

# Designing Audience Flow State in Narrative Media

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**Abstract.** Narrative media emerges its flow state model from a relationship between audience relatability and narrative continuity. When viewers engage with a story, their cognitive abilities and emotional investment interact with the coherence of the narrative, which determines the depth of immersion. Existing research highlights that textual cohesion, probabilistic continuity, and emotional transitions are key to sustaining flow when receiving stories through media. However, cultural background and audience familiarity with storytelling conventions also influence the interpretation of story content and, therefore, cause different degrees of immersive experiences. This study proposes a Two-Dimensional Flow Framework, categorizing factors for flow state into relatability—how much the viewer identifies with the story—and continuity—the logical progression of the narrative. Misalignment in these dimensions can lead to disengagement through negative emotions. This framework allows creators to craft narratives that sustain audience engagement without overwhelming or under-stimulating them through curating the relationship between audience relatability and narrative continuity. The findings suggest that cognitive compatibility and emotional resonance deepen audience connection and sustained participation, so future storytellers should consider these factors when designing narrative media.

**Keywords:** Flow state, story continuity, audience relatability, narrative media, emotional engagement.

## 1. Introduction

The concept of flow, introduced by psychologist Csikszentmihalyi, describes a mental state where an individual becomes deeply absorbed in an activity, often to the extent of “forgetting about time.” This psychological state is noted as intense focus and immersion and has found vast applications across diverse fields to enhance human efficiency and create compelling experiences (Doyle, 2017). As a primary approach allowing people to receive and interact with information from the world, the media has also adopted this concept to draw audiences into the unique realities that mass communication channels construct. Among the various flow applications in modern media, flow’s integration into the gaming industry has been particularly notable, where game developers and researchers have extensively explored methods to enhance player immersion. These efforts result in making flow an industry key to remarkable interactive entertainment.

In existing studies on flow in media, mainly games, the widely recognized flow model utilizes a coordinate diagram with game “difficulty” on the x-axis and player “skill” on the y-axis as key variables determining the flow state, where the challenge a game provides to players neither overwhelming nor too easy to gain a sense of achievement. Hence, game designers balance challenges with player abilities and create an immersive game world where players stick to the game experience due to feeling neither bored nor anxious (Chen, 2007).

However, as the evolution and convergence of media forms continue to emerge, new complexities, such as narrative games, in particular, offer deeply immersive experiences while often bypassing notions of “player skill.” For example, unlike many games involving hardcore controlling skills on keyboards or game consoles, in the game *What Remains of Edith Finch*, players follow along with an interactive storyline in a non-competitive manner (Sánchez Trigo, 2022). In this case, although the designers in this game removed the challenge aspect in the flow diagram, players still proactively sustain engagement as the narrative unfolds. Similarly, gamification in non-gaming contexts that harnesses storytelling and interactive mechanics also effectively captivates audiences without relying

on skill-based engagement. These developments suggest further exploring flow beyond its traditional two-variables diagram.

In light of this demand, this study aims to identify additional variables that determine if one can enter a flow state in narrative media, including but not limited to games, and expand the existing framework. However, existing research suggests that the “skill” required for entering the flow state in the case of narratives translates to the audience’s knowledge about the storytelling, including the content itself relatability and the comprehension under the author’s usage of multimedia narrative devices, such as metaphors in writings and post-editings in videos (Brechman, 2010). This research seeks a comprehensive understanding of how flow operates in media that prioritizes narrative over skill-based interaction, such as movies and theater, through analysis of flow characteristics, pre-flow stages, and reasons that break flow state, thereby establishing an expanded framework. The findings would contribute to academic discourse and aid future professionals in excelling in all kinds of narrative-driven media to create more engaging experiences for diverse audiences.

## **2. Methodologies**

### **2.1. Characteristics of Flow State**

#### **2.1.1 Optimal Performance and Motivation**

Flow is a mental state where people usually draw an equal mark with the degrees of focus. Yet, the flow state can bring more effect than merely focusing on a task because the sense of immersion from the flow state can also optimize performance. According to Bulitko, when people experience a flow state while dealing with tasks, they act out to the best of their capability. They would also gain higher motivation and a sense of happiness (Bulitko, 2015).

#### **2.1.2 Emotional Connection**

To achieve a flow state, a key and a lock must be matched: the key represents cognitive ability, and the lock represents task difficulty (Bulitko, 2015). In narrative media, emotional flow typically involves changes from fear to release or happiness to sorrow, thereby maintaining mental immersion and active participation (Nabi, 2015).

