Video Games and The Classic Game Model

Classical Game Model

- A definition for a game should address three things
  1. The system set up by the rules of the game
  2. The relation between the game and its players
  3. The relation between the playing of the game and the rest of the world
- Best way to test a definition is to examine whether it is too narrow (false negatives) or too broad (false positives)
  - Base of confirmed games, confirmed nongames, and potential edge cases

Figure 2.1 - Several Definitions

Source	Definition
Johan Huizinga 1950, 13.	[…] a free activity standing quite consciously outside "ordinary" life as being "not serious," but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means.
Roger Caillois 1961, 10–11.	[…] an activity which is essentially: free (voluntary), separate [in time and space], uncertain, unproductive, governed by rules, make-believe.
Bernard Suits 1978, 34.	To play a game is to engage in activity directed towards bringing about a specific state of affairs, using only means permitted by rules, where the rules prohibit more efficient in favor of less efficient means, and where such rules are accepted just because they make possible such activity.
E. M. Avedon and Brian Sutton-Smith 1971, 7.	At its most elementary level then we can define a game as an exercise of voluntary control systems in which there is an opposition between forces, confined by a procedure and rules in order to produce a disequilibrial outcome.
Chris Crawford 1982, chapter 2.	I perceive four common factors: representation ["a closed formal system that subjectively represents a subset of reality"], interaction, conflict, and safety ["the results of a game are always less harsh than the situations the game models"].
David Kelley 1988, 50.	[…] a game is a form of recreation constituted by a set of rules that specify an object to be attained and the permissible means of attaining it.
Katie Salen and Eric Zimmerman 2004, 96.	A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome.

	The game as formal system	The player and the game	The game and the rest of the world
Rules Fixed rules (Huizinga) Rules (Caillois) Rules (Suits) Procedure and rules (Avedon and Sutton-Smith) Formal system (Crawford) Rules (Kelley) Rules (Salen and Zimmerman)	▓		
Outcome Uncertain (Caillois) Disequilibrial outcome (Avedon and Sutton-Smith) Changing Course (Kelley) Quantifiable outcome (Salen and Zimmerman)	▓		
"Goals" Bringing about a state of affairs (Suits) Opposition (Avedon and Sutton-Smith) Conflict (Crawford) Object to be obtained (Kelley)	▓	▓	
Interaction Interaction (Crawford)	▓	▓	
Goals, rules, and the world Artificial conflict (Salen and Zimmerman)	▓	▓	
"Separate" Outside ordinary life/proper boundaries (Huizinga) Separate (Caillois) No material interest (Huizinga) Unproductive (Caillois)			▓

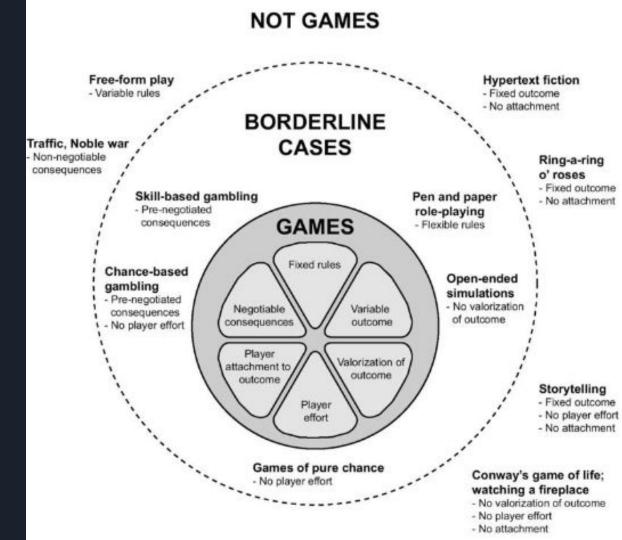|	The game as formal system	The player and the game	The game and the rest of the world
"Not work" Free/voluntary (Caillois) Voluntary control systems (Avedon and Sutton-Smith) Recreation (Kelley)			▓
Less efficient means Less efficient means (Suits)			
Social groupings Promotes social groupings (Huizinga)			▓

Game Model

"A game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable."

1. Rules prevent ambiguity
2. A "Best" sequence of moves removes variance
3. Some outcomes are "better"
4. Player effort means players are engaged
5. Immersion helps players feel attached to the outcome
6. Consequences are optional, and are not intrinsic to the activity

	The game as formal system	The player and the game	The game and the rest of the world
1. Rules	■		
2. Variable and quantifiable outcome	■		
3. Value assigned to possible outcomes		■	
4. Player effort	■	■	
5. Player attached to outcome		■	
6. Negotiable consequences			■

A potential alignment

Games Across Media

- Many games have abstract rules that are represented by physical representations
- IE Solitaire, mahjong, chess/checkers
- Card decks hold numerous properties making them functional in games
- Sports occupy a domain separate from video games, as the physical world holds different properties and contains much more depth in both input and state
- Dance and rhythm games are special in that the rules and information are simple, with physicality determining much of the experience

	Rules/computation	Game state
Card games	Human brain	Cards
Board games	Human brain	Game pieces
Blind chess	Human brain	Human brain
Competitive sports	Physics + human brain	Players' bodies/ game objects
Video games	Computer (CPU)	Computer (RAM)
Card/board games on computer	Computer (CPU)	Computer (RAM)
Sports on computer	Computer (CPU)	Computer (RAM)