

Scriptwriting for Interactive Crime Films The Case of *Scapegoat*

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Abstract

In recent years, the increasing number of interactive films being released has highlighted the need for further development of methods and criteria that can guide the earlier stages of development, such as the scriptwriting process. Following the framework of interactive storytelling as a spectrum, it is acknowledged that writing a script for an interactive narrative that involves branching path options for navigating through the story, or multiple endings, is becoming more common and presents its own challenges. In this context, this paper examines established criteria used for assessing narrative quality and examines currently available software for interactive scriptwriting, identifying their affordances and limitations. Accordingly, we present *Scapegoat*, a short interactive crime drama, based on the model of British homicide investigations, and with the objective to investigate in practice the application of the criteria for narrative quality, together with the processes and elements of scriptwriting that can lead to a strong, engaging story. We propose an approach that can efficiently incorporate crucial information of the interaction design, it can be effectively communicated to the crew and cast and used throughout the production lifecycle of the film. We highlight the crucial role of the on-set script supervisor for ensuring the interaction design is not compromised, and continuity is retained. We also discuss recommendations for further developments, including the importance of engaging the crew and cast early in the development process, together with future work into the requirements of interactive commissioners for television and film, and the need for standardization in the industry.

Keywords

Interactive Film, Interactive Storytelling, Interactive Narrative, Narrative Quality, Scriptwriting, #IFM2021

1. Introduction

The field of interactive media for storytelling and filmmaking has seen a resurgence in recent years, as technology has been advancing with accelerating rates, following the ideas and experimentations that were toyed with in the 1980s, like *Dragon's Lair* (dir. Don Bluth), but also the earlier productions of the 1960s. There are different definitions of interactivity, for example framing it as “a cyclic process between two or more active agents in which each agent alternately listens, thinks and speaks” (Crawford 29), or as “back-and-forth communications between the audience and the narrative material” (Handler Miller 3). Accordingly, the term “interactive” can involve a plethora of media, including video games. For the purposes of this paper, we will use “interactive” to refer to “media and technologies that enable a two-way communication between an audience and their film-viewing, thus enabling the audience having control of certain aspects of their experience” (Zioga and Vélez-Serna). Following the framework of interactive storytelling as a spectrum, narratives can range from fully linear stories to fully player-driven stories (Lebowitz and Klug 120). As such, interactive stories in films can follow the linear format of a traditional story but allow the viewer to engage with the content more actively, for instance by looking around and interacting with the scene while the action unfolds. Typically, these include Virtual Reality (VR) or 360° films that can be viewed using headsets, while branching path stories involve “branches” that the player can choose from, leading to different paths. In particular, multiple-ending stories occur when these branches alter the plot significantly enough to result in different endings. This type of stories is becoming more common, as seen for example in the case of Netflix's *Black Mirror*:

Bandersnatch (dir. David Slade).

However, the assessment of interactive films presents challenges. Murray (11) notes that interactive digital narratives commonly attract negative critique, as they are assessed from a game design perspective. Another challenge is the formatting of scripts for interactive films. Corley and Megel (17) suggest that screenwriters can change a screenplay's format, as long as there is some credit paid to the original format, such as the scene headings and capitalisation of characters' names.

Nevertheless, this does not shed light on what might be an effective format for an interactive script. At the same time, writers of interactive scripts are turning to software that function as programming languages but allow writers with no prior knowledge to create interactive stories. However, as we discovered in the course of this research, this can present its own issues when collaborating with a crew and cast.

Therefore, further research is needed on methods and criteria that can guide the earlier stages of development of interactive films, such as the scriptwriting process. In support of this, Murray (5) advocates for a new field dedicated to interactive digital narrative, with its own terminology and parameters. In this context, in Section 2 we examine established criteria used for assessing narrative quality, with the aim to investigate in practice their application to interactive films. Section 3 explores the use of currently available software for interactive scriptwriting, identifying their affordances and limitations. We present *Scapegoat* (dir. Sophie Hiscock), a short interactive crime drama, with the objective to investigate in practice the application of the criteria of narrative quality, together with the processes and elements of

scriptwriting that can lead to a strong engaging story. Lastly, Section 4 discusses its implementation in production and evaluation, together with final conclusions and recommendations for further developments.

