# **Can AI Support Fiction Writers Without Writing For Them?**

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# ABSTRACT

The HCI community has intensively explored the employment of AIs in story generation. However, creative writers may have mixed perceptions about their ownership of the story when there are significant AI contributions. We explore opportunities for AIs to support fiction writers without compromising their feeling of story ownership. In this paper, we present preliminary results of a formative interview study with fiction writers (N = 9), focusing on their practice and the challenges of the story-writing process. We discuss some of the challenges these writers face and propose design opportunities to address these challenges in ways other than text generation.

## **KEYWORDS**

writing support tools, creativity support tools, interview study, fiction writing, human-AI collaboration

## 1 BACKGROUND

HCI research on AI writing assistants has primarily focused on applications for text generation. For instance, Chung et al. [3] presents a tool, TaleBrush, that generates a story according to a manual sketch of the protagonist's fortune graph. While this approach has many useful applications (e.g. [2, 6, 7]), creative writers are wary of AI text generation because of questions about ownership of the text and artistic integrity [1]. Yet AI support can take many forms, and we are inspired by others who have looked beyond text generation to support writers. These include providing constantly updated summaries to help writers structure and reflect [4] and assisting the writing process in line with the writers' values and preferences [5]. To identify areas where *fiction* writers could benefit from AI support, we present preliminary results from a formative interview study.

# 2 FORMATIVE STUDY: INTERVIEWS WITH FICTION WRITERS

We conducted 9 semi-structured interviews with fiction writers (referred to as W0-W8) to investigate the challenges they experience. Details of participants' experience can be found in Table 1.

The interview questions were selected to shed light on the specifics of their processes that related work on support systems for

Category	Number of Participants
Genre	
Horror/Thriller	2
Fan Fiction	2
Historical Fiction	2
Science Fiction	1
Fantasy	1
Speculative	1
Story Type	
Character-driven	4
Character- and plot-driven	5
Writer Type	
Professional	4
Hobbyist	5
Experience (Years)	
Mean	9
Median	8
Min/Max	4/25

Table 1: The breakdown of participants according to their writing experience. For genre, story type, and writer type, participants were asked to select one option that best described them. All professional writers report also writing as a hobby.

writers has not focused on. We aimed to identify challenges writers face during specific story-building processes such as character development, plot development, and writing dialogue.

## **3 SELECTED FINDINGS**

Based on our qualitative analysis, we identify several problems that can be addressed through new AI-driven support tools.

**Creating distinct characters.** Creating believable characters with authentic, distinct voices and perspectives is a challenge. W4 discusses how careful writers must be for each line of dialogue, where they consider the character's personality traits and knowledge: "The main question is, how much are they going to reveal through their dialogue? How much do they know about the world or the situation? And then there's things at the very sentence level. How do they talk? Are they an anxious person? They're probably going to be using filler words like "like" or trailing off or speaking in fractured

fragments. A confident person is less likely to do that." There are also more sensitive aspects of creating characters, like avoiding stereotypes or otherwise offensive portrayals. W5 has encountered this when writing characters whose ethnic background is different from theirs: "If I'm writing for a character from a different ethnic or historical background, I might ask someone from that particular culture, like, is this an accurate portrayal of that character? I know in the literature scene, there's a big emphasis now on what is known as sensitivity readers. So these are people who might just be people from a different background. They'll read through your story and say that, you know, this doesn't seem representative of our culture."

Writing about unfamiliar experiences. Writers can struggle to write about things they haven't personally experienced, which can create difficulties when their characters go through such experiences. For example, as W6 mentioned: "For the most part because I am not a super romantic person, most of the relationships that I've had have been like familial, friendly. So that tends to be just what I write about: familial, friendly relationships. So it's when I need to think about other types of relationships, like I'm thinking about business relationships or thinking about more romantically inclined relationships. Those tend to be a bit hard to start with, because I struggle with figuring out what exactly the conflicts could be between those. That's probably the hardest part." W0 uses media and real people for inspiration when creating characters they don't relate to: "When I was creating this character, this girl is a 13 year old girl. Obviously I'm not a 13 year old girl, so I have to apply my logic of what I witnessed from media and how I perceive that, or even those who are younger than me that I've had the privilege to talk to. I applied those experiences with them to generate a character based on all of that. So when I was making [this character], for example, I had to look at, okay, she has the mysterious feelings of how Coraline Jones was in [the film] Coraline. But she maybe has a little bit of my younger cousin, who is a little bit more aggressive. You have to take combinations from real life experience. So living and watching a lot of stuff helps to generate ideas to form your character."

