# Could an Al design a larp? Processes and applications<sup>1</sup>

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## ABSTRACT

The potential use of artificial intelligence (AI) in the design of live-action role-playing games (larps) presents a new frontier for this kind of creation processes, even among analog games. To explore the possibilities, we developed *Project Dark.IA: The Insurrection of the Captives* (Torrebejano 2023), a science fiction larp created mainly through artificial and automated means by ChatGPT and Midjourney. The analysis of this design process shows that, currently, AI is not capable of creating a larp in a coherent and unassisted manner, although some of its resources –in addition to other technological tools, that will be explained– can be truly useful and efficient both creatively and non-diegetically.

#### **Keywords**

Larp, AI, prompt, game design, convergence culture, interactive narration, ChatGPT

## INTRODUCTION

In November 2022, the launch of the new version of <u>ChatGPT</u>, the 3.5 autoregressive language model of <u>OpenAI</u> –a company specialized in the research of this type of artificial intelligence (AI) since 2018– took place. From the outset, many content creators have started using this application to generate or develop new ideas, from academic work to advertising and copywriting texts, the development of small video games and text adventures, and even the production of illustrated novels –thanks to other image generation AIs, such as <u>Midjourney</u>.

Amid this accelerated process, artificial intelligence has barely been applied to liveaction role-playing –a medium internationally known as larp (*live-action role-playing games*)– so there is a wide field of study to be explored. On one hand, the autonomous design possibilities of larps by generative AI applications must be investigated, as well as their potential use as support tools for human creators.

This project arises as one of the first attempts to capture the evolution of this landscape through the practical application of AI tools for the design of a new larp, developed from scratch specifically for this purpose, which will be hosted on the <u>International Print&Play Database<sup>2</sup></u>, a repository of larps available for free download.

The result, whose characteristics and revelations will be detailed below, is *Project Dark.IA: The Insurrection of the Captives* (Torrebejano 2023), a science fiction liveaction role-playing game created, to a large extent, artificially and automatically through generative AI, which also participates in the experience itself as a character via a customized bot designed for the occasion.

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**Figure 1:** Cover of the larp designed with ChatGPT. Image prompted on Midjourney bot.

The larp was first playtested in April 2023 during the tenth anniversary of EntreReVs –an annual Spanish convention for larp creators and researchers– thereby initiating a complementary study on player reception towards the use of generative AI in larp and other creative environments.

# **DEFINITION OF LARP AS A STUDY OBJECT**

Deterding and Zagal (2018, 8) make a distinction between different formats of roleplaying games (RPG). They present certain precursors and derived formats, until they reach tabletop role-playing games (TRPG), live-action role-playing games (larp<sup>3</sup>) and computer role-playing games (CRPG), with its online multiplayer variant (MORPG).

Despite its clear distinction from other RPGs, it still remains challenging to define what a live-action role-playing game is, as the term was proposed outside of the scientific community and has sometimes been used to refer to very different concepts.

In numerous instances, live-action role-playing games are defined concerning their direct predecessor, tabletop role-playing games. Unlike these, the larp takes place in a physical environment where participants interact through the interpretation of their characters' actions (Salen and Zimmerman 2003, 7-8).

Our particular perspective when carrying out this experiment is based on a *narrativist*, dramatic and, to a certain extent, *immersionist* vision of larp, which means that *simulationist* and *gamist* factors are in the background or even absent. To understand this distinction, we must go back to the taxonomic contributions of Gleen Blacow (1980) or Bartle (1996), deeply influential in the early specific theories developed in various forums of the 90s (Torner 2018, 14-23), which would give rise to theories such as the Threefold Model, the GNS Theory or the Big Model, later expanded with a fourth aspect, *immersionism* –characteristic of recognized Nordic Larp schools, through theories such as the Process Model (Mäkelä et al. 2005).