2. Criteria of Narrative Quality

One element deemed important in a story is the likability of the main character, so much so that scriptwriters should include a scene where a character's action defines who they are and make the audience root for them (Snyder xv). The hero, or main character, must have an objective, or need, that will influence their behaviour and give the story a driving force (121), as well as a challenge to overcome, so that their reactions create more depth keeping the audience immersed in the narrative (Ince 62). It is also suggested that the quality of the plot is influenced by identifying with the main character and their situation, as well as the struggle with their opponents (Cooper and Dancyger 41). Characters act as stand-ins for the audience, so that they can experience the world that the story is set in (Snyder 48), and therefore, audiences must be able to project themselves onto a character (Cooper and Dancyger 10). This means that in a good film, the characters are relatable, yet still function in a way that complements the genre and narrative of the film.

Accordingly, character, conflict and plot are all connected to one another to determine the quality of a film, particularly how the conflict, which provides the plot, is understood by the audience. Therefore, to make a film more dramatic, the stakes should be raised (92). Narrative quality also relies, in some part, on structure, as it shapes the plot, informed too by the genre (106). However, different writers take

different approaches on how a structure should be formed, from creating layout of beats (Snyder 69) that should be featured in a script, to suggesting instead, that writers should aim for elements that make a story engaging, like catalysts, climaxes, and recognition (Cooper and Dancyger). Whereas Nash (99), argues for a “discovery-driven script development,” meaning that the process of creating the story and the materials used determine the structure, as opposed to a set formula that can result in a predictable script. In particular, the story beats are milestones of the plot that build the core overarching story and need to be facilitated, but not altered, through the chain of events. At the initial stages of the script development, these story beats can be bullet-pointed out as a basic plotline, and then developed into a rough script forming a timeline guide.

It is worth noting that, as Batty (2) points out, the aforementioned criteria are likely to be favouring their authors’ work. Nevertheless, they bear similarities and can be used as a starting point for creating a set of criteria to assess the narrative quality of interactive films.

3. *Scapegoat*: A Short Interactive Crime Script

In order to investigate in practice, the processes and elements of scriptwriting that can lead to a strong engaging interactive narrative, *Scapegoat* (Clarke), an interactive crime script for a short HTML-based film with the same title was created.

3.1. The Narrative

From the onset, the development of the script followed the crime genre, a classic

“whodunit” murder mystery that allows to create engaging characters and a plot structure with clarity. The story involved two detectives, Mia Johnson and Alison Turner, as the main protagonists, investigating the murder of Lucas Cook, only to find out that he is a scapegoat for disappearance of a girl called Victoria Grey. Emphasis was placed on structure, character and conflict, and the story beat method was used to create the different branches and narrative paths. The practices used in British homicide investigations were incorporated, providing the audience from the outset with a challenge, that is to guide the detectives in their efforts to identify and arrest the killer. Research showed that homicides are solved in teams (O’Byrne 15), which influenced the cast decisions and location choices, including incident rooms that are used to keep the investigation and its findings in a central place, overseen by a superior officer. Following the completion of the treatment, a pilot script was created to investigate the use of available software for interactive scriptwriting.

3.2. Scriptwriting Software

The pilot script was implemented using *Celtx* and *Celtx Gem* (Celtx Inc.), *Twine* (Interactive Fiction Technology Foundation) and *ink* (inkle). The format followed the games script layout demonstrated by Ince (146). Scenes were noted by a number (e.g. Scene 1), and the options within the same scene were noted by a decimal point (e.g. Scene 1.1, 1.2 etc.), thus clearly presenting where a branch takes place.

