

# Game design and free to play

TC3 : Gameplay

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# Game design and free to play

- I. Presentation
- II. Mkg
- III. Concept
- IV. [Gameplay](#)
- V. L&F/LD
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- VII. Ludi.

# Gameplay

« Game » = rules

« Play » = fun

- « **Playability** », **handling, difficulty**
- Give a **sensation of freedom** to the player in a open and interactive world while guiding him
- Rational game design (RGD) :
  - Rational description of the mechanics  
(*gameplay*, mechanics, *challenges*, game system)

"The gameplay, from game's rules point of view, consists by rules which define objectives to achieve associated with other rules which specify ways and constraints to reach these goals"

— Julian Alvarez

« Forms follows function »  
— Louis Sullivan



# Gameplay principle

## Micro-gameplay

- Core and tile of the game
- 3C
- Failure and success
- Difficulty and virtuosity
- Gameplay indicators

Micro-gameplay : game details

## Macro-gameplay

- Game loop
- Motivation
- Game system
- Narration
- Game structure

Macro-gameplay : whole game



# Core and tile of the game

- **Coregameplay:**

- Main **mechanics** of game
- Monocore ou multicore
- **Kind of core:** FPS, plateforme, race, etc.

Realise monocore or multicore  
bring different difficulties

- **Game tile:**

- Satellite element
- Tile classification:
  - **Hero capacities:** weapons, moves, attacks, etc.
  - **Enemy:** enemy type, behavior, etc.
  - **Interactive elements:** levers, trap, bonus, etc.
  - **Map:** topology, points of interest, etc.
  - **"Abstracts":** countdown, order of execution, etc.

Build like Lego

# Game classification

- **Competition** (*agôn*)
- **Random** (*alea*)
- **Simulacre** (*mimicry*)
- Impression of **vertigo** (*ilinx*)

*Paidia* : game without rules (play)

*Ludus* : Game with rules (*game*)

REPARTITION DES JEUX

|   | AGON<br>—<br>(compétition)              | ALEA<br>—<br>(chance)  | MIMICRY<br>—<br>(simulacre)   | ILINX<br>—<br>(vertige)  |
|---|---|--|---|--|
| PAIDIA<br>↑<br>vacarme<br>agitation<br>fou-rire       | courses<br>lutton<br>etc.<br>athlétisme | pile ou face<br>comptines  | imitations enfantines<br>jeux d'illusion<br>poupée, panoplies<br>masque<br>travesti | manège<br>« tournis » enfantin<br>balançoire<br>valse          |
| cerf-volant<br>solitaire<br>réussites<br>mots croisés | boxe<br>escrime<br>football             | billard<br>dames<br>échecs   |   | volador<br>attractions foraines<br>ski<br>alpinisme<br>voltige |
| LUDUS<br>↓  | compétitions sportives en général       | pari<br>roulette<br><br>loteries simples<br>composées<br>ou à report | théâtre<br>arts du spectacle<br>en général  |  |

N. B. — Dans chaque colonne verticale, les jeux sont classés très approximativement dans un ordre tel que l'élément *paidia* décroisse constamment, tandis que l'élément *ludus* croît constamment.