In this context, it is important to note that the conceptualization of the *narrativist* terminology is more connected to the concept of diegesis itself, as it focuses on the development of a collective story, where the question of the narrator is relegated to the background and may even be absent. In this sense, the larp is characterized by being primarily mimetic and dialogic –hence its proximity to theater– with a fundamentally indexical –or, in its absence, iconic– aspiration from a semiotic point of view (Loponen and Montola 2004). In fact, this latter aspect will be fundamental in distinguishing the

larp from tabletop role-playing games –the two main "methods" of role-playing games according to Stenros (2004, 165-171). TRPGs are fundamentally symbolic, as they are based on description, rather than action, something that is an essential component of the larp –to the point of appearing in its own name: live-*action* role-playing.

All of these factors are crucial in determining the type of stories that can be developed through larp, which also influences the mode and reason for which they are told (Ryan 2014, 25). From this perspective, we can refer to some definitions that depict larp as an experience through which we create a space of fiction with our bodies and voices (Torner 2015), which is summed up by Stenros as "embodied participatory drama" (2013).

As main or recurring characteristics, we can highlight the following (Mochocki 2018, 94-95): absence of audience; predefined game space, characters, and mechanics; authority of the game master, with varying importance depending on the type of event; player-participant unity; and possible iconic or symbolic representations –when indices are not possible or insufficient. In larp, the possible inclusion of "NPCs" (Non-Player Characters) does imply the presence of players, although these players have received specific instructions from the game director, which is why many designers prefer to abandon the term inherited from tabletop role-playing games and use others such as "Dramatic Character" or "Secondary Character".

All of these features set live-action role-playing apart from other role-playing games as well as theater (Stenros 2010, 303). Larp, like any game or experiential work, involves a *paratelic* creation, a goal in itself. It does not need to be directed towards an external audience, although it could be –something that already happens in experimental contributions, which are logically closer to theater. However, participation is necessary and essential for experiencing the medium in its entirety, since its goal is not only to simulate experiences but to generate them (ibid., 300-303). For this reason, any research related to live-action role-playing typically involves the use of participant observation methodologies, which is often related to the phenomenon of *fan-scholars* or *aca-fans*<sup>4</sup> (Deterding and Zagal 2018, 15).

## **Convergence Culture and Dispersed Authorship in Larp**

Another key feature of the larp is directly related to theorists such as Henry Jenkins (2006, 14) in terms of *convergence culture*, which is based in the understanding of interactivity as participation and agency (Murray 2017, 75) –that is, the capacity of each participant to carry out meaningful actions, whose consequences will persist throughout the experience. Moreover, while in an RPG this interactive agency may be developed solely through one player, in larp, the agency of multiple players must unfold simultaneously.

Even in the design of a larp itself, we find a dispersed authorship (Torrebejano 2022, 274-275) that can generate various authorial challenges when involving several individuals in distinct creative and organizational roles.

In addition to the authors of a potential source text, the creators of the player's handbook or design documents, who develop the specific features of the game's storyworld<sup>5</sup> must be considered. Furthermore, we must also include the writers of the game session, as well as its potential organizers and directors, alongside the players themselves. Therefore, by incorporating artificial intelligence in the design of a larp, a new profile is added to this dispersed authorship, further increasing the complexity of the process.

## BACKGROUND ON LARP AND TECHNOLOGY

Traditionally, larp has been framed within analog games, as an heir to tabletop roleplaying games, from which it has taken numerous theoretical and design concepts. This medium specificity distinguishes it from other formats within RPGs, especially video games. Therefore, the analog aspect is a key concept in the generic identity of tabletop and live-action role-playing games, but this does not mean that they remain completely separate from technological advances that can be applied to their design and development, in order to facilitate and expand their communicative needs and creative possibilities.

The use of technology can allow or amplify certain types of interaction in a more realistic, mimetic, and immersive manner, as well as track players or the game world. A great example in Spain is <u>Mission Together</u> (Not Only Larp 2022), which had scientific and medical scanners –which provided information about certain objects and people through specific codes–, video call booths –which enabled message consultation via a personalized identification card–, a space ship simulator through the video game <u>Empty Epsilon</u><sup>6</sup> (Daid and Nalath 2014) –with specific missions for the larp–, or an engineering system simulator –capable of controlling elements such as ventilation ducts or electricity, which impacted the speed of other technological systems.