3.2.1. *Celtx* and *Celtx Gem*

Celtx, one of the most well-known pre-production software, designed to support scriptwriting for film, includes shortcuts tailored to film script formats, such as indents

for character names, dialogue and scene headings. Although *Celtx* is ideal for writing a linear narrative, it presents issues when writing a script for an interactive film. For example, one of the challenges encountered is that it does not support adding branching narratives. To keep up with the rising popularity of interactive entertainment, Celtx Inc. released *Celtx Gem*, a software for creating VR and games scripts. It uses the same principles, with indents for character titles, but the format options are more tailored to games and limited to “Character,” “Dialogue,” “Gameplay,” “Action,” and “Parenthetical,” without including shortcuts for “Acts,” “Scene Headings,” “Shots,” “Transitions” and “Text.” It also includes a view of the overall flowchart of the story that shows the scenes, branches, and interactive dialogue, together with the interaction points (Figure 1).

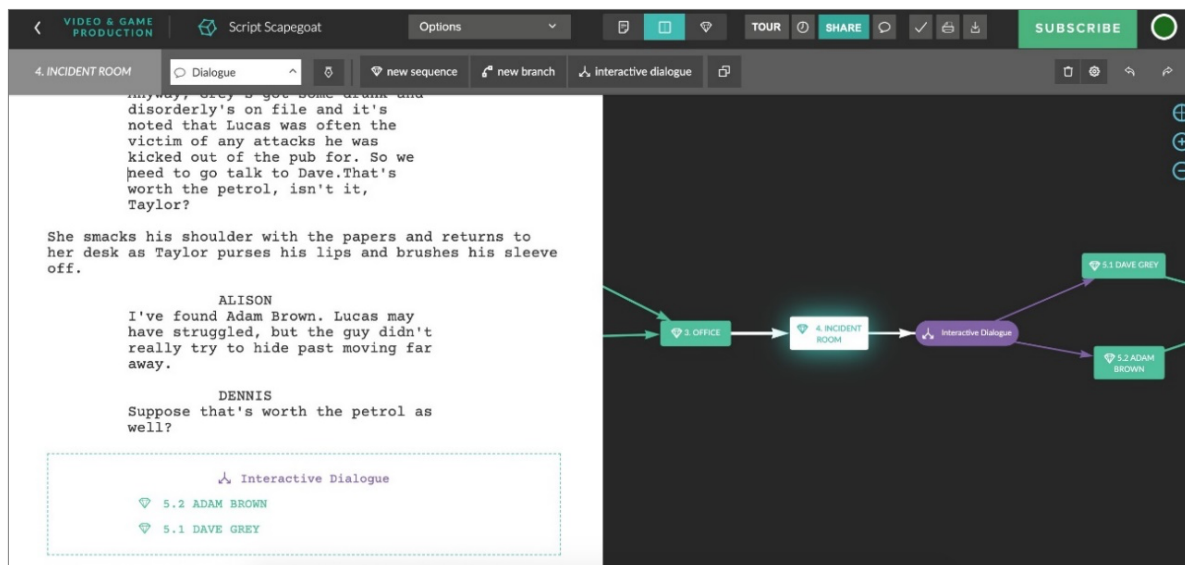


Figure 1 - Celtx Gem split screen view of Scapegoat script.

However, the order of the branches is not easily altered. *Celtx Gem* also allows the writer to choose between a screen showing only the flowchart, only the script or a split screen between them, and enables to export the script as individual scenes, or the entire script to a PDF, as well as print the beats flow chart.

3.2.2. Twine

Twine was developed for creating non-linear and interactive stories, and has been used in professional productions, for example for writing the outline of Netflix's interactive film *Black Mirror: Bandersnatch* (Rubin). It has an option to test the script with active links, which also allows to check the flow and continuity more effectively (Figure 2).