Ensuring story timeline continuity. Writers often tinker with the timeline of stories as they are being written. Other times, they will explore adding one theme/aspect to see whether it helps to tell the story better. Removing one of these ideas may often mean needing to go back to find passages or dialogue that need to be revised. W0 discusses how challenging this can be: "Keeping the continuity [of character backstories] intact is very difficult... I can't tell you how many times I've written a scene, and I would be like, "oh no, this is not supposed to happen like this, because I did it this [other] way in the backstory." So which one do I change? Do I change the backstory or do I change this?" In addition to the background details, the sequential order of events can also be difficult to keep track of. W3 keeps a written timeline to help with this: "I think for me one of the important things has been not mixing up the timelines. So I do have a timeline that I'm working on for story I'm writing that just helps me keep everything straight and make sure that I haven't accidentally written something happening in a year where the character wouldn't have been there."

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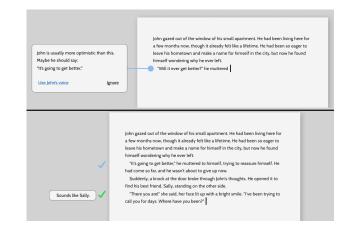


Figure 1: An example interaction using AI Character Models. Top: the model for John's character has pointed out a piece of dialogue that doesn't match John's personality; the user can ignore the model or heed its advice. Bottom: the model for Sally's character has reviewed her dialogue and confirms that it is in line with her personality.

**Ensuring factual correctness.** Many writers encounter challenges when writing about settings or objects that are unfamiliar (e.g. locations, time periods, tools, etc.), as this necessitates doing additional preparation/rigorous research work. Some do not do this, but then run the risk of writing something that becomes less believable. W5 encountered this exact issue: "*I remember when I was writing a novel in the medieval period, I tried to make sure that some of the details in the background story were actually accurate because I didn't want to publish or to share it with someone else and then they'll say, "oh, that didn't exist in that time period" ...that's one of the greatest challenges."* 

#### **4 FUTURE WORK**

One limitation of our current study is the absence of any observations of the micro-processes that fiction writers follow when using their current writing tools (e.g. word processors). Such details will be very useful in future stages of this work, particularly when it comes to building tools such as the ones described below. Our work has thus far focused more on high-level conceptual ideas for writing support tools, but we plan to examine writers' micro-processes in future work.

Nonetheless, based on the findings from our interviews, we have identified several opportunities for AI-driven tools for supporting fiction writers. We intend to prototype these tools and evaluate them with authors.

**AI Character Models.** AI representations of fictional characters, created according to the writer's input, could help the writer to maintain dialogue style (Figure 1), character knowledge, and character histories. Tools can assist by identifying dialogue and passages that are "out of character" or inconsistent with prior behaviour; alternatively, they could provide suggestions for amending such passages.

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*Experience Advising.* AI tools can bridge the gaps between a writer's own experience and what their character is experiencing. For example, if a character were experiencing a traumatic event that the author themselves has never been through, the tool could advise the author on the emotions, actions, and language that the character would be likely to exhibit. Alternatively, it could describe procedural experiences unfamiliar to the writer, like the steps involved in landing a plane or performing surgery.

**Continuity.** Much like how semantic code editors can facilitate swapping out names of variables, or recognize when function calls are inconsistent with function definitions, we could imagine writing support tools being able to identify and locate continuity problems for writers that arise during the writing process.

*Fact Checking*. Real-world facts sometimes need to be incorporated into fiction. For example, historical fiction and science fiction will likely make use of historical and scientific facts, respectively. AI tools could check the writer's text for factual inaccuracies. Of course, intentionally fictitious aspects should remain untouched. Such tools could work either on-demand (e.g. like how a compiler works), or on-the-fly as the writer is preparing the text.

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