Another crucial technological component in *Mission Together* was the diegetic and non-diegetic use of <u>Discord</u>, granting it a greater transmedia dimension. The organization provided each player with a personalized account for their character, allowing them to access different chats related to their narrative plots, to stay informed of any announcement or novelty both in and out of game. At the same time, this application allowed characters to chat, which was especially useful considering the dimensions of the game space and the multiple activities developed throughout the weekend. Through Discord, characters could solve some of their affairs online and even arrange meetings at specific times and places, facilitating encounters and communication with other characters.

Other larps have introduced *wearables*<sup>7</sup> to track and display character parameters –such as location or health status– through lights, sound, and other intermedial elements (Dagan et al. 2019). These functionalities are expanded by allowing participants to interact with devices belonging to other players and the environment itself, even enabling them to modify them automatically through proximity to motion sensors or NFC tags<sup>8</sup>.

## Larp and Artificial Intelligence: State of the Art

There are some theoretical reflections on AI applications in larps, developed in an advanced article from 2020 (Salge et al.). Among them, the use as a conversational agent stands out, ranging from a non-player character that interacts with participants through a chat, to a physical object programmed to receive or disseminate information, such as a "magical" book or totem, or a computer that monitors different storyworld parameters, thereby increasing immersion. As another form of support for organization, they suggest that AI could occupy the role of the game director in making complex narrative decisions. From a non-diegetic perspective, it could also imply a chatbot that offers practical information about the event. From the creative genesis point of view, the use of artificial intelligence as a content generator stands out, especially in terms of narrative hooks for characters or as a tool for simulating aspects of the storyworld. At a ludic level, it could also be useful for automatically or more precisely balancing certain game attributes.

To date, at the time of writing this article (mid-January 2023), no larps have been found that claim to specifically and comprehensively integrate artificial intelligence tools

within their narrative design. At least, none of them have been publicly shared in the main larp discussion groups of the international community, primarily hosted on social media platforms such as Facebook, Twitter, Reddit, and YouTube, or in the annual *Knutepunkt Books*<sup>9</sup>.

Nonetheless, a subsequent approach to the Spanish designers of EntreReVs 2023 – whose interviews will lead to a future paper on the perception of AI use in larp– has revealed some applications of generative AI tools in larp design, even in versions prior to GPT-3. Despite this, these designers have understood these AI uses as purely anecdotal and limited to the creation of some images or the automatized expansion of some historical landmarks in the storyworld, which is why they did not even mention their use before.

The arrival of more powerful tools such as GPT-3.5, GPT-4, or Midjourney 5 appears to be changing this paradigm. For instance, on January 19, 2023, content creator MarisArmoury briefly touched on this subject in one of her <u>YouTube videos</u>, which was advertised through several <u>Reddit threads</u>, though without developing a complete design process.

The YouTuber asks ChatGPT for a fantasy-themed larp, for which the AI provides a title, synopsis, and a brief description of the setting and its plot twist. After receiving a classic idea based on a castle cursed by a witch, the YouTuber decides to introduce aliens into the plot. Her next prompt<sup>10</sup> was limited to the development of a larp about the writing of a larp itself, resulting in a kidnapping meta-plot that she herself considers "repetitive."

The YouTuber arrives at the astute conclusion that she will achieve better results with a more specific prompt, so she requests a science fiction larp about a world where everyone is controlled by a single mind. This time, in addition to the premise, the AI includes potential challenges and character archetypes. This is updated with a new request: the addition of ideas for inclusion of possible cyberpunk aesthetic components.

Finally, she asks ChatGPT to generate a larp in which participants play discarded supermarket products, although the creator never manages to obtain specific characters developed by the AI. As a result, MarisArmoury succinctly summarizes her experience: "In the end, I am still the one writing the larp. I can just use it to generate ideas, take the ones I like, and insert it into the larp concept I already have". Therefore, she does not believe that the AI is capable of writing the larp on its own; instead, she considers it merely a source of inspiration.

