

To what extent is AI pushing the boundaries of scriptwriting practices? Benjamin's sci-fi short film screenplays. A case study

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Panel 9 – TECH 2 (VR, IMMERSIVE, AI)

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Abstract

Between 2016 and 2018, director Oscar Sharp and AI researcher Ross Goodwin produced three short films: *Sunspring* (9 min, 2016), *It's No Game* (8 min, 2017) and *Zone Out* (7 min, 2018). Conceived as an entry in the Sci-Fi-London 48-Hour Challenge (a competition organised as part of the annual festival of science fiction and fantastic film), the three short films were created by an artificial intelligence called "Benjamin". While in *Zone Out*, algorithms are used mainly for editing, automating video creation and face-swapping, in *Sunspring* it is the AI that wrote the entire screenplay, composing it after assessing hundreds of other science fiction screenplays source material. Starring Tim Guinee and Thomas Paine as respectively, Writer League's West and East, *It's No Game*, *Sunspring*'s follow-up created by both AI and humans, tells the story of two scriptwriters meeting a rather ruthless producer claiming AI's ineluctable rise. Nanobots and a Benjamin empowered version will, in fact, take over, making human screenwriters obsolete. Indeed, for both short films, the AI system has already been credited as "Writer" on the IMDB website.

While Sharp's and Goodwin's experiences with algorithmic scriptwriting have undoubtedly succeeded in redefining the boundaries between human and machine film co-creation, they question both the reality and the representations of these interactions, notably when it comes to originality and creative imagination. Is AI effectively changing scriptwriting practices? To what degree and in which ways? Can "Benjamin", as a system based on machine learning, neuronal networks and long short-term memory, help expand our understanding of genre conventions and narrative theories in writing for short films? Based on the comparative analysis of *Sunspring*'s and *It's No Game*'s AI generated scripts, my presentation seeks to highlight some key issues about the development of algorithmic scriptwriting skills and practices, with regard specifically to tropes and clichés, dialogues and characters' definition.

Keywords – AI, algorithmic scriptwriting, *Benjamin*, genre conventions, formulaic storytelling

Marida Di Crosta (Université Jean Moulin Lyon 3, France) is associate professor at LYON 3 University, where she teaches screenwriting and story design for digital media. The founder of a two-year Master's Degree in Screenwriting for multiplatform content, she is the author of *Between Cinema and Videogames: Meta-narration and interactivity* (2009). A member of the French Society of Dramatic Authors and Composers, Marida has screen played a 52' episode for the animation TV series *Papyrus*, and worked on various interactive drama projects. In 2017, her transmedia project *Micro-Mondes* received financial support from the French National Centre for Cinema. Since 2018, her research has been focused on data-driven storytelling and the use of AI algorithms in scriptwriting. In February 2019, she set up the working group "AI, Art, Creativity" as part of the research projects developed by the Centre for Internet and Society (CIS) of the National Centre of Scientific Research (CNRS).

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