with identifiers of individual layout/rhetorical units)

3.3 Rhetorical layer

The aim of the rhetorical layer, the third part of the GeM model, is to identify how the textual and visual elements combine to achieve the intended communicative purpose of the entire document (Bateman 144). The rhetorical layer is grounded in Rhetorical Structure Theory – initially developed by Mann and Thompson, who defined a set of rhetorical relations which may hold between individual portions of text (so-called text spans), and which are recursive in nature. While the asymmetric rhetorical relations refer to the configurations between a nucleus carrying the basic information and a satellite which provides additional information, the symmetric relations hold between spans that are of equal importance. As an extensive description of all relations is not possible within the scope of this article, only the ELABORATION, ENABLEMENT, JOINT and RESTATEMENT relations will be described in this section (for more detailed definitions see Mann and Taboada).

Rhetorical Structure Theory which relies on the sequential order of the text spans. Bateman therefore proposes the extension of the model, which enables us to analyze the relations between spans that are adjacent in any direction. Moreover, the preference of symmetric (multinuclear) relations is given to the combinations of multimodal elements to avoid assigning a nuclear/satellite role to a particular visual or verbal element (Bateman 158–162).

The recursive character of the rhetorical relations is demonstrated on the ballet company’s homepage, where individual sections of the webpage (“Behind the scenes”, “News”, “Company”, etc.) may be identified as an ELABORATION relation. In the ELABORATION relation, additional information or detail is provided for a nucleus,

which we can observe e.g. in the expansion of the headline by an introductory text to the “Dutch National Ballet” section. As the individual sections share the ENABLEMENT features (which allows readers to perform the action described by the nucleus), they are at the same time involved in the multinuclear JOINT relation, which links spans with the same function. The same pattern may be observed at the lower level of segmentation, as seen in the rhetorical structure of the “Behind the scenes” section (see Figure 5).

The central segment of the above-mentioned section is the introductory sentence of the paragraph (S1.4.1.2a), which enters into an ELABORATION relation with the following sentence (S1.4.1.2b). The segment is further elaborated by its satellites – six spans of similar structure (video + descriptive text). While the spans offer additional, more specific information on the introductory paragraph, they may also be considered ENABLEMENT spans, as they clearly allow readers to truly “look behind the scenes” and provide readers with the technological affordances (i.e. videos) which enable them to perform actions described in the text itself (“see our principals”, “take a sneak peek”) and to discover what usually remains hidden from audiences.

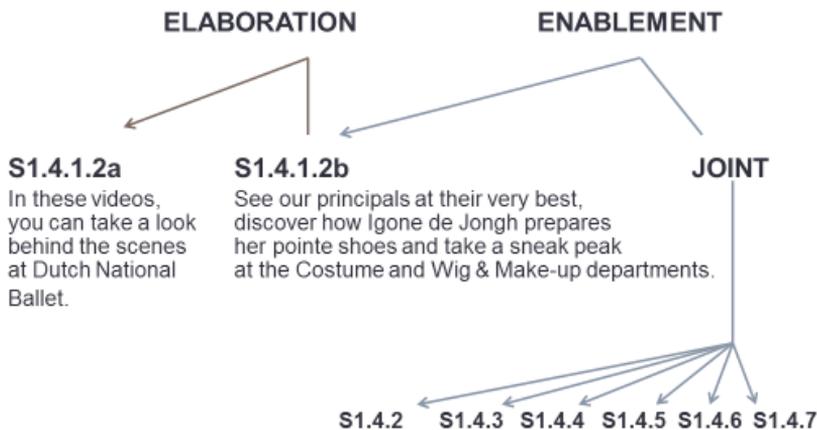


Fig. 6: Rhetorical structure of “Behind the scenes” section

The multimodal character of the ballet company’s homepage and the regular combination of textual and visual elements accentuates the preference for the RESTATEMENT relation mainly in the video-text complexes of the “Behind the scenes” section. The proximity of the video and the accompanying text suggests that they form one complex unit and as such should be interpreted together. The RESTATEMENT enables us to see them both as nuclei of the relation, and suggests that the content of the textual and visual units is re-expressed. Other forms of visual elements, especially icons such as the “Play” button in the video-text span, may also enter the ENABLEMENT relation with the video span, thus allowing the reader to actively use the technological aspects of the page (see Figure 6).

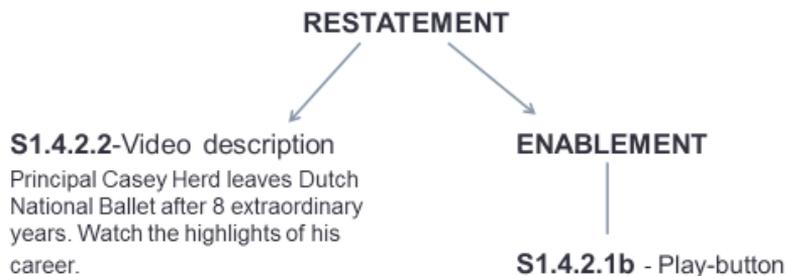


Fig. 7: Rhetorical structure of S1.4.2.1a-behind-the-scenes-video1 segment

The rhetorical structure of the “Behind the scenes” section represents the recursive rhetorical organization of the individual sections on the ballet company’s homepage, where the introductory paragraph is typically elaborated by a series of spans, and where photos/videos enter the RESTATEMENT relation with their respective accompanying texts. The frequent use of ELABORATION and RESTATEMENT relations may, in a sense, reflect the gradual unfolding of the content on websites that are built as a network of interconnected hypertexts, simultaneously mirroring the parallel organization of the rhetorical relations that correspond to the webpage’s layout structure.