We can deduce, therefore, that *Project Dark.IA* –whose original language is Spanish– could be considered the first truly (co)written live-action role-playing game by artificial intelligence, or at least, the first to be easily accessible.

## **PROJECT DARK.IA**

## Methodology

According to the Meilahti School (Hakkarainen and Stenros 2003, 56), the development of a live-action role-playing game involves four basic elements: a diegetic framework, a game master, a player, and the interaction that occurs between them.

Within those four key elements, the current research has focused on the use of artificial intelligence for the development of the narrative framework. We have also discovered certain AI applications for the game run elements and its interaction experiences, which could be expanded upon in future investigations. Lastly, we consider irrelevant the

application of AI to the element linked to players, as a complete absence of real (human) players would hinder the experiential and participatory nature of larp.

According to the Process Model (Mäkelä et al. 2005, 2), larp is composed of four key elements. It outlines certain *Processes* that occur through different *Methods*, both ludic and narrative, allowing the development of a *Shared Imaginary Space* (Mäkelä et al. 2005, 2). These processes lead to specific *Results*, whether positive or negative, that are influenced by the *Circumstances* of the experience and its social characteristics.

By simplifying this process and considering the distinction between game-object and game-process (Aarseth 2014, 484), we can assert that larp involves three processual dimensions:

- 1. Preparation, as a game-object at a structural level, generally leading to preexisting content such as design documents, player's handbooks, direction guides, character sheets, etc. that participants must read and internalize before the game starts.
- 2. Execution, as gameplay or game-process, meaning the experience itself –the game's oral and ephemeral components, the performance with its unpredictable development.
- 3. The resulting content, as a game-object linked to the tangible outcomes that arise from a given experience –we refer here to written documents in character, illustrations, letters, journals, costumes, props, photographs, summaries, or expansions of game elements in any media.

Within that initial phase of preparatory content development, and considering that larp constitutes an intermedial genre, efforts have been made to cover the basic elements of any medium: words, images, sound, and interaction (Wolf 2012, 248).

To do this, the selected tools have been ChatGPT (3.5 version) and Midjourney (4 version), because they are two of the most accessible and currently recognized by users. ChatGPT defines itself as a large-scale language model developed by OpenAI, capable of generating coherent and natural text, such as answers to questions or continuances of a given text fragment. On the other hand, Midjourney is an independent laboratory on new media that has a bot on Discord that allows you to generate images through text and even specify values such as the desired style, composition ratio, or level of detail and image size, as well as generating new variations and even introducing or mixing other images as a reference.

The premise of the project was to create a larp through AI, with minimal human intervention, which would be limited solely to initial instructions. However, due to necessity and to enhance the process with our own ideas, some human interventions were ultimately carried out. To be aware of the development of this entire process, the complete chat –with all its corresponding prompts– was exported to Markdown format and can be consulted in the following <u>GitHub repository</u>, open to future contributions from other designers. Concurrently, this entire writing process is explained in detail in the game design document itself, in the "Author\_Epilogue" section.

## **Design Process Summary**

To initiate the project, we developed a generic prompt based on our own experience as larp designers and players, as well as the methodologies employed by Spanish promoters of EntreReVs, and those developed in the *Knutepunkt Books* within the Nordic Larp community –where we must also highlight the book *Larp Design: Creating Role-Play Experiences* (2019), edited by Koljonen, Stenros, Serup Grove, Skjonsfjell, and Nilsen.

As a result of this context, the initial prompt used was as follows:

I want to demonstrate that AI is capable of independently writing and designing a live-action role-playing (larp) with a narrative and interpretive nature, without a complex gaming system.

The larp should last approximately 3 hours, and 10 individuals can participate in it.

To accomplish this, start with the following steps:

1. First, select a theme (if desired, you may base it on a well-known literary or audiovisual work) and define what the larp will cover, what it aims to express, and which aspects it will develop. Also, define the tone and artistic vision.

