

The director's notebook: a video annotation system for theatre

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Context

During rehearsals, the director's assistant takes notes of all stage actions and their changes, using a combination of (1) direct annotation of the text of the play, with markings for "cue points" where stage actions start or end ; (2) notation of actor movements, decor and lighting changes, sound effects, etc. in a codified "blocking notation" language ; and (3) storyboard sketches showing actor positions and movements from the viewpoint of the audience or from the ceiling (floor-plan views).

Objectives

In this Master's thesis, we would like to investigate, prototype and evaluate novel user interaction paradigms for creating such notations digitally from video recordings of the rehearsals, similar to current work in choreography [1] but specially adapted for theatre production [2,3].

Starting from the video recording and the text of the play, the task will be to notate stage actions using a combination of sketching and pen-based annotations [4,5,6].

One difficulty to be overcome is that the annotation must be synchronized with the text and the video. This will require a user interface for playing and pausing the video, turning pages of the text and specifying start and end points of all annotations.

Another difficulty will be to automatically check that the annotation is complete and consistent - such that all stage actions have a well-defined start and end point, and are grammatically correct. One possible solution may be to translate the annotation into a "score" summarizing the states and actions of all actors at all times in the performance in a common time-base [7].

Finally, it should be easy to modify an existing notation, by taking notes only of the changes from one rehearsal to the next one. Thus, the digital notebook should offer a simple user interface for inserting, deleting and modifying existing cue points, blockings and diagrams, with an integrated version control system for showing differences between different versions of the blocking.

This Master's thesis is expected to lead to a PhD thesis on the topic of "rehearsing with virtual actors in augmented reality".

References

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