3.4 Navigational layer and layout changes

The cross-layer character of the GeM model is exemplified mainly in the navigation layer, which identifies the segments that tell readers how to navigate through the document and connect the texts with their continuations elsewhere on the website. The navigational units comprise pointers, entries and indices that refer to the relations between rhetorical segments and layout chunks either within one page, across the whole document or outside it (Bateman, Henschel and Delin 118). While the navigation layer of the original GeM model was based primarily on the use of page numbers and “document deictic expressions” such as pointers (Henschel), web-mediated documents largely rely on links as the means that direct how the readers consume the document. Due to space limitations, the present paper focuses specifically on the layout changes which result from the readers’ active usage of the web-mediated document.

Unlike traditional printed documents, where pointers serve only as navigational cues, the readers’ interaction with the document through links may result in visible alterations of the webpages’ layout structure and the area model. The Dutch National Ballet and Opera’s website presents a great variety of layout changes, including simple underlining, contrastive colouring or colour covering of the activated segments, as well as scrolling-down (or side-scrolling) menus of navigation bars.

As web-mediated documents allow the presentation of units on different layers within a single webpage, the superimposition of individual layout units may be seen as another typical feature of layout alterations resulting from the navigation on the website. The activation of a bottom navigation bar link on the theatre’s homepage divides the page into two

layout chunks: the gif presenting the performance is shadowed, and the second navigation bar/column is superimposed over the bottom half of the webpage (see Figure 7) so that one layout unit partly or fully covers the underlying ones. The frequent reorganization of the layout supports the lively and ever-changing nature of the website, while the use and regular alteration of bright colours (orange, light green, light blue) for colouring the segments creates a striking contrast to the generally simple black and white typographic elements

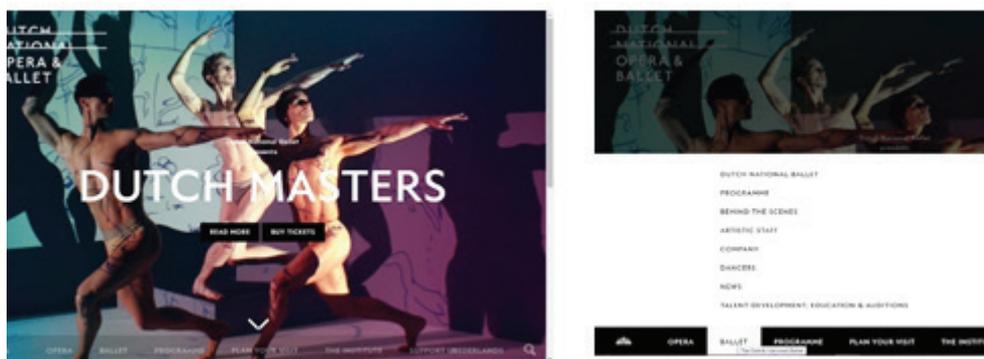


Fig. 8: Layout change on the homepage

4. Conclusion

The inherently multimodal character of theatres' websites requires a complex approach to the analysis of the both visual and verbal elements present on the webpages. Bate-man's Genre and Multimodality (GeM) model provides a suitable analytical tool for the systematic analysis of the webpages within the scope of the four individual layers as well as in their cross-layer interpretation. Although the model was originally developed for the purpose of analyzing printed documents, its variability and adaptability also enable it to be applied to theatres' websites.

The distinctive affordances of web-mediated documents pose considerable challenges primarily in the analysis of the layout and navigational layers, where the websites' fluidity is most prominent. While overlapping elements are a regular occurrence in print documents, web-mediated genres are characterized by the frequent superimposition of elements, i.e. the presentation of multimodal content on several layers of a webpage. The resulting "layering" of visual and verbal material requires the individual annotation of the features separately for each of the layers as well as their clear distinction in the area model and the realization information if the size, colour or other (typo)graphic features of the elements are modified.

Moreover, the users' navigation throughout the document may visibly alter the layout of the webpage, as manifested especially in the underlining, colouring or side- and down-scrolling of the individual elements. The alteration of the rhetorical layer is rather rare, resulting mainly from the appearance of further textual rhetorical segments if the cursor is placed over them (the examples of such segments were limited to the texts entering the

ELABORATION relation with their accompanying headlines if activated by the user). The current preference for scroll webpages may also impede the unambiguous perception of the layout and rhetorical segmentation, as only a part of the whole webpage may be presented at once. The relations that hold between the segments thus may not be seen clearly, while at the same time this may enable a wider range of their interpretations than originally intended.

The main contribution of Bateman's Genre and Multimodality (GeM) model is manifested in its application to the base and layout layers, where it provides a transparent and systematic segmentation of a webpage which may serve as a foundation for the further analysis of visual and verbal elements as well as their mutual relations. Although the use of the GeM model for a precise interpretation of such relations is rather limited, the model seems to offer effective tools for the analysis of the rhetorical layer owing to Bateman's extension of the original Rhetorical Structure Theory to incorporate visual features (especially images and videos), which enables a deeper analysis of elements that play a crucial part in theatre presentations.

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