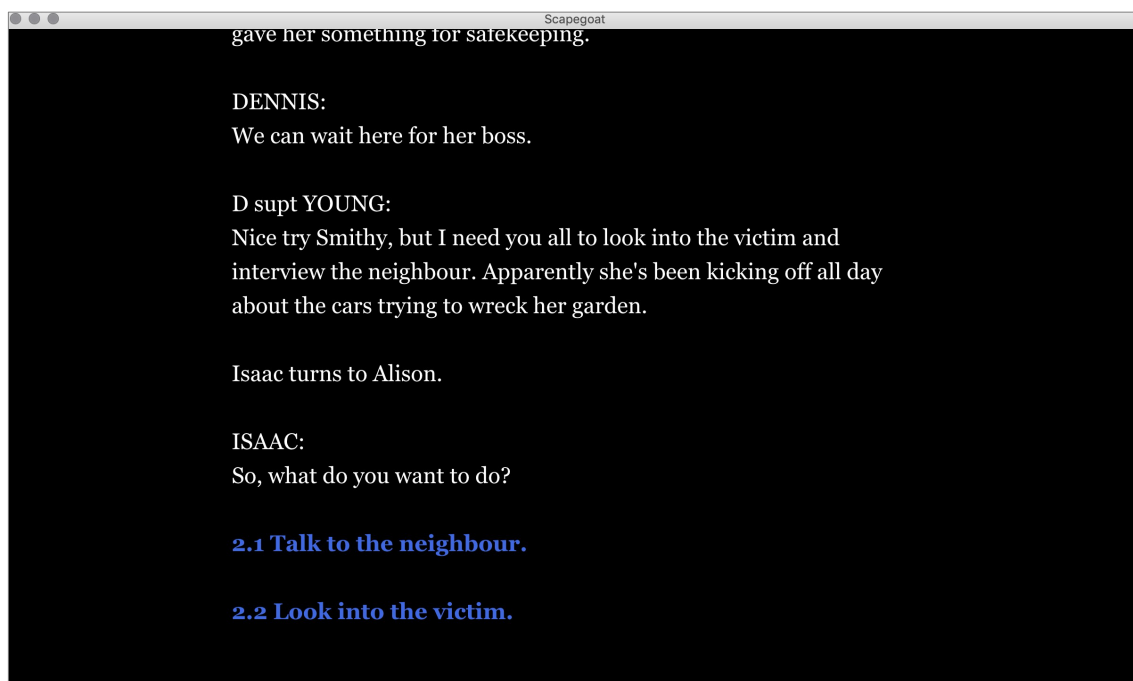


Figure 2 - Twine 'Test' screen of Scapegoat script.

However, in order to read all the available options, the reader has to “playthrough” several times. Outside the test function, the beats of the story are laid out in a flowchart with visible titles that can work as scene headings, which are easy to understand and useful when assessing the story's structure (Figure 3).

