Past theatre productions: from archive to virtual reconstruction

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Background

Research project on Marivaux's stagings :

- Creations' and creative process' archival documents
- From the 18th to the 21st century
- European and non-European stages

Can we visualize productions from the past?

reconstitution hypothesis

but

documented

historically and philologically well-founded

Corpus

Theatrical staging:

- Performance of a known and preserved theatrical text
- Defined space: stage dimensions and shape
- Information added by: • Set models, costume models, photos...

What kind of documents?

Prompt books

(whose typology differs according to the theatrical traditions of different contexts)

In France: Relévés de mise en scène:

meta-writing: recurring formulas typology definition of: actions, movements, displacements, proxemic situations and mimics

Which steps for reconstruction?

- •studying the documents containing the stage and actors directions essential for imagining the staging as it had been conceived at the time of creation
- comparing the annotations on a performance recording with the indications contained in the staging notes for that performance
- proposing a reference ontology, ordered by categories of actions and spatiotemporal reference points.

Example 1 : a script annotated by an actor (around 1860)

Interreur 3 B 8 9 10 3 Légende Decor · Meubles A = Porte o'appartement Gueridon Porte allant al Inter 2-4-9-11 Fautenil Porte S'entrie 3 - Pelit Canase 5-4-8-10 - Chaise Jalon Loris XV 6 - Cetite table en lague is plans depro Ceajois de deine Meuble Louis XV Capuserie et bois doré Couter les maications sont prises de la salle, le nº 1 tient toujour, la gauche, Les indications non effacies sont bormes Au lever du rideau la seine est vide. La porte : s'ouvre, Silvia entre suivie de Sisette ; toutes deux des dent an milien Silvia ne 1 - Lisette no 2) Silvia va un peu à gauche. Lisette est au milieu. 3) Vilvia remente aupris de lis ette. with gagne un peu à droite. Silvia presso le milieu

Plantation

set design / props

entrance of the two characters at the beginning (from where and to where)

successive moves by the two actors



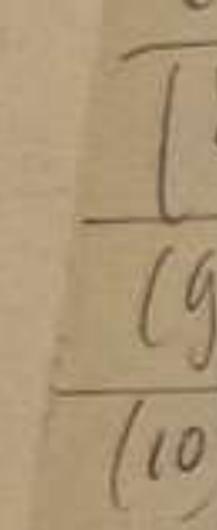
Example 1 : a script annotated by an actor (around 1860)

LISETTE. Touche là, Pasquin, je suis prise pour dupe. Le soldat d'antichambre de monsieur vant bien la coiffeuse de madame.

PASQUIN. La coiffeuse de madame

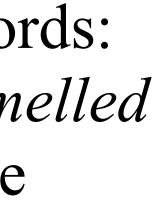
C'est mon capitaine, ou l'èqu PASQUIN.

Masque!