#### **2.1.3 Story Coherence**

To be more specific to narrative media, the comprehensibility of storytelling links to audience participation vitally. Zhang et al. emphasized that the plot and characters’ relations must be coherent to comprehend a narrative. Hence, story coherence is a gateway that decides whether one can enter a flow state for narratives (Zhang et al., 2016).

#### **2.1.4 Cognitive Processing of Narrative Elements**

The audience’s interpretation of storytelling components, such as text-and-image combination and story structure parallelization, is important for processing a narrative in the media context. Cohn highlighted this point with the Parallel Interfacing Narrative-Semantics Model (PINS Model) and depicted that semantics, such as image sequences in visual narratives, is a surface form that links to semantic memory through audience “access, prediction, and updating mechanisms” that operate across modalities like language, music, and visual narratives (Cohn, 2019). According to Tikka et al., the story’s sequential consistency also activates higher-order brain regions, such as the frontal, temporal, and parietal lobes (Tikka et al., 2018). This scientific finding further brings forward narrative coherence as a key variant for analyzing flow state. Multidimensional Immersion

Furthermore, flow theory also lines up with traditional drama’s narrative structure with clearly defined goals, subgoals, and actions. Media narratives mimic real-world perceptual and cognitive feelings, including audience engagement, harnessing a seamless model that processes audiovisual experiences as cognitive streams called Perception, Emotion, Cognition, and Motor Action Flow Model (PECMA Flow Model) (Ros & Kiss, 2018). For instance, classical Hollywood narrative targets only relevant details to avoid disrupting narrative devices such as non-linear timelines or missing plot

details so that the narrative can naturally unfold to the audience and ease the audience's cognitive pressure.

### **2.1.5 Suspense and Higher Cognition in Modern Narratives**

In contrast, today, directors sometimes contradict what PECMA Flow Mode suggests and employ suspense, curiosity, and surprise as narrative tools to manage informational gaps and maintain engagement, yet requiring viewers to engage in higher-level cognition and problem-solving. This new fashion aligns with and expands its application from what Sap et al. discussed about the differences in flow between autobiographical and fictional stories (Sap et al., 2022). They analyzed the storyline's narrative sequence, lexicon features, and primary incident distributions. They also claimed that flow state tends to happen in fictional narratives due to the leveraged and matched sequentiality and narrative expectations. In comparison, autobiographical narratives rely on one's episodic memory, meaning the incidents in the story incline towards surprising elements, first-person references, and social or cognitive processes, which challenge the audience to deviate from expected schemas, enhance the emotional impact and memorability and thereby creating a more dynamic flow state.

### **2.1.6 Cognitive-Emotional Balance in Narrative Flow**

To sum up, the flow state is a highly immersive experience with consistent mental focus, and the core is whether a task or, in the case of narrative media, the story's complexity is consumable with individual cognition. Through emotional changes in the story, narrative coherence, and the cause-effect relationships' comprehension, the audience engages with the narrative and is immersed in the world that the narrative forms.

## **2.2. The Process to Enter the Flow State**

### **2.2.1 Human Psychological Recognition and Flow State**

According to past research, the flow state is a highly focused and immersive psychological state that thrives on clear objectives for the entire body's investment into the activity, on-time feedback, and the balance between task complexity and participants' skills (Bulitko, 2015). These requests are because the human brain's nature in focusing is when a task is specific enough and able to deliver progress and conditions towards the finish line, and then one may enter the immersive state of flow.

### **2.2.2 How Multimedia Creates Immersion for Audience Through Narrative**

Among narrative media, cognitive and emotional motivate target audiences' flow state. Firstly, narratives guide the audience's attention through the main goals and sub-objectives of the character; specifically, in mainstream narrative media, visual and audio applications link with the protagonist's objective, attracting the viewer's attention through their senses (Ros & Kiss, 2018). This process activates the target audience's brain cognitive mechanism and reinforces immersion through emotional resonance. In narrative media, audiences often enter a flow state through mental transportation. In this process, participants lose their self-awareness and put their focus, imagination, and emotions into the storyline (Brechman, 2010). This process decreases counter-arguments towards some illogical story design or opposite ideologies and makes the narrative impact one's attitudes and beliefs.

