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# USING ARTIFICIAL INTELLIGENCE IN SCREENWRITING: OPPORTUNITIES, CHALLENGES AND PROSPECTS

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Abstract. The article examines the role of artificial intelligence in modern screenwriting. It analyzes its capabilities in modeling situations, improving plot logic, finding references and adapting stories for the international market. The study also explores AI's potential in stylizing scripts to meet studio requirements and predicting audience reactions. Special attention is given to the ethical aspects of using AI, which does not replace but rather complements the creative process of screenwriters, helping to create high-quality and competitive film product.

**Key words:** AI, Artificial intelligence, screenwriting, creative process, script structure, story analysis, scriptdoctoring

#### Introduction.

Today, cinema is actively uses artificial intelligence at all stages of production. As Neil Sahota notes in an article for Forbes: "The penetration of artificial intelligence into the film industry begins at the stage of writing the script." However, it is important to use it in the right direction and not perceive it as a independent tool for creating a script. After all, in this case, the author won't create a high-quality, emotional story that could touch the viewer.

Artificial intelligence began to develop actively in the early 2020s. At this time, programs for working with text and visual tools for creating images and videos became the most popular. They were the first to find application in the field of cinema, in particular for writing film scripts.

The term artificial intelligence itself is not something new, because it appeared back in 1955. "However, it was ChatGPT that attracted the attention of a large number of people around the world. It expanded the horizons of what a computer program can do, stirred interest in the topic of general artificial intelligence, and also launched a real artificial intelligence race". And today ChatGPT is the most common artificial intelligence tool for writing and developing film narratives.

Attempts to create a high-quality script without human input did not bring good results. This proved that artificial intelligence cannot completely replace a human.



However, there are a number of tasks that can be solved using AI tools.

#### Main text.

Artificial intelligence can be used at any stage of script development. Even if you lack an idea, title, or theme, AI can help you analyze and shape these elements. It is important to remember that any film being created today should be remain relevant 3–5 years after its release.

Therefore, the scriptwriter's primary task is to analyze the topic's relevance to an international audience, if the film is intended not only for the local market, but also for film festivals or global distribution.

Artificial intelligence can help:

- analyze popular topics in the film industry,
- identify topics that win at film festivals,
- research audience requests and generate relevant ideas,
- formulate issues that should be raised in a future script.

After choosing a topic for the script, it's important to find a starting point. This can be an original idea, real-life events, or an analysis of existing films. AI can help structure this data and find a suitable basis for the story.

If the author unsure of the choice of topic, additional analysis can be carried out. AI can suggest several options and help improve them or present them in a new light. It is also important to determine the genre, style and narrative features of the future script, as well as identify cinematic references.

In addition to the starting point, a key stage is research. This is an important component of any script. Artificial intelligence significantly reduces the time required to collect information and filters the volume of information to precise queries. It can instantly find the necessary data, links to sources and a list of literature.

AI is can analyze both electronic resources and published books, articles and materials on past films. This helps narrow down the focus to relevant information, which is especially useful when conducting historical research or analyzing undocumented legends. With sufficient information available, the author can draw certain conclusions and use them in their script.



Very often, the accuracy of details is important in historical narratives. For example, in order to accurately depict the atmosphere of a specific historical moment in a script based on real events, you need to know which day of the week a historical event occurred, whether it was a weekday or a weekend, what the weather was like that day, and which concurrent historical events might have influenced the characters, artificial intelligence can find this data within minutes.

Previously, screenwriters spent a lot of time on such research, and the research stage took up a significant part of the work on the script. Using AI can significantly increase the efficiency of this process and reduce the time for preparing the material.

If the script is based on a literary work - a book, a novel, a story, etc., then in this case the research is as important as the background of this literary work. Artificial intelligence tools can help you understand the story itself: analyze the theme, central idea, and purpose, as well as analyze the idea of a literary work, understand what the author intended in it. Artificial intelligence will even suggest options for adapting it to the present day if the novel took place in historical time and is not very relevant at the moment.

In addition to the basis, which can be a finished literary work, artificial intelligence can analyze a completed script. In other words, when the script is already written, but the author feels that something is wrong, at this stage AI can replace the script doctor, point out to the author the mistakes made: structural, in character development, in turning points.

You can even specifically ask artificial intelligence to compare your story with a script diagram, for example, from the book "Save the Cat" by Blake Snyder or another script theory. Accordingly, AI will indicate what is not working, what was missed, what needs to be improved. In this way, a full analysis of the work and the script itself is carried out.

An important element of the script at the analysis stage is explication. Explication is an analysis of the story, the path that is taken not only by the screenwriter, but also by the director. Artificial intelligence can analyze the script and make an explication, that is, immediately determine the theme, idea, problem, super-task; divide the

characters into camps - who supports the protagonist and who aligns with the antagonist, etc.

Such an analysis can be carried out both at the synopsis stage, when there is more detailed material, and at the stage of an already completed script, when you need to determine if your idea aligns with the original concept that was laid down at the beginning of writing the script.

In addition to the screenwriter himself, such an explication can be carried out by the director when he receives the script for production. This helps him to understand more clearly what he should shoot the story about, place all the accents and sometimes even discover new subtexts. Thanks to this, the director will be able to more accurately transfer the screenwriter's idea to the screen.