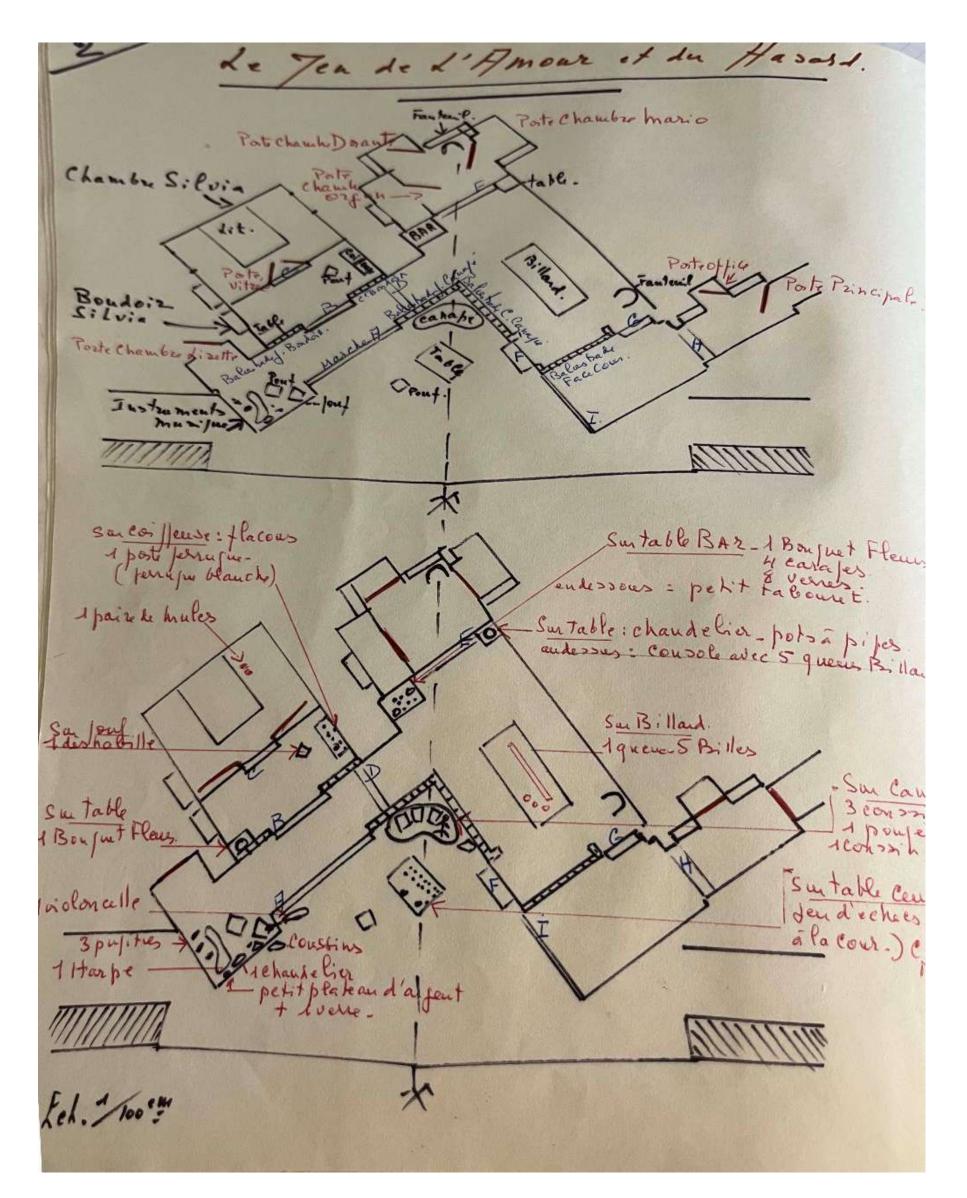
On stage the actor usually adds these words: I wouldn't be surprised if these hands smelled of ointment! Joking antics, but not by the author.

dirette lui tendant la main Parquin baire la main de cisette





Example 2 : relevé de mise en scene + video of the show (1970s)



Direction : Jean-Paul Roussillon (1976) Production : Comédie-Française

Le jeu de l'amour et du hasard

Example 2 : relevé de mise en scene + video of the show (1970s)

The show's video recording enables us to transform the **indications in the** *relevé* into *annotations in the video* itself

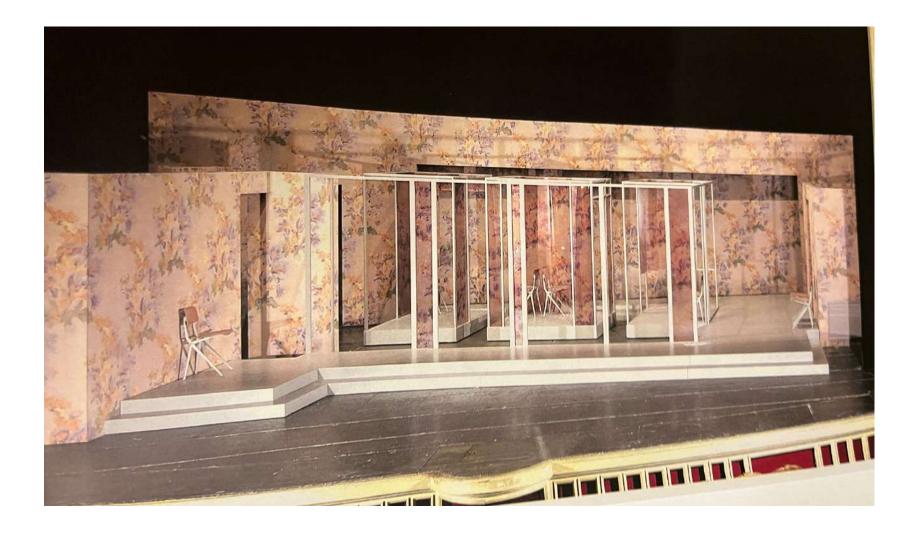
 \Rightarrow example of the labels to define an ontology

