

# GameFlow: A Model for Evaluating Player Enjoyment in Games

Presents a model for reviewing games with  
regards to enjoyment

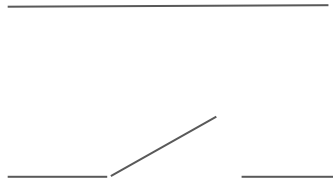
# How can we explain and evaluate enjoyment in games?

- Literature has been focused on three aspects of games:
  - Interface (control and display)
  - Mechanics (interacting with the game world)
  - Gameplay (problems and challenges)
- Exists a lot of heuristics:
  - Disposition theory
  - Attitude
  - Transportation theory
  - Cognition
  - Parasocial interaction
  - Flow
- We want to incorporate the heuristics into a model for evaluating enjoyment

# Flow

- What makes something enjoyable in itself?
- Elements of flow:
  1. A task that can be completed
  2. The ability to concentrate on the task
  3. That concentration is possible because the task has clear goals
  4. That concentration is possible because the task provides immediate feedback
  5. The ability to exercise a sense of control over actions
  6. A deep but effortless involvement that removes awareness of the frustrations of everyday life
  7. Concern for self disappears, but sense of self emerges stronger afterwards
  8. The sense of the duration of time is altered

# My recent flow



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# GameFlow

- Builds on the concept of flow adapted to games
- In summary, games must keep the player's concentration through a high work-load; but the tasks must be sufficiently challenging to be enjoyable

Games literature	Flow
The game	A task that can be completed
Concentration <ul style="list-style-type: none"> <li>- All of a player's relevant skills are needed, but within the players perceptual, cognitive and memory limits</li> </ul>	Ability to concentrate on the task
Challenge <ul style="list-style-type: none"> <li>- The challenge must match the players initial experience and evolve as the player learns</li> </ul> Player skills <ul style="list-style-type: none"> <li>- A player should be able to jump into the game and learn while playing at an appropriate pace</li> </ul>	Perceived skills should match challenges and must exceed a certain threshold
Control <ul style="list-style-type: none"> <li>- Players should feel a sense of control over their actions in the game</li> <li>- Players should feel that their decisions influence the game</li> </ul>	Allowed to exercise a sense of control over actions
Clear goals <ul style="list-style-type: none"> <li>- Games should give clear goals at appropriate times</li> </ul>	The task has clear goals
Feedback <ul style="list-style-type: none"> <li>- Feedback on progress towards their goal</li> <li>- Get immediate feedback on their actions</li> </ul>	Task provides immediate feedback
Immersion <ul style="list-style-type: none"> <li>- Players should feel deep but effortless involvement in the game</li> </ul>	Deep but effortless involvement, reduced concern for self and sense of time
Social interaction <ul style="list-style-type: none"> <li>- Games should be a starting point for social interaction</li> </ul>	n/a

# Conclusion

- The study presented is claimed to be a good tool for evaluating games
- And to give an understanding of enjoyment in games
- Not applicable as a design tool as presented in the paper