Moreover, emotional changes in the narrative, such as from tension to release, can effectively strengthen the audience's empathy for the character in the narrative and, therefore, also enhance the receiver's engagement with the media. Audiences can submerge themselves into the narrative by paying attention to the character's journey, from conflict to resolution, and experiencing the same emotional shifts (Nabi, 2015). This emotional flow works together with cognitive activities and encourages audiences to put their entire being into absorbing the narrative (Brechman, 2010).

Additionally, the multimedia narrative builds up and refreshes the flow state, making it dynamic through visual cues and familiar scenario models, notably one including Campbell's hero's journey. Cohn pointed out that sequential imagery comprehension requires viewers to connect surface forms, such as image layout and sequence, to semantic memory based on the narrative context to renew the

scenario models (Cohn, 2019). This interaction between visual information and narrative context can foster audiences' formation of a coherent psychological model and support deeper immersion.

Lastly, causality cohesion is the pillar of narrative media. Audiences need to establish a continuous narrative model through reasoning that bridges new events in the story with past incidents. This cause-and-effect net fabrication updates the scenario models and further leads the audience into a flow state (Song et al., 2021). For example, in narrative media, the flow state that the audience enters often relates to the understanding of key cause-effects in the story. Multimedia narrative viewers proactively synthesize past and new incidents through visual cues such as story characters' facial expressions and body language and then weave a coherent cause-effect narrative (Song et al., 2021).

As a result, in a multimedia narrative, the process for audiences to enter a flow state includes experiencing the following in the storytelling:

- An unmistakable character goal and a series of objectives around the goal;
- Dynamic mood shifts in a plot to change the audience's emotion and fortify engagement;
- Sensory cues such as sequential visuals for the audience to refurbish the scenario model;
- A believable cause-and-effect chain that contrives a coherent narrative.

All the above aspects involve cognitive and emotional functions in the human brain, which connect with a story and immerse one in the narrative, allowing one to experience a complete flow state.

## **2.3. Flow Interruptions**

### **2.3.1 Narrative Inconsistency**

Under the umbrella of the media narrative, the task difficulty in existing flow models for game design is transformed to "how easy it is to understand," the formation of flow needs the understanding process of turning obtained external information into internal scenario models. In narrative media, flow states are prone to suffer from disruptions that come from inconsistencies. Discordancies, such as unreasonable character actions, will force the audiences to reevaluate the narrative contents and rebuild the scenario models in their minds, thereby interrupting the flow state. Skimming contents barricades comprehension of the story because partial absorption of a story destroys narrative coherence (Zhang et al., 2016).

### **2.3.2 Sensory Disruptions**

Besides, in media that involves multiple communication components, such as visual and audio designs, storytellers can enhance the immersive experience. However, none of the components can stop independently, or the human mind would recognize the cut-off and then walk out of the flow state. Hence, pace adjustment requirements arise in narrative media, which limit media flexibility and aggravate the potential flow interruption (Brechman, 2010).

### **2.3.3 Emotional Ruptures**

Ruptures in continuous emotional experience are another barrier to maintaining a flow state. Distracted emotional coherence, such as chaotic stimuli predominantly, reduces higher-order brain region engagement and leans to use lower-order sensory areas, which is the opposite of the level of focus that the flow state demands (Tikka et al., 2018). For example, in the case of intentional suspense in the plot, if the resolutions and the cues that lead to solving the suspense are too weak to convince the audience, this sense of gap loses the audience's interest in participating. It pushes the audience out of immersion in the narrative (Nabi, 2015).

### **2.3.4 Cognitive Overload or Underload**

Although these interruptions challenge cognitive aspects that guide the flow state, they can also stimulate problem-solving and hook the audience into further participation. For example, even though a non-linear timeline and intentional delay in releasing key information add pressure to cognition, such narrative strategies induce audiences to infer proactively, thereby diving deeper into the story (Ros & Kiss, 2018). At the same time, the task's challenge must match the individual's cognitive

capability because too easy of the task would make the process too dull to focus on, and too hard of the task would cause anxiety.

### **2.3.5 Intentional Disruptions for Engagement**

Disconnection in the narrative, such as suspension, curiosity, and surprise, can vitalize the flow state if adopted in a proper amount. Indeed, leaving blanks between information handed to the audience initiates audiences to figure out resolutions. In complex narratives, this informational blank design can encourage the audience to interact with the plot with their mind more completely (Ros & Kiss, 2018). For example, peripeteia or plot twists will likely interrupt the flow state. However, at the same time, such unexpected incidents can ignite a stronger desire to engage with the narrative and spark memorization for the specific juncture. This kind of salient event is exposed more in autobiographical stories, which, according to Sap et al., deviate from conventional narrative models and trigger flow interruptions (Sap et al., 2022). However, as long as this disruption is partial regarding the general narrative image, the audience would find the narrative more profound and rich in emotional effects.