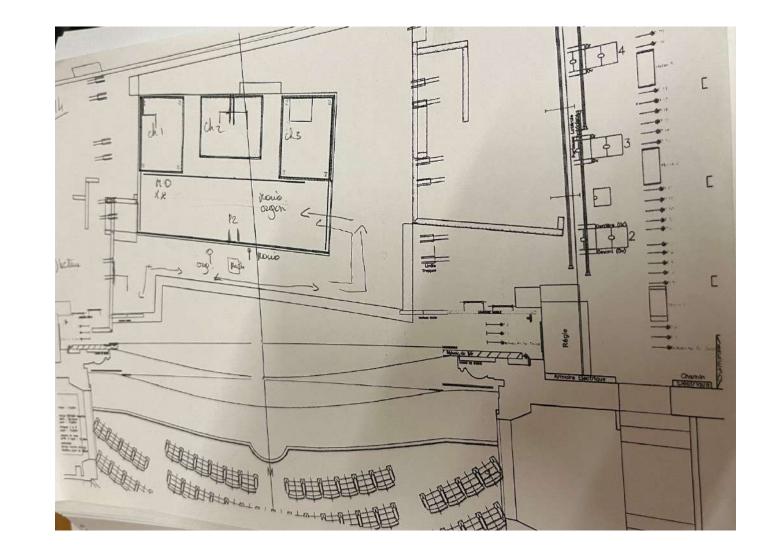
 \Rightarrow opportunity to verify the relevance of the categories of descriptive labels

⇒purpose of making labels' transformation automatic in the virtual reconstruction



Example 3 : relevé de mise en scene + video of the show (2000s)





with + "voici a que le prie récuit ... 8+6) -> orgon report le leur « O l'avrête de le voir " le n'ent por tous a kouis dons posse uns cour => Kouis Revent a'O. TS Des 2 fosse J Che [C13] M 9119 Ils parlent chaceen d'1 cote de pleaie 1 <u>919</u>" sorte de ptir feu de cache coche. Ils sont dans la conspiration, ils parlent bas, pour ne pos se faire entende.)orgon reprend la lettre à reorie

Motivation

Virtual reality is a novel way to experience theater

- better than radio
- better than television
- better than cinema

Much work on contemporary production

- 360 camera capture
- volumetric capture

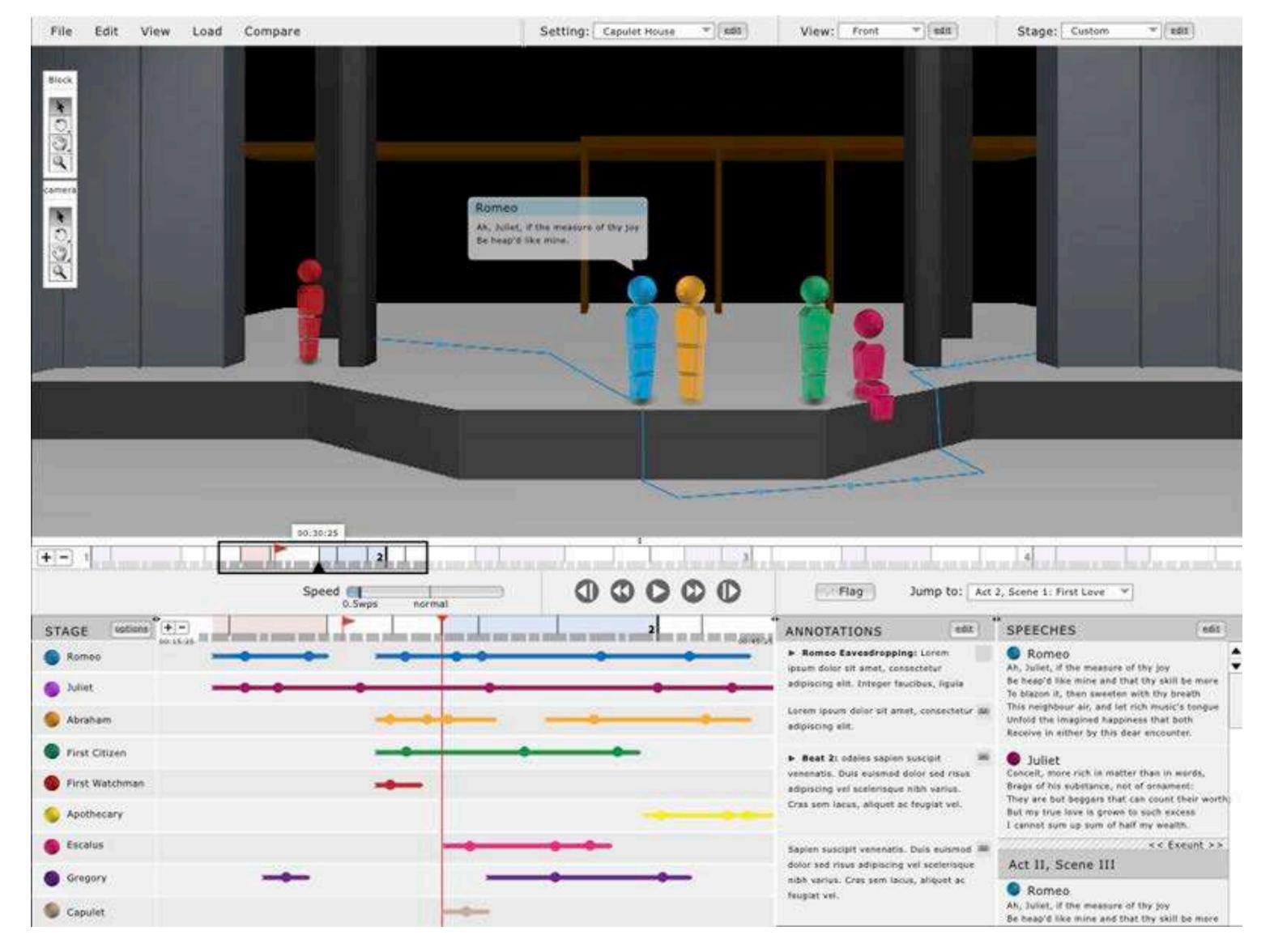
Can we use it to visualize productions from the past ?

