

The Use Of Generative Artificial Intelligence In Screenwriting

By Olivia Maltz

Generative Artificial Intelligence (AI) has become a very notable tool in recent years. In the summer of 2023, the Writers Guild of America (WGA) began a strike for better working conditions in the American film industry. A central tenet of the WGA's strike centered around the growing use of generative AI in the creation of film. American screenwriters have growing concerns that AI programs will create and edit movie scripts, limiting the potential work and pay for screenwriters ([Maddaus, 2023](#)). Due to its place among the WGA's strike demands and presence in media discourse, many people have started examining AI's strengths and weaknesses within the workplace, as well as the ethical ramifications of its growing use. This essay examines the capabilities of AI in the role of a screenwriter, its potential capacity as an assistive tool, and potential safeguards needed to protect the work of screenwriters.

Many see the use of generative AI in the film industry as simply the next step in technological development. Generative AI has been compared to previous technological advancements that have transformed the film industry, like the use of Computer-generated Imagery (CGI) ([Engler, 2023](#)). However, writers view the increased use of generative AI as a specific threat to their careers as well as the content they have already created ([Bedingfield, n.d.](#)).

American screenwriters have every reason to believe that generative AI will have an immediate impact on their work. According to recent studies, screenwriting and other similar creative industries are placed within the highest category of future 'exposure' to AI programs as part of their job responsibilities ([Eloundou et al., 2023](#)). Projections predict that the use of generative AI could reduce the time it takes for screenwriters to complete their work by up to 50 percent ([Eloundou et al., 2023](#)). The possibility of reduced hours has caused concern among writers that film executives and directors will vastly reduce or even remove writers from the screenwriting process ([Singh et al., 2023](#)). However, the possibility of generative AI replacing screenwriters entirely has been questioned.

The case study of a recursive neural network developed by Oscar Sharp and Ross Goodwin in 2016, named 'Benjamin AI,' highlights both the potential and limitations of AI-generated scripts. Benjamin AI is believed to be the first generative AI program to independently create a screenplay working with a database of dozens of science fiction scripts including *Highlander* and

Ghostbusters (Li, 2022). Benjamin AI then broke these scripts down to a string of letters and used them to predict which letters were more likely to be used side by side in a science fiction script. Then, Benjamin AI generated sentences using these calculations and produced the screenplay, *Sun Spring* which was made into a short film (Li, 2022). Many were impressed with Benjamin AI's screenwriting capabilities, and *Sun Spring* became a top ten finalist for the 2016 Sci-Fi London 48 Challenge and received a special mention at the corresponding awards show (Li, 2022).

However, despite the notoriety of Benjamin AI's screenplay, many took it as an example of the limitations of AI writing. Several people who watched the short film described it as chaotic and incomprehensible. The sentences Benjamin AI generated were grammatically correct but ultimately meaningless (Song, 2022). This lack of comprehensibility was likely due to Benjamin AI's early creation, and current and future generative AI programs, like Chat GPT and other Large Language Models (LLMs), could be more capable of crafting meaningful sentences and therefore more meaningful stories (Song, 2022). However, this ignores the fact that the screenplay is filled with a writer's identity. A writer crafts a script using inspiration from their own life experiences and distinctive writing style which are key to any piece of creative writing (Song, 2022). A generative AI program will only have the capacity to imitate those elements, not create them. Therefore any screenplay written completely or partially by a generative AI will always be 'spiritless' and 'lifeless' (Song, 2022). Generative AI, while capable of creating comprehensive sentences, lacks the inherent creativity that is a key tenant of screenwriting, and therefore could not act as a replacement for writers in the industry. However, this still leaves the possibility of generative AI acting as assistance or support to screenwriters in the film industry.

Generative AI being used as a support to screenwriters still carries the possibility of harm to writers in the film industry. However, this harm is heavily dependent on how it is implemented in screenwriting. After all, generative AI does not only have to create content for a screenplay, flawed as it may be. Generative AIs need databases to train, and AI-generated screenplays could likely be partially based on the existing work of writers and filmmakers (Engler, 2023). As mentioned above, the screenwriting AI program Benjamin was trained using several science fiction scripts before it was able to produce a screenplay.

One possible solution to keep generative AI from using existing content is to limit its use in screenwriting to those outside of the creative tasks. One proposed plan has been to orient generative AI away from tasks that consist of writing and instead utilize them with the more mechanical, time-consuming tasks (Li, 2022). This includes utilizing generative AI during the entire pre-production period of a film including things like budget-calculations and automatic storyboard

generation ([Singh et al., 2023](#)). With careful consideration, generative AI could be used in film editing and promotion while giving screenwriters the peace of mind that their material will not be used to train an AI program. Others argue that there does not need to be such a hard mandate against the use of AI, and instead, there should be careful surveillance and guidelines around the use of AI as a supportive tool ([Engler, 2023](#)). The WGA's final agreement supported the previous conclusion and did not outlaw the use of generative AI in the writing process completely.

Instead, the WGA's final agreement enacted specific guidelines to ensure that AI use was limited to the wants and needs of the writers and was not mandated by the film studios. The final consensus reached by the WGA does dictate that generative AI can not be used to write completed screenplays and writers can not be asked to work on a screenplay that has been completely AI-generated ([Anguiano & Beckett, 2023](#)). Additionally, the WGA has limited what AI-generated material can be legally classified as. An AI's work can not be classified as 'literary work,' which is a legal term used for a screenwriter's original content. Additionally, it can not be classified as 'source material,' which is a legal term used for a screenwriter's original adaptation of a source ([Anguiano & Beckett, 2023](#)). For example, if a writer creates a completely original screenplay then it would be classified as source material, however, if it was based on a Shakespearean play then it would be source material. Studios must disclose if they are asking writers to work on any content that has been generated by an AI ([Anguiano & Beckett, 2023](#)). These specifications were made to protect a writer's pay or both original and sourced content ([Bedingfield, n.d.](#)). Under the new terms of the WGA's contract, studios can not force writers to use generative AI programs, but individual writers may use generative AI tools for their work as they see fit. This contract leaves the possibility for generative AI programs to be used as a helpful tool without putting the hours, duties, or pay of screenwriters at risk.

The specifications involving AI in the new contract agreement between the WGA and film studios are being regarded as the new standard for AI protections in screenwriting and other industries. Experts have encouraged other creative industries to push for similar protections in their employment contracts ([Anguiano & Beckett, 2023](#)). However, this does not mean that it does not still hold the potential to be harmful to screenwriters. Most generative AI models are still new and it is unclear how some of these protections will be monitored and enforced ([Engler, 2023](#)). All applications of generative AI into the workforce must be done with careful and deliberate consideration to continue to ensure it remains a helpful tool instead of a technological threat.