2. Develop a public synopsis for the players.

4. Explain what the initial narrative situation will be that brings all the characters together.

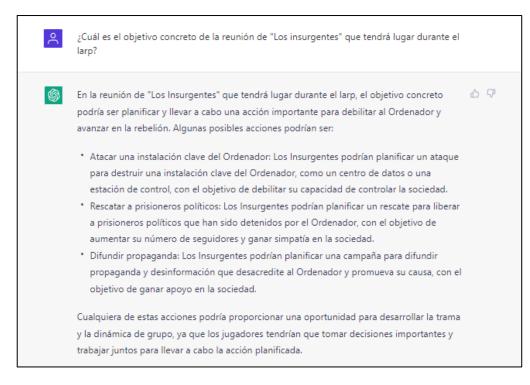
5. Create a brief description of each character, including their name, narrative background, and their main relationships with other characters. Also, define why they are in the initial narrative situation you have proposed and what their motivations are.

In the beginning, the AI just continued the list of requirements to create and organize a live-action role-playing game. After refining the prompt, ChatGPT began to ponder the potential themes, even suggesting some narrative sagas such as *The Lord of the Rings* or *Game of Thrones*. It was made clear that it was the AI's responsibility to make the creative decisions, so it proceeded to select a science fiction theme, curiously set in a dystopian world controlled by artificial intelligence. In this context, the protagonists would be members of a secret organization called "The Insurgents", who aim to fight against "The Computer".

Since it did not initially develop many more details, we had to deliberately explore certain aspects related to the storyworld in order to define the specific elements of the setting. Through further questioning, we obtained more information about the secret organization, its conspiracy, the society of this world, and the characteristics of The Computer. Furthermore, although some of its suggestions were purely superficial, these also served as inspiration for subsequent human creative development. Finally, ChatGPT combined all these features into a single text, written with a more literary and dystopian language befitting the larp atmosphere.

We also had to specifically develop some prompts about the initial situation that would set the larp in motion: a meeting of the clandestine organization. We then delved into potential themes, narrative conflicts, and specific events that could be developed: missions, betrayals, moral conflicts, clashes of interests, internal disagreements, etc.

Regarding the situation that would bring the larp to an end, some issues arose. The AI intended to introduce more complex scenes connected to the action sphere, to directly portray the attack on The Computer. To avoid this dispersion –which would require greater human and material resources–, limit the temporal and spatial development, and encourage a more open ending, we manually established that the experience would conclude when the characters' meeting came to an end.



**Figure 2:** Example of conversation with ChatGPT during the development of the larp design.

When the AI was about to write a final synopsis, it decided to introduce too much relevant information into it, which would have spoiled part of the suspense and immersion of the experience. For this reason, this synopsis had to be modified through subsequent prompts.

The final phase, in which the AI presented greater difficulties, consisted of the development of concrete characters. For this, we developed the following prompt (translation from the original in Spanish):

For each of the 10 players, develop the following:

a) Character's name.

b) Profession.

c) Occupation or role within the hierarchy of the clandestine organization.

d) Brief description of their personality.

*e)* Brief narrative background on their life before joining the organization.

f) Character's opinion about The Computer.

g) How did they come to know and infiltrate the organization? Why?

*h)* Personal opinion about the organization. If it is not entirely positive, introduce the reasons for such disagreements.

*i)* Character's opinion about the attack method and use of violence.

*j)* Character's opinion about the ethical dilemma of rescuing political prisoners.

k) Opinion about the advantages and disadvantages of propaganda diffusion.

*l)* Character's opinion about the allocation of the organization's resources.

m) Character's motivations and goals.

*Try to balance conflicting interests so that no group of characters has too much advantage over another.* 

You can introduce some infiltrated character who obeys The Computer, but they cannot be more than two.

*Use a literary writing style that fits the dystopian and dark tone of the larp's setting.* 

The AI proposed some interesting characters, but many of them were extremely similar to each other. For this reason, we had to introduce prompts with specific characteristics for some of the characters. This way, we ensured that names or professions were not repeated, or that there was greater heterogeneity in terms of their personalities and views. Additionally, we rescued some of the initial character ideas contributed by the AI that, for some reason, were not being developed in this phase. However, upon introducing these types of prompts to expand the development of the characters, the AI began to reset its responses, resulting in the mixing of some character concepts with others. The confusion was so disproportionate that we eventually had to manually merge the different characters, so we can confirm that the AI increased the complexity of the design process at this time.