)

Research question

Can we use archive documents (prompt books / relevés de mise en scène) to reconstruct a stage production from the past and experience it in virtual reality?

Related work



 Jennifer Roberts-smith. Performing the Archive: Visualizing Performance Reconstruction in the Simulated Environment for Theatre (SET). Cultural Histories: Emergent Theories, Methods, and the Digital Turn. March, 2012.

Related work



in a traditional classroom. Digit. Humanit. Q. 2018.

Eleni Bozia. Reviving Classical Drama: virtual reality and experiential learning



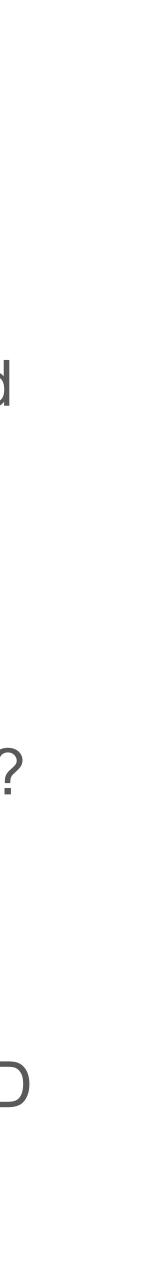
Prompt books describe in detail the movements, gestures and interactions of the actors, in parallel with the text. They are written in natural language accompanied by sketches.

Problem

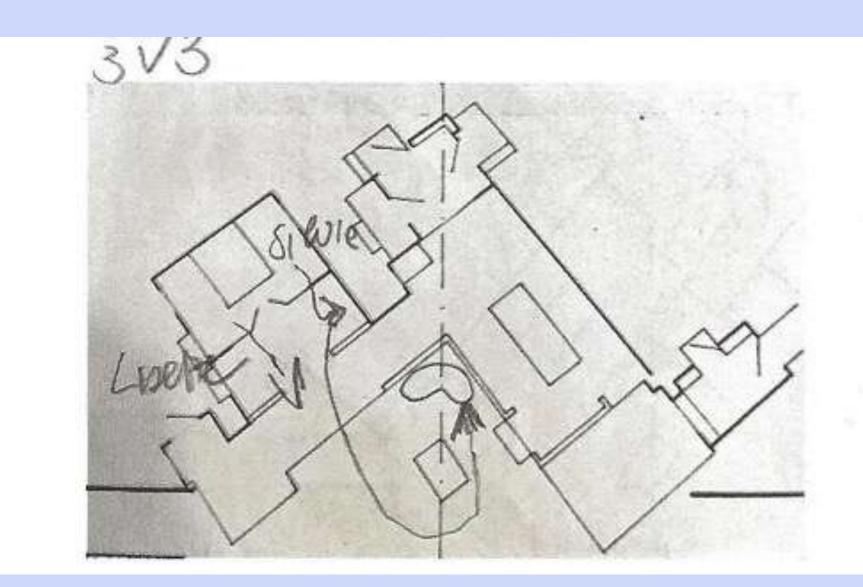
They are difficult to use with computerized tools - can we re-organize them into a more formal notation, suitable for reconstructing / recreating a stage production ?

Proposed solution

We encode the prompt book into "stage actions" written in blocking notation and organize them temporally into a non linear animation (NLA) timeline in Blender 3D



1 Why answer for my feelings? LISETTE I believed that, on this occasion, your feelings would resemble those of everyone else. 2 3 Your father asks me if you are happy that he is marrying you.



