Balancing Plot and Character Believability by Reasoning Out-of-Character

by Reasoning Out-of-Character

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Introduction

▪ Context: serious game for social awareness training
▪ Target group: police officers
▪ Scenario: confronting loitering juveniles

▪ Research question: How can plot and character believability be balanced in a serious game?
▪ Proposed solution: Out-of-character reasoning enables virtual characters to adapt the story towards a good plot.

Out-of-character reasoning

▪ Emergent narrative: a narrative emerges from the joint behaviour of the autonomous characters in a storyworld.
▪ Are these stories interesting?
  ▪ No, not per se!
▪ Use out-of-character (OOC) reasoning to guide the behaviour of these characters.
▪ Preliminary implementation in the Virtual Storyteller, an interactive story generation system.

  Inspiration: improvisational theatre.
▪ Actors create a story on-the-fly by reasoning about which actions would be interesting (e.g., comical or dramatical) for the story.
▪ In their mind, they step out of their character role and think about the possible effects of their actions on the story.

Conflict

▪ My proposal: let characters use OOC reasoning to let the conflict escalate.
▪ The player reflects on the experienced story and gets insight into how his actions led to this outcome.

Interpersonal circumplex

▪ Leary’s Rose: a model that divides interpersonal stances in the dimensions of dominance and friendliness.
▪ My proposal: virtual characters use this model to reason OOC to adopt an IC stance that opposes that of the police officer.
▪ Example below: a police officer has a friendly-submissive (cooperative) stance toward a juvenile.
▪ OOC the juvenile adopts an opposing hostile-dominant stance (attacking).
▪ When the character behaves according to this stance IC, the conflict will escalate.

Story arc

▪ My proposal: give characters OOC knowledge about story arcs.
▪ The climax and resolution of a conflict give feedback about the effectiveness of the police officer’s approach.
▪ The characters monitor the conflict and when the resolution is not as desired, they can reason OOC to intervene.

Expected results

▪ Serious game through which police officers improve their social awareness.
▪ Virtual characters that reason out-of-character to:
  ▪ Adapt the story to the player’s behaviour
  ▪ Make sure the story follows a story arc