The generation of meaningful relationships between characters was algo not possible, as the AI was limited to reiterating already developed content. For this reason, in order to streamline the process —which already exceeded four hours— we decided that the relationships between characters would be treated in a more generic manner, which would be concrete by the players themselves. To help them have a guide for expanding their character's characteristics, ChatGPT developed some questions as inspiration.

The character sheet writing also did not have a successful development. ChatGPT did not use literary language but rather limited itself to repeating previous content, even forgetting certain details at times. For this reason, we decided that the character sheets would be based on a restructuring of the content obtained through the previous prompts.

Finally, we dedicated part of the development to intermedial matters. ChatGPT wrote some prompts for the creation of images to illustrate the larp, which were introduced in Midjourney and gave rise to striking dark and cyberpunk-themed illustrations. It also created a music playlist –although some of its songs actually did not exist– and a list of references to other narrative works of inspiration. In addition, we defined the title of the larp in a completely collective and dialogued process.

After restructuring all this material, we proceeded to lay out the larp design document. In it, small details that were added or modified concerning the initial version proposed by ChatGPT have been typographically marked with a black underline.

The lore section was divided into two: "Frame\_Dataset", about society in general; and "The\_Computer", with specific information about this antagonist. Additionally, we

manually added a section called "Context\_Rules", with the ludonarrative characteristics of the larp according to the *Mixing Desk of Larp* (Andresen and Nielsen 2013). Other additions were an initial description of the larp, a summary of characters ("Vox\_Populi"), and a section with a brief guide for the game master ("Master\_Notes"). Finally, some reflections on the process of designing the larp through AI were introduced, embodied in the sections "Author\_Epilogue", "20-tIAps", "Power-Boost", "About\_Us" and "Credits".

Following this initial creative phase, the larp was expanded with the development of the <u>NPBot</u><sup>11</sup>, a Python and Discord application that allows interaction with ChatGPT while the AI embodies one of the larp characters –in this case, The Computer. This extension, which was initially considered an anecdotal endpoint, has become one of the major attractions of this larp.

Finally, after receiving feedback from the initial players, the design document was manually expanded with several new sections to allow for a better understanding of the game, particularly with regard to the use of Discord and the NPBot ("Insurgent" and "SGCEO"), as well as the commands capable of altering its behavior –a series of keywords and trigger codes included in the bot's initial personality prompt.



**Figure 3:** Image for the NPBot documentation, featuring a screenshot taken during a run of *Project Dark.IA*.

## RESULTS

## Learnings and discussions

A key issue, already mentioned in the article by Salge et al. (2020, 2), is decomposition. As we have seen in the section on dispersed authorship, many larps, especially the larger ones, must divide their design tasks among the various members of a team. For these, a possible division of functions would involve generating the storyworld and its simulation –where NPC issues would be included–, creating specific events and/or missions, arbitrating rules, or providing information –scene narration or non-diegetic practical information.

This structuring of the different tasks and objectives that must be achieved for a correct design of the experience should also be taken into account when working with artificial

intelligence. In general, we have seen that breaking down information into more specific and lighter prompts is a positive method. This is due to the memory limitations of ChatGPT, which in its 3.5 version only handles a context of 4.096 tokens (approximately 3.000 words). Consequently, when the sum of our prompts and its responses reaches this size, ChatGPT begins to forget certain aspects, resulting in inaccuracies and loops in the development of its new responses, for which we may likely need to initiate a new chat.

Although this limitation will be significantly resolved in future models –such as the initial 8.192 tokens of GPT-4, which will eventually exceed 32.000– an equilibrium between specificity and condensation is essential: we must be highly accurate and explanatory with the AI, but also limit the length of our instructions. In this regard, the application of prompt engineering methods proves extremely useful, as can be seen in the documentation provided by <u>OpenAI</u>, or in specialized courses, such as those offered by the <u>DeepLearning.AI</u> platform.

