

Storytron

Interactive Storytelling
Lecture slides
September 25, 2008
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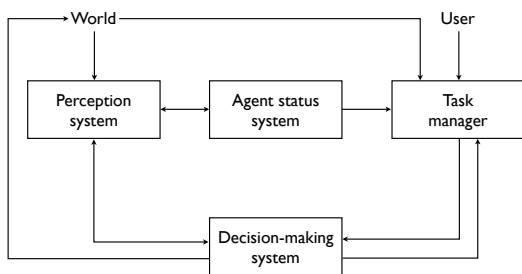
- components
 - authoring tool SWAT
 - storyworld library
- launched 2006; currently in Beta stage
- originally developed under the name Erasmatron

(Crawford, 2005)

VIBES

- framework for virtual behaviour
 - learning
 - neural networks
 - learning classifier system (i.e. genetic algorithm)
- (Sanchez *et al.*, 2004)

Architecture



Virtual Storyteller

- multi-agent framework
 - plot generation
 - natural language generation
 - presentation by an embodied agent
- (Theune *et al.*, 2004;
Swartjes & Theune, 2006)

Plot generation

- select “episodic script” from a database
 - setting: location, characters, objects
 - goals
 - constraints
- character asks the director’s permission before carrying out a plan

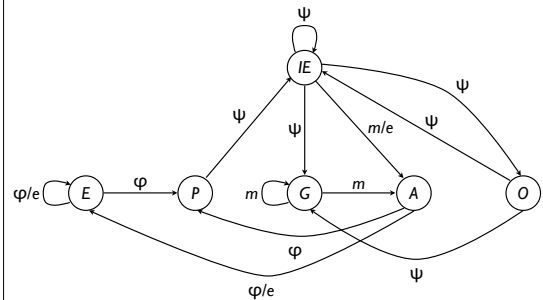
Plot generation (cont’d)

- within episode characters are free to choose action
 - subjected to probabilistic emotions (OCC-model)
 - example: 90% fear means 0.9 probability of choosing a cowardly action

General transition model (GTN)

- elements
 - ▶ G – goal
 - ▶ A – action
 - ▶ O – outcome
 - ▶ E – event
 - ▶ P – perception
 - ▶ IE – internal event
- causal relationships
 - ▶ φ – physical causality
 - ▶ m – motivation
 - ▶ Ψ – psychological causality
 - ▶ e – enablement

GTN (cont'd)



Discussion and conclusion

Interactive story for multiple users?

- too many heroes
 - ▶ how to guarantee dramatically compelling story to everyone?
- intertwining storylines
 - ▶ how to combine individual storylines coherently?
 - ▶ not a problem in emergent narrative?

Can you cheat in an interactive story?

- every action within the storyworld should be valid
- limitations exist
 - ▶ e.g. zombie attack and "I've been shot" in *Façade*
- how about multiple users?
 - ▶ is collusion cheating in an interactive story?

Dramatis Personæ 1986–2002

Brenda Laurel

Joseph Bates

Chris Crawford

Michael Mateas

Andrew Stern

Janet Murray

Dramatis Personæ 2003–

Stefan Göbel

Ruth Aylett

Ulrike Spierling

Sandy Louchart

Marc Cavazza

Nicolas Szilas

Ana Paiva

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