## **2.4. How Multimedia Audience Remains in Flow State**

Flow state reflects a process with the core of attention, including highlighted focus and activated emotion. Focus, cognitive arousal, affective arousal, sympathetic and empathetic, and absorption construct multidimensional immersion (Brechman, 2010). Admittedly, flow interruptions inevitably exist in narrative media because of diverse audiences and the unavoidable knowledge gap among everyone, primarily the storyteller and the viewer. Nevertheless, consolidating causality and emotional cohesion keeps the audience engaged, making the flow state more achievable. Through the cohesion of the story, the audiences log the information that media showcases into their brain's Default Mode Network (DMN) and digest it into familiar scenario models, thereby achieving a sense of immersion, in other words, flow. When the audience can efficiently integrate reasoning in the narrative, functional brain connectivity predicts evolving cognitive states, links events across time, and promotes efficient communication across functional modules like DMN and processes incoming events with accumulated situational models (Song et al., 2021).

Given this fact, a straightforward narrative goal and an emotional chain that matches the goal are the keys to maintaining a flow state. For instance, when the audience follows characters' actions backed up by their objectives, visual and audio effects consistent with the plot cue viewers to pay attention to the narrative (Ros & Kiss, 2018). Likewise, under a coherent narrative, emotional flow along the pace and the approach to resolute suspension can boost immersion (Nabi, 2015). Although narrative inconsistency can interrupt the flow state, designing an appropriate suspension and informational gap turns distractions into stimulations that energize audiences' cognitive and emotional participation, thereby endorsing more significant immersion.

## **3. Results**

Throughout the analysis of existing literature, the flow state in narrative media closely relates to the audience's cognitive ability, the viewer's emotional participation, and the range of narrative methods that vary how coherently storytellers deliver the material. To categorize these three factors, the proposed documentation categorizes cognitive ability and emotional participation as audience "reliability" to the narrative and the impact of narrative ways as "narrative continuity."

### **3.1. Narrative Relations to In and Out of Flow State**

#### **3.1.1 Narrative Continuity and Flow State**

Zhang et al. identified textual cohesion as a dominant factor for audience understanding (Zhang et al., 2016). Suppose the narrative is continuous enough to let the audience follow the storyline smoothly without losing track of essential ingredients in the plot. In that case, the viewers can hence

enter a flow state. Visual narrative depends upon “Continuity Constraints,” meaning sequential images rely on probabilistic continuity. Namely, even style changes can maintain audience participation by consistently paying attention to an event or object. By establishing and relieving these persisting panels in multimedia, the story provides audiences with cognitive reference, thereby mitigating semantic processing load and improving comprehension (Cohn, 2019).

### **3.1.2 Emotional Engagement and Narrative Complexity**

Nabi (2015) underlined that emotional transitions, such as suspension and resolution, are another critical factor in maintaining a flow state. To exemplify, unresolved suspension can facilitate a curiosity for the audience to re-engage and seek the ending. Narratives that include social and emotional factors can trigger “Theory of Mind,” meaning inferring intentions and beliefs, and DMN. These brain activities are intimately relative to audience immersion (Tikka et al., 2018). Autobiographical stories benefit from their nature of unexpectedness and specific details, even though these elements can interrupt the flow, they nurture complex emotional resonance (Sap et al., 2022).

### **3.1.3 Cultural and Audience Traits’ Impacts on Flow State**

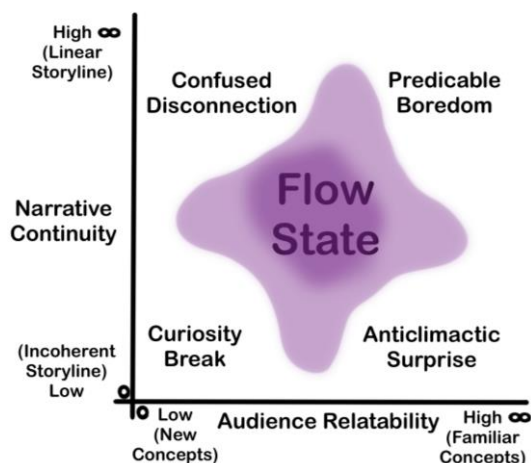
Ros and Kiss propounded that training for culture and inclinations of emotion should be incorporated when creating the narrative framework because these factors propel audience participation and experience with narrative-driven media (Ros & Kiss, 2018). Autobiographical narratives contain unexpected details that may distract the audience from preserving the flow state. However, by cultivating emotional depth and narrative complexity, the overall audience experience can elevate and increase engagement (Sap et al., 2022). Different types of films, from simple to complex plots, conserve or break flow state in different blueprints, which satisfies different audience groups and further exhibits the importance of balancing profound narrative with the audience’s capability of understanding (Ros & Kiss, 2018).