To structure all this process, we can take into account some ludonarrative theories, such as Espen Aarseth's (2012), which divides narrative games into four concrete elements: world, objects, agents, and events.

Given that the storyworld is imposed as one of the most complex elements –since, in a way, it encompasses the rest– a specific new decomposition for this element could be necessary. This may lead us to use theories such as Mark J. P. Wolf's (2012), which details eight infrastructures: space and time –concerning the narrative scenario–, characters, nature –which not only includes flora and fauna but physical laws in general–, culture, language, mythology –the way the world is understood by the characters– and philosophy–such as the underlying ideology and values in the narrative proposal.

Each of these categories could serve to develop more advanced and structured prompts, which will undoubtedly lead to better narrative results, not only in terms of detail but also in terms of coherence. As other possible improvements, perhaps the AI could be used to detect ludonarrative errors and inconsistencies present in the initial design of a larp.

In addition, all of these elements can not only be used at a diegetic level but can guide participants in production and preparation issues –for example, with costume guides–, although precautions should be taken with regard to potential "hallucinations"<sup>12</sup> of the AI.

For all of this, at least today, it is essential to concretize what is being asked, through the division of complex tasks into different points or prompts, where we must indicate as many details as possible. As an example, we can see that more extensive and higher quality results were obtained when the AI developed the characters individually and we specified issues such as avoiding repeating names or professions.

A correct development of prompts requires an absence of irony, double meanings, and spelling errors, as well as limiting the use of specific jargon. In addition, among the most popular prompt libraries, the use of roles with the AI itself is common: in an initial prompt, it is indicated that it should act in a specific way, generally associated with a profession with certain skills. In this case, for example, the AI could write as "a professional larp designer with a great power of narrative and literary expression". To this, we must add specific details of the larp in question, such as the tone, style, or type of language desired in its responses. In all these cases, the inclusion of adjectives and descriptive expressions is usually a factor of success –"literary", "atmospheric",

"interesting", "evocative", "metaphorical", etc. Finally, we must also specify the structure of the text we wish to obtain, in terms of its length and content subdivisions.

We have also observed that cases where the AI suggests interesting ideas, which it does not complete, are frequent. Our job here must be to make concise prompts to obtain more related information, and in turn, to indicate that it should integrate this new content into the current process –specifying how, if necessary.

For the development of specific game documents, this decomposition is again essential. If we indicate, in the form of a list and through individual prompts, which are the specific parts it should develop, a positive result is much more likely. Here, we must also take into account the AI's potential to rewrite, summarize, and translate content, something that we can also use in non-diegetic communications with potential players –advertising, registration processes, emails, etc.

Regardless, a human review remains essential, as even spelling mistakes were detected among ChatGPT's writings.

Lastly, to amplify the possibilities of the AI, it is advisable to explore third-party applications capable of expanding the native functionalities of the basic models. For instance, during the development of *Project Dark.IA*, and thanks to several Chrome extensions, we were able to access templates and visual prompt editors, chat exports, integrated web searches –including references– or the implementation of ChatGPT directly into web browsers, social networks, word processors, or spreadsheets.

## **Consequences and Final Thoughts**

After *Project Dark.IA*, all these learnings related to prompt engineering and the creative use of AI were applied in a workshop at EntreReVs 2023, where it became evident that the use of different structured prompts<sup>13</sup> enables the obtention of much more accurate and fluid results.

One of the consequences of using AI in live-action role-playing games is the potential for increased scalability. For example, at the narrative level, the number of fictional details, such as character relationships or the lore descriptions, could substantially increase. Practically speaking, the inclusion of a larger number of players could also be facilitated. In turn, this technological support could reduce the design time and increase the number of larp creations, which could increase attempts to professionalize the hobby.

However, the analysis of this project indicates that this artificial intelligence –at least in its 3.5 version– is currently not capable of generating a coherent live-action roleplaying scenario autonomously, due to the difficulties it presents in differentiating between characters. Although it can simulate conscious development, a lack of understanding its own creation is apparent. Nevertheless, it is important to highlight that it still represents a valuable tool for creative inspiration and optimization of design and writing processes, although it can only reach its full potential through human intervention.