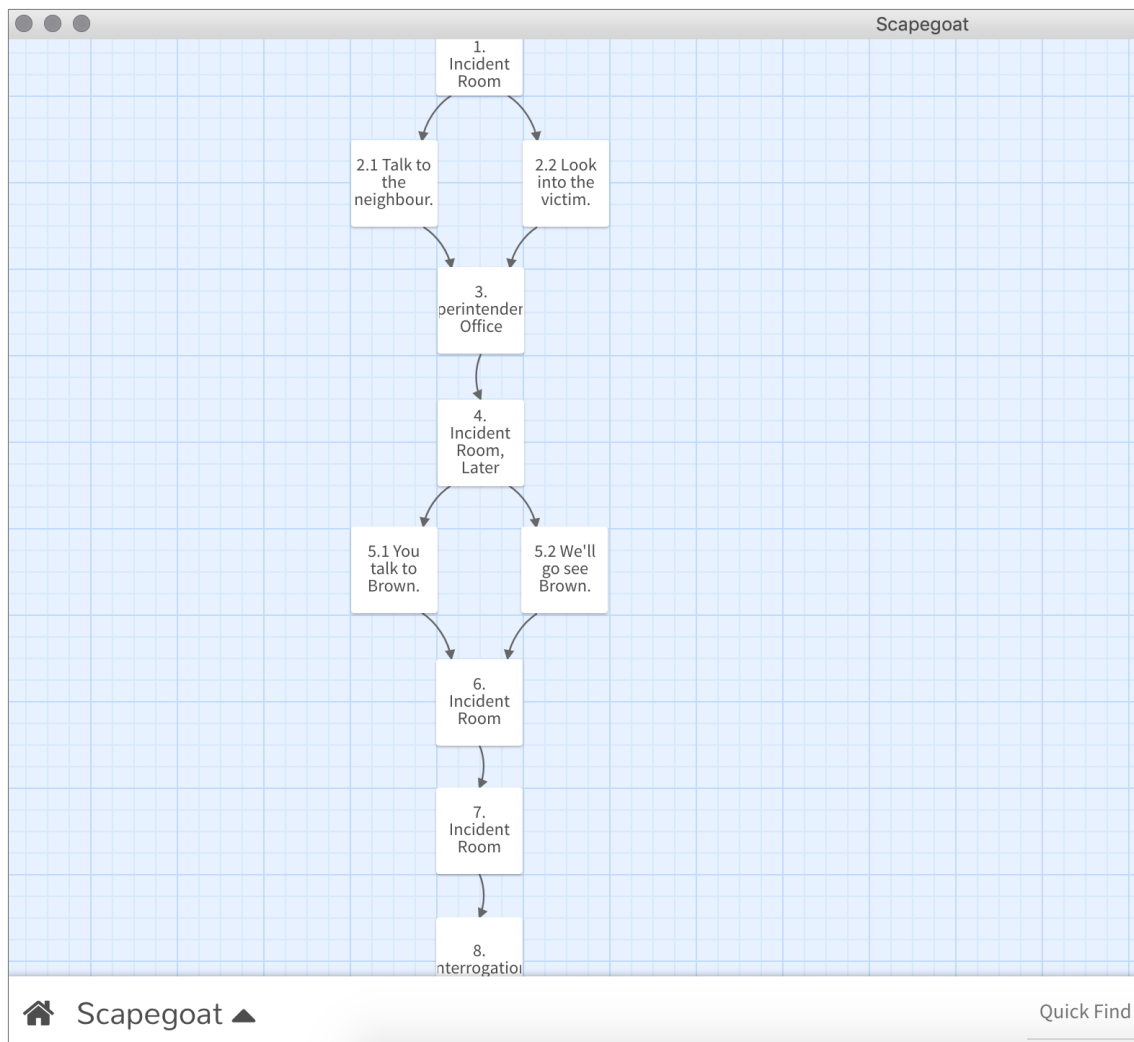


Figure 3 – Twine ‘Story Map’ of Scapegoat script.

3.2.3. *Ink* and *Inky* – the editor

ink is described as a “narrative scripting language for games” (Inkle) with *Inky - the editor*, a plugin that includes a display resembling a coding window, with the benefit that the story appears in its final format beside the work-window, so changes can be seen in real time (Figure 4). *Inky* also keeps track of where options and branches have been created and will alert the writer when these have not been linked to a scene, and when scenes have not been either linked to a new one or ended, thus avoiding loose ends. However, the coding required can be challenging to a writer without prior experience.