## **3.2. A Two-Dimensional Flow Framework in Narrative Media**

In narrative media, relatability and continuity work together to help the audience enter a flow state. These dimensions are similar to the balance of player skill and game difficulty in interactive gaming and shape the audience’s engagement with the story.

Flow occurs when the audience is challenged to relate to the story without it being outside their cognitive or emotional familiarity. The effects of an improper amount of relatability can hinder the audience from entering the flow state in different ways, even if the story itself is simple and straightforwardly conveyed through media, such as linear storytelling. On the one hand, if the relatability is too low for the audience to understand the media narrative, the resulting audience’s emotional state is a confused disconnection, where the audience struggles to grasp or connect with the story despite its continuity. On the other hand, if the Relatability is too high, where everything the media shows to the audiences is familiar, the storytelling leads to an emotional state of predictable boredom, as the narrative feels overly familiar and fails to maintain the audience’s interest.

Narrative continuity refers to the logical progression and coherence of a story. While some discontinuity can generate suspense and intrigue, excessive breaks can block engagement. To elaborate, when the story is told in a low continuity, and if the audience also does not relate to the subject, the narrative will cause viewers a curiosity break, where the audience starts to engage but cannot follow through due to incoherence and unfamiliarity. Conversely, the same discontinuity in the case of high audience relatability results in a distinct emotional state. The amount of relatability would follow along the storyline because of the enough suspension in the narrative. However, it will produce an anticlimactic surprise to the audience, where initial intrigue dissipates into dissatisfaction because the narrative lacks a meaningful resolution.



**Figure 1.** Continuity-Relatability Flow Framework for Narrative Media (Picture credit: Original)

Figure 1 shows this two-dimensional framework, which highlights the importance of balancing relatability and continuity to sustain the audience’s flow. It ensures that stories remain engaging without becoming overwhelming or unengaging.

## 4. Discussion

### 4.1. Emotional Engagement

Bulitko underscored that matching the audience’s cognitive ability and narrative complexity is the key to maintaining a flow state, which further indicates that gripping the level of audience cognition is an indispensable step when designing narrative media so that audience apprehensive challenges remain and keeps the interest while audiences can interpret the story (Bulitko, 2015). Tikka et al. denoted that negative emotional processing often activates the anterior cingulate cortex, which connects thinking with emotions and is in charge of how humans experience pain and regulate our emotions, affecting audience in making decisions, recognizing mistakes, staying motivated, focusing attention, and handling conflicts (Tikka et al., 2018). This finding hints that future models related to flow state should consider emotional valence, the balance between positive and negative emotions in narrative media.

### 4.2. Cultural and Experiential Origins Impacts

Individuals’ culture and experience impact how they discern narratives through media, such as decoding the meaning of camera visual languages. Cohn revealed that frequent exposure to narratives can improve audience recognition of a certain storytelling model and eventually adapt to the model (Cohn, 2019). This adaptation can cause the audience to lose interest in the story because they are too familiar and can guess what comes next. In general, future versions of this flow model for designing narrative could specify considerations of audiences’ background to guarantee sustainable flow.

## 5. Conclusion

The findings support an expanded flow framework where causal coherence, rather than skill-based challenges, becomes the core determinant of engagement in narrative media. The Two-Dimensional Flow Framework in Narrative Media harnesses causal coherence as its core while drawing lines to the audience’s likelihood to appreciate the narrative instead of depending merely on the balance between skill and challenge in previous flow models. This new framework prioritizes cognitive compatibility and emotional resonance as primary variables for maintaining audience immersion. Narrative media development should consider the potential audience’s cognitive model and emotional expectations. Because designing the right amount of effort and social elements induces the audience to stay in the flow state, the audience can achieve a more profound emotional resonance and narrative

delight. The contents of these two variables can stretch to the methods of bringing cultural and emotional aspects to narrative design to balance the depth of narrative and audience conception and further secure participation and immersion in narrative media.

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