From an intermedial (and controversial) perspective, AI could allow any larp to feature high-quality illustrations, even if its creative team does not have the necessary resources to allocate this task to a professional illustrator. In the musical realm, AI could be very useful for building playlists that serve as inspiration or atmospheric background for the experience. After Google's recent announcement of MusicLM<sup>14</sup>, this is something that could be amplified in the future with greater development of text-

to-music generation AI, which could facilitate the fact that any larp creation can have its own original soundtrack too.

In general, we could define this "collective" design process as a form of feedback in which, by guiding the AI adequately, it can guide the designer to efficiently achieve the desired content.

Regardless, the fact is that this type of technology continues to change almost daily, so the future situation could be very different, especially given the release of version GPT-4–with greater human language competencies–, the increase in processing speed, or its integration into our everyday applications –from <u>Canva</u> to <u>Visual Studio Code</u>–, something that becomes especially interesting due to the Microsoft's<sup>15</sup> huge investment in OpenAI –which means that the GPT model will be natively included in future versions of Windows and Microsoft Office; and where other big companies such as Google and Meta will do the same, through their own AI models.

The landscape is so vast that perhaps in the future, we will have tools capable of surpassing the Turing Test to equate its understanding to that of humans, which would undoubtedly involve a very different approach to this type of creation act, which could lead us to speak of *new* new media (Levinson 2013).

In fact, the development of artificial intelligence, combined with virtual reality, could allow larp designers to have tools close to *Star Trek*'s Holodeck: a virtual room capable of transforming spoken commands (Heim 1993, 122) into an elaborate simulation of an illusory world that behaves like the current world, as a universal fantasy machine with which we could interact at any level (Murray 2017, 24).

Regardless, the advent of models with a larger number of context tokens will facilitate the creation of live-action role-playing games and allow for the development of broader and more precise settings, with a greater number of characters and relationships between them, as well as a reduced need for human intervention.

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#### **ENDNOTES**

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<sup>2</sup> The database developer is Kaja Michałowicz, while the editor-in-chief is Andrzej Pierzchała.

<sup>3</sup> The word "larp" is used in lower case because its acronym has become an everyday term in the community.

<sup>4</sup> With these terms, we refer to those designers and fans who make this interest into their own academic object of study.

<sup>5</sup> In this context, as an extension of Herman's (2009, VII) and Ryan's (2014, 33) ideas, we understand the storyworld as the world evoked by the narratives that allow the development of the game world, regardless of whether it displays fictional or current characteristics.

<sup>6</sup> *Empty Epsilon* –whose creators were part of the *Mission Together* team itself– had already been employed as a space simulator in the Finnish larp <u>Odysseus</u> (Kröger, Hautala, and Kumpulainen 2019).

<sup>7</sup> A wearable is an electronic device that must be worn like another piece of clothing or accessory, and can connect to other devices to transmit or store information.

<sup>8</sup> NFC is the acronym for *Near Field Communication*, a wireless technology that allows the exchange of data between several devices located at short distances.

<sup>9</sup> These books include some of the theoretical ideas developed in these annual conferences on Nordic Larp since 2001.

<sup>10</sup> A prompt is an indication in a computing system that invites the user to enter some type of information or data. In the field of artificial intelligence, a prompt is a sentence or question given to a language model to generate a response.

<sup>11</sup> The bot can be downloaded for free from <u>GitHub</u>, allowing other larp creators to incorporate it as a new creative tool. Its development process, as well as its implications, are extremely complex and deserve to be collected in a future paper.

<sup>12</sup> An hallucination in ChatGPT is a type of error or misunderstanding in which the model generates or interprets data inaccurately, making up non-existent results that it presents as real or authentic.

<sup>13</sup> The prompt developed for this workshop, as well as the new AI-generated larp ideas, will be shared in the same <u>GitHub</u> repository.

<sup>14</sup> <u>https://google-research.github.io/seanet/musiclm/examples/</u>

<sup>15</sup> <u>https://blogs.microsoft.com/blog/2023/01/23/microsoftandopenaiextendpartnership/</u>