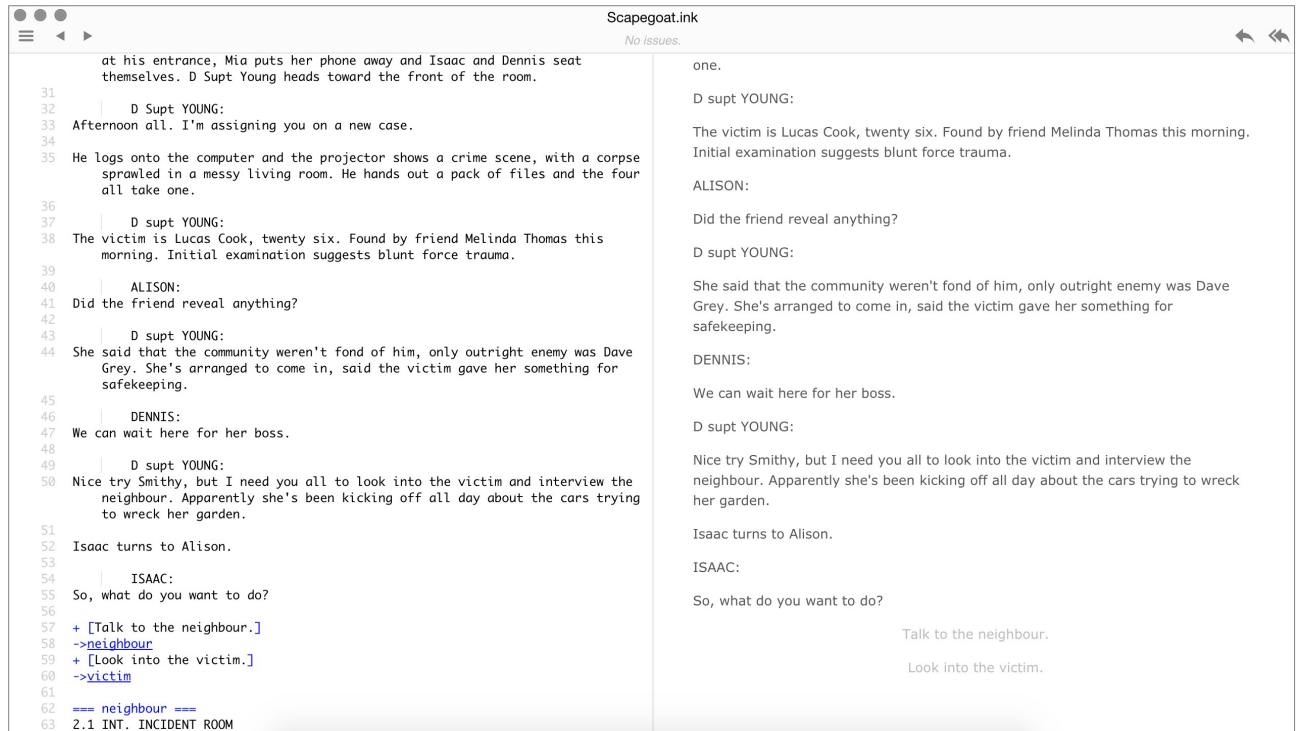


Figure 4 – Inky view of Scapegoat script.

3.2.4. Comparison

Celtx Gem is similar to *Twine* in terms of the presence of a flowchart with a scriptwriter functionality, but neither of them has a feature that alerts the writer to potential loose ends, as *Inky* does. However, the script editor that is more tailored to film, makes the software more appealing. Compared to *Celtx*, it can be challenging to adjust scripts in *Twine* or *ink* scripts to reflect film formatting, such as centring a character’s name to indicate the start of dialogue. However, they are more customisable. For example, *Twine* has four different available “formats,” with one more code-based (*Twine Cookbook*). Overall, *Twine* and *ink* are more suited to Interactive Fiction, similar to “choose your own adventure” novels, as the “play” functions let the audience go through the novel toward a set ending.

A common challenge is that of exporting. *Celtx* allows the script to be exported as a

PDF, which is easy to share with the cast and the crew. *Twine* scripts are saved as HTML files, which however require that the reader has the *Twine* software installed, or an online account already setup. Similarly, the reader of the *ink* scripts that are saved as ink files, must have the software installed, which can present accessibility barriers for the crew and the cast.

Following the completion of the pilot script and the tests conducted, it was decided to use *Celtx* for the final script development for its ability to export the script as a PDF file, as well as its functionalities that allowed for a traditional film script formatting.

