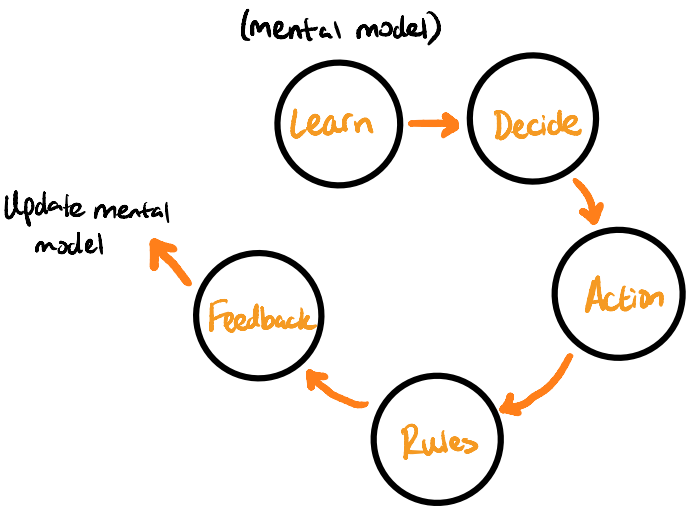
Ulo Freitas
CS 2476

game architecture

Interaction Loops and Arcs

- structural elements
- describe how a player interacts with a game
- how a game responds to the player

Useful for game designers to understand
- How players learn your game
- Skills players acquire + order they acquire them
- The parts of your game that are breaking/confusing
- How small interactions lead to complex interactions



Mastery only arises after repeated passes through the steps

Skill Chain

↳ eg. need to jump and move to kill a Goomba

Master simpler interactions to do more complex/compound interactions

If a player is struggling, investigate the interaction loop of the lower-order skills

How do we use interaction loops?

Frequency

The frequency which they occur at during a game matters

Impacts the pace of the game

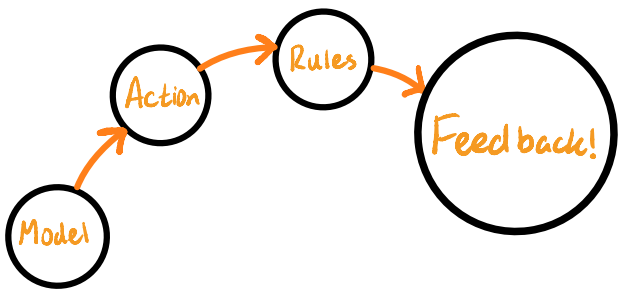
Okay... how do we know when to use them?

Good to methodically build a players wisdom/approach a complex system

Rich use of them empower player to approach unexpected situations with confidence and a mental problem solving toolkit

Interaction Arcs

Purpose: To help deliver more evocative content (stories/movies)



Due to fast nature of this arc, author needs to convey key ideas efficiently and effectively

To do this, arcs usually have this functionality...

1) Simple Modular Actions
   eg. turning a page/watching a movie
   Want players to get the info easily and quickly

2) Simple Systems
   Display content to the player

3) Evocative feedback
   Links together existing mental models in a unique/interesting/useful way

Arcs are usually only executed once or twice and are exited almost immediately

Excel at communicating "success stories" which are brilliant learning shortcuts
↳ ideal golden path that teach a lesson

Both arcs and loops are essential and serve different design needs

Sequences of Arcs

Issue with arcs: players burn out on them and don't want to engage with them multiple times
↳ Potential solution: bringing together arcs into a sequence of arcs

Downside: This creates a content treadmill (need for constant sequence of arcs)

Interaction loops = series of arcs

Mixing loops and arcs

- Parallel arcs
- Levels
- Micro Parallel arcs (levels + parallel arcs)