- SILVIA But, again, what business is it of yours? Silvia is lying on the right side of the bed. Lisette standing on the left side.

 - 1 Silvia throws back the sheet and sits on the edge of the bed with her legs to the right. Then she will put on slippers
 - 2 Silvia gets up, goes down, grabs the dressing gown placed on the pouf in front of the dressing table; then continues her movement to the right of the central table.
 - 3 When Silvia is in place, Lisette goes down to step B (right foot on step A)



Silvia is lying on the right side of the bed. Lisette standing on the left side.

Silvia throws back the sheet and sits on the edge of the bed with her legs to the right.

SILVIA But, again, what business is it of yours? 1 Why answer for my feelings?





- Silvia is lying on the right side of the bed. Lisette standing on the left side.
- Silvia throws back the sheet and sits on the edge of the bed with her legs to the right.
- SILVIA But, again, what business is it of yours? Why answer for my feelings?

- LYING(Sylvia, right side of the bed)
- STANDING(Lisette, left side of the bed)
- THROW(Sylvia, sheet) SIT(Sylvia, on the edge of the bed with her legs to the right)
- TALK(Sylvia, But again)

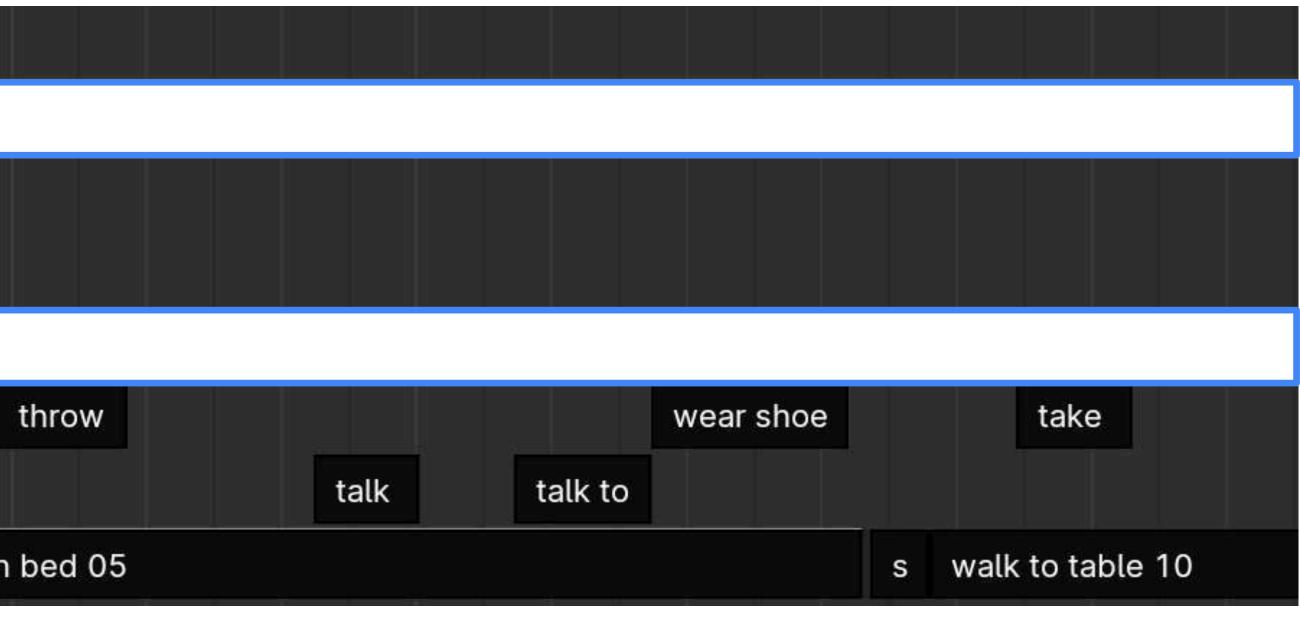




🛣 Silvia				
gesture 🗹 🔂	☆			
look 🗹 🔂	\sim			
touch 🗹 🔂	\sim	throw	wear shoe	take
say 🗹 🔂	☆	talk	talk to	
move 🔽 🔂	☆ lay 01	sit on bed 05		s walk to table 10
User Perspective	User Perspective (197) Lisette : mixamorig:LeftArm		User Perspective	
(101) Lisette : mixamorig:LeftArm			(611) Lisette : mixamorig:LeftArm	









Future work : automation

phrases Analysis of prompt book sketches Synchronization of stage actions Parameterized animation

Recognition and classification of action

Thank you !