3.3. Final Script

Initial readings with the director showed that the format was easy to understand, but an addendum at the start of the script could help readers, unfamiliar with interactive scripts (Clarke 25). Another suggestion was that the interaction points/options should be written into the script, to make the flow of the scenes clearer, by following the numbers assigned, and ensuring that they suit the tone of the characters speaking, while during the post-production the correct phrases are used.

It was also decided to reduce the main investigating team from three members to two. The narrative was originally drafted with different branching narratives that ended with four different killers. However, this version would have made the runtime longer than anticipated, extending the production-time beyond the set deadlines of the project. For this reason, the branches were reduced, leading to one killer, and instead dictating which part of the investigation the audience can see based on their decisions,

similar to how cutscenes play in video games (Clarke 25).

4. Discussion and Conclusions

Following the completion of the script and the feedback received during the pre-production stage of the film, further testing and improvement continued during the production, allowing for any errors, like continuity and character voice, to be identified and corrected. Following ethical approval, feedback was collated from the crew and cast, a total of nine participants that gave written informed consent and were directly recruited by the first author. The study involved the use of a questionnaire that incorporated a Likert scale from 1 to 5, as well as open questions, which provided qualitative and quantitative results of the script's reception, together with advice on how to improve it, particularly for those unfamiliar with interactive films and productions (Table 1).

How easy was it to understand the script format?		How do you think the script could be improved?	
5 Completely Clear	75%	No improvement needed	33.33%
4 Very Clear	25%	Clarity on branches	25%
3 Somewhat Clear	0%	Clarity on scene divisions	16.67%
2 Not Very Clear	0%	No comment	16.67%
1 Not Clear At All	0%	Less description of character action	8.33%
Total	100%	Total	100%

Table 1 - Analysis of participants' answers to questionnaire.

Responding to "How easy was it to understand the script format?," 75% answered

“completely clear” and 25% “very clear.” In the question “How do you think the script could be improved?,” 33.33% responded no improvement was needed, 25% requested more clarity on branches and 16.67% more clarity on scene divisions, while 16.67% made no comment, and 8.33% indicated less description of character action.

Additionally, in the “other comments,” 33.33% stated that they enjoyed the script and 25% asserted that no improvement is needed. The results show that the format chosen was easily understood, the narrative structure was clear, and the script was easy to follow. However, more clarity was needed in the branching options, for example by creating an information sheet or some sort of colour coordination to help readers navigate the branching options.

The criteria of narrative quality---character, conflict and structure, presented in Section 2---informed from the outset all the stages of the script development. The story beat method was proven useful, as the branches were treated as beats and the narrative was used to link them. The characters could have been better fleshed out by increasing the interaction between them and adding more details about their lives, such as backstories. Conflict, a staple of the crime genre, primarily came from the dynamic within the team and power relationships, allowing the audience to side with the character that matches their experiences and preferences.

On set, the non-linear aspect of the story seemed to confuse the actors. The scriptwriter, who was also the script supervisor, had to occasionally remind them the position of the scene within the story, for example during the filming of a branching option, and provide them with the context of the previous one and the alternative

scene that would run concurrently. For this reason, dedicating more time to rehearsals and roundtable readings can help actors understand the script's format and the non-linear story. Therefore, the presence of a script supervisor on set is crucial when shooting an interactive film, to keep track of the branches, ensure all paths are covered while continuity is retained, and both crew and cast are aware of the position each scene has within the narrative.

To conclude, Murray's (5) argument for creating a distinct field of study for interactive digital narratives is supported by the presently discussed study. A consistent set of criteria for interactive narrative quality and terminology would help the advancement of the field, and the standardization of the industry. Additionally, further development of user-friendly tools, tailored to the format requirements of a film script, will allow writers to explore the creative potential of interactive scripts. Functions that can provide feedback on which narrative branches are chosen most often, could improve the narrative quality by helping make all branches equally engaging. Moreover, research is needed into the requirements of interactive commissioners for television and film, to identify preferred formats for interactive proposals. This could also inform the type of narratives deemed more appealing to audiences and the interaction required.

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