One of the most important stages of creating a screenplay is the development of characters, in particular the so-called character arcs. At this stage, it is very important to clearly and carefully think through each character of the script so that he fully exists in the script material. So that all his actions are well-motivated, logical, and consistent. All character traits should serve the story and not feel extraneous. They should organically weave into the plot, and not stand out and not leave the question: "Why was this created?".

If in certain places the character's actions raise questions and lack logic or consistency, artificial intelligence can help motivate them.

Artificial intelligence can give any character both interesting external characteristics and internal ones. In addition, it can come up with the character's language, which is an extremely important element. All characters cannot speak the same way, and this is precisely the advantage of artificial intelligence. AI is able to analyze different geographical regions and create the character's language according to the area in which he lives. If the author determines the specific place of residence or origin of the hero, artificial intelligence can endow him with a unique speech characteristic of this region. In addition, AI will take into account the experience that the character has gained by the time the story begins, which can significantly affect the quality of the dialogues.



Each character should exist in a logical and consistent scripted universe. Such a universe can also help create artificial intelligence. The hero's world should be complex and full of conflicts, full of various ups and downs and obstacles that he will have to overcome. If the world created by the author does not work, then the hero in it does not feel the urge to move on. Artificial intelligence can help not only with the external description of the world, but also with the formation of obstacles and external motivations. Thanks to this, it is possible to create a world where the character's full potential can unfold.

Artificial intelligence can model completely different situations from scratch, create obstacles, especially in those places where you understand that your script supposedly works, but it does not move the story forward. Therefore, in such cases, you can simply turn to artificial intelligence and make a request for an effective situation or turning point that alters the hero's journey. All this will motivate the finished story.

AI can establish logical cause-and-effect relationships that align with the existing material. It is able to weave invented plot twists so logically and consistently that they will not raise any questions and will not stand out from the solid material of the story.

In general, artificial intelligence can analyze the entire story for logic and consistency, point out moments that raise certain questions, and suggest options for their improvement. Artificial intelligence can also be turned to for solution options, since it is able to give not one option, but several. You can also refine requests by adding details: the mood of the scene, genre, certain characters, etc.

If you are creating a film that must follow a certain scheme or structure of an existing film, you can also ask an artificial intelligence. It will check the structure of your script against the reference, find places where the script does not match the given structure, and help you correct them.

Regarding references, before any story is created, a certain analysis is carried out: whether similar stories already exist, whether they have been created in your country, in a certain region, in Europe, and whether they were successful. When creating a story, it is very often necessary to be inspired or refer to similar stories to understand how

appropriate references that can help in creating the story.

they work, what may be missed, which elements are mandatory. Therefore, even having a brief description, you can turn to artificial intelligence to search for references. After that, any program or algorithm analyzes your synopsis or other material and selects

Each story should be designed for a specific audience. If you are creating a story not only for the local market, but also for the international one, then it is very important to analyze it for its relevance to the international audience. In this case, artificial intelligence can help determine the best time and place for the action of your script. This gives a significant advantage in finding possible co-producers and countries where the shooting of the future film can take place.

In addition, artificial intelligence can predict the audience's reaction to your story. This makes it possible to immediately understand whether it is worth implementing, whether it will be successful, and, perhaps, how to change it to increase the chances of success. You can also adapt a ready-made script for an international audience. Since any author belongs to a certain country, he often embeds in his story the characteristic values, views and social visions inherent in this country. But to succeed in the international market, sometimes you need to assess whether the script aligns with global trends. And this can also be done with the help of artificial intelligence.

If a script is created at the request of a studio with specific requirements, then artificial intelligence can help imitate the style of a particular screenwriter, film or director in order to achieve the desired result that meets the producer's request or the studio's requirements.

## **Summary and conclusions.**

It is clear that all this must comply with ethical and copyright standards. However, the methods of using artificial intelligence described above do not violate copyright, as they do not generate entirely new, AI-owned content. They only help the screenwriter to refine and improve the story. And this is where the ethical aspect of using artificial intelligence comes into play: it does not replace human labor, but only enhances the creative process, ensuring a high-quality and marketable product.

In this format, the use of artificial intelligence proves to be the most effective and



creative. It is important to minimize its use to ensure a fully human-written script - with an emotional component, interesting twists, avoiding templates and clichés, without imitating specific authors or films. After all, before using this or that element suggested by artificial intelligence, the screenwriter always analyzes its relevance in his story. He does not use the text provided by artificial intelligence in full, but adapts it to his own script or completely rewrites it from scratch, relying on the knowledge and analytics obtained.

Thus, artificial intelligence does not replace the creative process, but becomes a valuable tool for screenwriters, enabling them to craft richer, more coherent scripts.

As Nick Bostrom notes in his book "Superintelligence": "In fact, people could create artificial intelligence that would protect humanistic values. And we should create it just like that. After all, in practice, the problem of control — how to manage the activities of artificial intelligence — is very difficult to solve. It seems that we will only have one chance to try. Because if artificial intelligence turns out to be hostile to us, it will easily stop our efforts to change its preferences, it is not known what will happen to us later".

So, artificial intelligence is a powerful tool that can greatly facilitate the process of creating a film script. However, it cannot replace human creativity, intuition and emotional depth, which are the heart of great filmmaking. Therefore, it is important to use it as an aiding tool rather than a primary scriptwriter.

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