

Agency and the "Emotion Machine"

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Abstract. In interactive fiction or drama the author's role in manipulating the user into dramatic situations is as important in the construction of the user's sense of "agency," as concerns about the her freedom and choice.

1 Agency, Authorship, Manipulation

When considering interactive fiction, agency has been typically understood as the user's sense that she can act in a virtual environment and that her actions are effective [6]. Choice and freedom for the user are at a premium; narrative engines must be devised that can devise plots on the fly. However, some researchers reject both the possibility and need for absolute freedom in an interactive narrative. [5][4]. This school of thought focuses on producing a more strictly authored narrative which uses physical or social context to constrain the users' actions and controls pacing and surprise. Fiction and drama move their audiences by manipulating their knowledge and emotions [7]. My own work in interactive fiction suggests that rather than looking for ways to provide freedom and choice, we should be researching dramatic methods for manipulating users that work successfully in an interactive context.

Semioticians suggest that a reader/spectator is an agent because it is the work she does that creates meaning[3]. This suggests that for authorial manipulations to work, the user has to go along with them. She has to willingly suspend disbelief and actively engage her cognitive and emotional self in the construction of the story. On the other side, the author has to be able to reliably evoke narrative reasoning and emotion. Bernard Perron applies Ed Tan's expression "emotion machines", originally used to describe movies, to video games and I suggest that interactive drama should also be an emotion machine. I believe the role of the author is to set up the structures of constraint that allow meaning and agency to emerge at all. These can be contextual constraints; the narrative logic; the norms of social interaction; the rules of any game. The author has to provide these constraints so that a user watching or interacting with the spectacle can decode and interpret events and act. It is ridiculous to try to abrogate the author's responsibility for exacting a specific performance of agency from the user – that's what she's paid for. Within this framework, interaction works by trapping the user, so that her actions implicate her even more strongly in the ongoing semiotic process. The idea of creating a trap in fiction is an old one; Barthes uses the term "snare" to talk about the process of setting the user's

mind to work along a certain, desired, path of signification [3] p32. I have co-opted this term for the dramatic structure that has been emerging from our interactive drama practice [1, 2].

2 The play's the thing wherein I'll catch the conscience of the king.

Interactive fiction should be a series of snares for the user; snares that manipulate the user's actions by manipulating the user's emotions [2]. Providing a series of self-referential scenes that slowly reveal information and surprises, forming emotional highs and lows and raising tension, is a staple of drama. This process can be seen as luring the user along an emotional path, a psychological journey. If the journey is interactive, it is not enough to set up the conditions that will evoke the emotions, but we must provide actions that suit that emotional scenario. Providing actions is also not enough, but the actions must be specifically designed to reveal the state of mind of the user. The dramatic progression and success of the interactive drama depend on a process of feedback and interpretation of the user, so that the world and the characters in the world are appropriately responsive. The snare must be baited by the author, activated by the user, and checked by the author; and the results then used to influence future snares. In the following sections I use examples from my own work, *The Thing Growing*, a virtual reality drama for immersive CAVE-like VR systems[1].

2.1 Baiting the Snare

The bait is the emotional stimulus plus a possible action(s) dangled in front of the user, inviting her to the next step of performed agency. The author sets up a constraining narrative context and/or using intelligent agents establishes a constraining social context. For example in my immersive VR interactive fiction, *The Thing Growing*, a social/emotional context is established in which a creature the user releases from a box, proclaims its love for the user, and invites her to dance. Common sense psychology tell us that humans are very apt to physically mimic the movements of other humans, that dancing signifies intimacy, that some people are awkward with their bodies. The snare is set.

2.2 Activating the Snare

The action or actions must be deliberately designed to fit in seamlessly and logically with the narrative and emotional context; to be checkable; to reveal as much as possible about the user. The user/agent must understand the signs accurately, and allow her emotions to be stimulated. She must decode the affordances, assess her options, and commit herself to the performance of an action that follows from her emotional state. Continuing the example above, the user understands the invitation to dance and reacts emotionally. She must also understand how she can act - in the case of this immersive VR project she must

understand that her body is tracked and she is expected to use it. Her action will stem from her emotion, but a variety of emotions may be stimulated. Some users, rather liking the chirpy creature who is in front of them, perhaps flattered by the declaration of love, feel happy and co-operative. They dance. Other users may like the creature but dislike dancing, they do not. Still others, may already have decided to dislike or distrust the creature. They also refuse to dance.

2.3 Checking the Snare

The snare must be designed so that when we check it we learn as much as possible about the user. Checking the snare depends first on hardware. In the case of the VR example I am using, the user is attached to a tracking system, and has a 3D joystick to move around the virtual environment. Data from the tracking system can be used to assess the movement of the user's hands and head. Data from the joystick can be used to assess the user's position in the world and relative to the creature she is with. We backchain from the data we receive to the action that has caused it, to the probable emotional state of the user. So, if the tracking sensors move in a particular way, we understand that the user is dancing, we interpret that to mean that the user likes the creature, is happy and co-operative. Other feedback data indicates the user has turned away from the creature without dancing. Either the user doesn't like dancing or doesn't like the creature.

2.4 Building Drama with Snares

One snare is not likely to make interesting drama. For interactive fiction, snares only become meaningful when they are combined. The knowledge gained about the user from one snare is used in selecting others, so that the system responds to the user, maybe surprising her by its response, heading her off, herding her to the next snare, the next check point. This does not have to be extremely complex a simple feedback loop of snare and check can be established.

Returning to our example: the creature responds to a user who is inclined to dance by praising her, teaching her a new dance step, and again checking the user's action. Dancing obediently the user learns to expect praise - thus a new snare is set - one specifically for this compliant user. Because over time the creature becomes pickier, criticizing the user's performance. The new snare relies for its emotional impact on two different assumptions about how people work psychologically. First there is a tendency for people to become self-conscious physically if they are criticized, which is heightened because the user is expecting praise. Second some people can be hooked into a psycho-dynamic of trying to please the other in a relationship, to seek out affirmation from the other. In either case a combination of snares leads the user to become unbalanced, unsure, maybe anxious to please, maybe annoyed. If the user continues through several check points trying to dance we assume the former, if they stop dancing we assume the latter. Further snares await her response.

Although the snare is designed to evoke an emotional response which should lead to an action, the author cannot expect to be able to cajole the same performance of agency out of each user. The authorial system must be able to handle a variety of responses. However, our experience building this kind of supported improvised drama with snare-like structures suggests that users tend to fall into patterns of response. Therefore, a strategy of anticipating responses using a common sense understanding of psychology to predict them, and also iteratively testing and refining the snares in order to add necessary responses can result in a drama that works – for some of the people some of the time. Others will not consent to the performance of agency that the piece demands, they will not co-operate in the creation of meaning, and there will be no fictional experience.

2.5 Conclusion

Each person brings their own instincts, background, and assumptions to a new enterprise such as interactive fiction. My background in experimental fiction and video art has focused on questions of the formation of identity. A first person interactive form is an important new medium for authors, and an exciting playground for participants, in which to explore such conceptual territory. The Thing Growing's was entirely driven by the content we wanted to present, the experiment was to devise methods for delivering that specific interactive experience. Now we are in the process of trying to analyze, formalize and generalize methods that worked to evoke the kind of user response we wanted, and apply them to our new work The Trial The Trail. The elaboration of the snare structure is the core of this work.

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