

DUAL CLAIRE

Directing Digital Humans and Interactive Experiences - a Theatrical Approach

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WHAT IS DUAL CLAIRE?

A hybrid experimental project

Consists of:

2 versions of dramatic (script) & performative (movement) output of the same digital human character, directed according to 2 different directing theories:

- i. Stanislavski
- ii. Artaud

Developed to provide an interactive experience of conversing with an intelligent embodied virtual assistant in a commercial services context.



OBJECTIVES

How an artistic approach based on theatre directing methodology in designing IVAs may pervade their usual functional provision of services scope and create a differentiated, aesthetically coherent result, triggered by the implementation of theatre directing theories.



RESEARCH QUESTIONS

- How could the implementation of two different theatre directing theories affect the designing of a digital human within a commercial services context?
- What are the challenges emerging in terms of directing, acting and script?
- Does the adoption of certain directing approaches lead to a differentiated, aesthetically coherent digital human performance?



MOTIVATION

- To explore the potentials of theatre/performance as a research tool for the designing & customization of digital humans performance.
- To open up new performative horizons that may expand beyond IVAs usual scope and be appreciated as “artistic”.

AIMS & GOALS

- To explore digital human theatricality and performativity outside artistic frame (commercial services context).
- To explore the potentials of IVAs to create a unique user experience.



GENERAL CONTEXT

- Advancements in the fields of artificial intelligence, machine learning, natural language processing and computer graphics -> IVAs with humanlike traits (personality, physical appearance, gender etc).
- The systematic approach of the above traits, their aesthetic organization and repeatable exhibitability in a theatre performance - objective of theatre directing theories and acting methods.
- Rendering the performer/actor an able, intelligent “machine, producing aesthetically coherent performative results.



STATE OF THE ART

- The development of IVAs coupling conversational AI with (limited) facial & emotional expression (by companies such as Uneeq) aiming to enhanced communicational accuracy and customer satisfaction.
- Theatre & narrative studies enable the exploration and identification of theatrical/performative elements, adopted by intelligent embodied and disembodied machines for optimal performance as social agents.
- Role of intelligent technological nonhuman expanded in the cocreation of artmaking and copformance within and beyond the theatrical environment - emergence of hybrid artistic practices.
- IVAs implemented in theatre performance - use of conversational AI for interactive storytelling.



STATE OF THE ART

- Theatre/performance studies:
 - i. theatre & digital media discourse (Laurel, Auslander, Dixon, Giannachi)
 - ii. interaction as performance (Benford & Giannachi)
 - iii. human-robot interaction as theatre
(incl. human-chatterbot interaction, robotics & theatre/performing arts, theatre as a research tool for HCI, virtual agents performance, improvisational theatre techniques and puppetry as a source for the designing of personified interfaces, acting methods in IVAs)



EXAMPLES

Artistic examples:

- Improvisation based on bot performance
<https://improbotics.org/>
- AI playwriting project
<https://www.theaitre.com/>
- Film: Digital Humans as actors
- Performance: Happiness — Dries Verhoeven

Built-in or stand alone IVA's:

Siri (Apple), Cortana (Microsoft),
Alexa (Amazon), Google Assistant



METHODOLOGICAL FRAMEWORK

Elements of exploratory design

Theatre directing explored as a research tool for the designing & customization of IVAs/digital humans performance

Emergence of the “appropriate” text enter

Comparison

2 different theatre directing theories in order to explore the differentiated outcomes

Reflection/speculation



IMPLEMENTATION APPROACH

2 different cases illustrating two different theatre directing approaches in script production, digital human customization and design of the interactive experience with “Claire”.

TECHNOLOGIES USED

- Uneeq Digital Humans platform (basic requirements, i.e. real-time human-computer interaction with natural language (spoken & written), machine learning, variety of emotional responses and realistic graphics).
- Google Dialogflow was used for the design of the dialogues.



EXPERIMENTAL DESIGN

Interactive drama

Conception of 2 linear scripts, inspired by the methods of

- i. Stanislavski (realism)
- ii. Artaud (surrealism)

Transformation of the scripts into multi-linear, following a logic of “multiple improvisational rehearsing”

The two scripts aspire at delivering the same meaning load in both versions, following different dramaturgical aesthetics in each case.

Changes are limited on the character of the text and the emotes of the digital human.



STANISLAVSKI VERSION



ARTAUD VERSION



CLAUDE: CHARACTER BIO

Claire is a 22 year old law student.

Her father died while she entered university and her mother does not earn enough money.

She has to work for her and her younger brother.

She works at the reception of a lounge bar in the Aegean, on Paros, and hates it - but her best friend's dad runs the bar and it is an easy way to earn some money.



EXPECTED IMPACT

- After the development of "Dual Claire", Uneeq, Uneeq announced its new creation, "Bella", a barrista digital (Autumn 2021).
- Commercial and social use of aesthetically inspiring and cognitively stimulating IVAs and rephrases the future of personalization.
- IVAs as educational tools in Drama and Theatre in Education.
- A tool within the framework of behaviour management and coping with learning difficulties.
- Recreational and artistic experiences with IVAs.



FUTURE RESEARCH

- "Dual Claire" experiment currently on pilot phase
- Future research includes the conduction of several experiments exploring the change of certain parameters i.e. theatre directing theories, digital human's gender & appearance and aims, such as a highly artistic motivation outside IVAs quotidian purposes