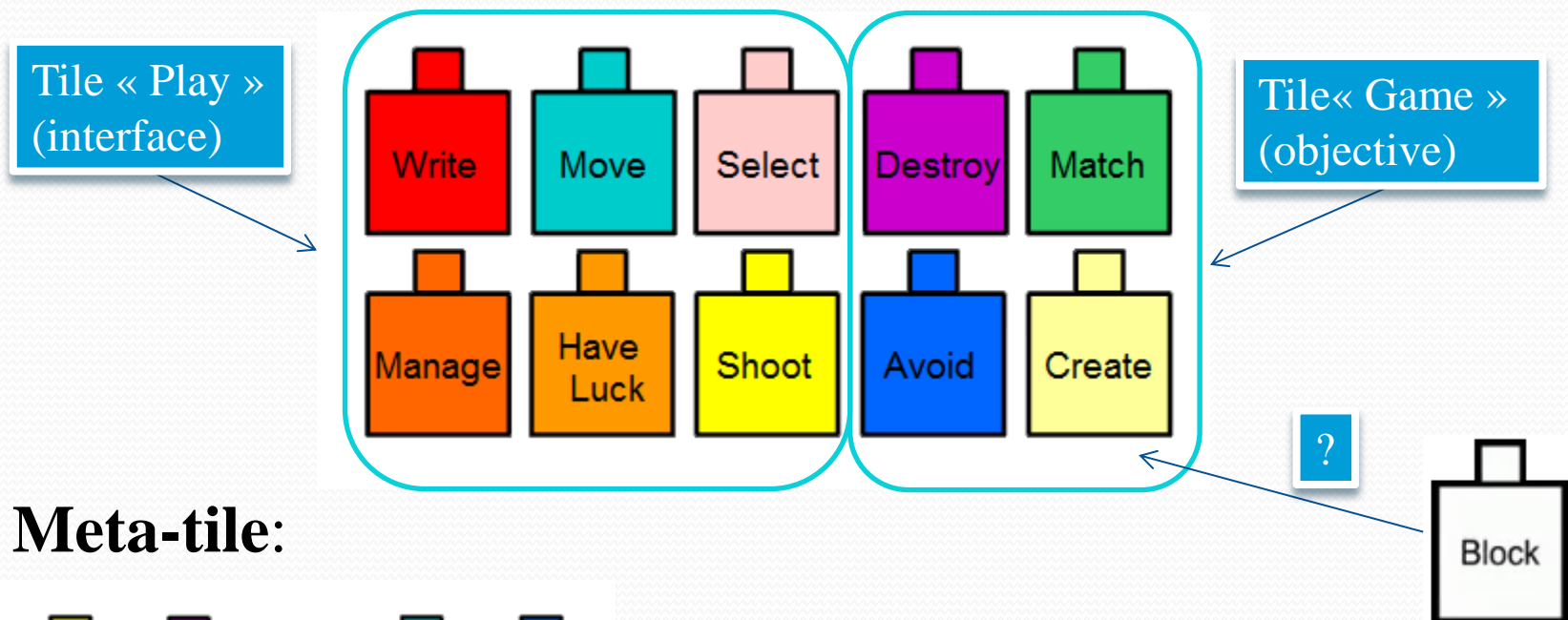
# Video Game kind

- <http://www.youtube.com/watch?v=pbyu7UNk2QM>

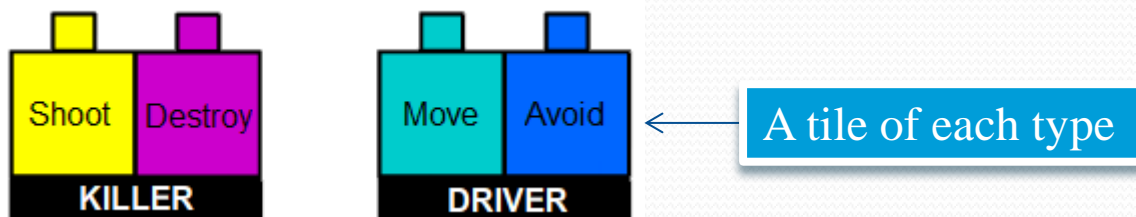


# Gameplay tiles

- **10 to 11 elementary tiles:**



- **Meta-tile:**



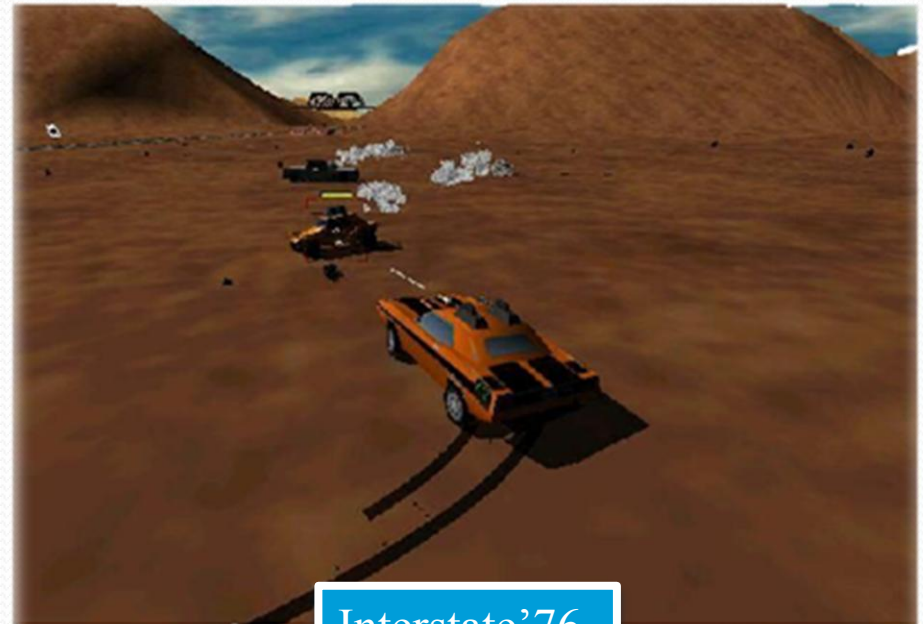
<http://gameclassification.com>



# Gameplay tiles



Street Fighter 2



Interstate '76



# Cameras, controls and character

- **Cameras** (view): subjective, third person, panoramic view
- **Controls:**
  - Must be adapted to the **view**, to the **player** level, to the complexity of the gameplay
  - Concerning the **screen** or the **character** (according to the view)
- **Character:**
  - Determine the possible character actions
  - Must be coherent with "controls"
  - Can alter the view (thermographic vision)

3C are combined

# Challenge and flow

- **Challenge:** test, proof
- **Flow:** psychological state of a person totally **immersed** in the achievement of a **task**
  - Generally characterized by:
    - Very high level of **concentration** and **focus**
    - **Wrong time perception**
  - Obtained thanks to:
    - **Clear and specific objectives**
    - **Valuation of the intrinsic** activity effort
    - Balance between **capacities** and **objective**

Flow happen from a challenge of good difficulty but motivating

# Failure, success and difficulty

- **Failure and success:**

- **Oscillation** for the player between failure and success

- **Difficulty and virtuosity:**

Virtuosity  $\neq$  dexterity

- Potential **players** identification
- Level of control (virtuosity) identification
- **Adapt the difficulty** (game tile): progressive challenge

Niveau de virtuosité nécessaire pour finir le scénario



Niveau de virtuosité nécessaire pour terminer le jeu à 100 %



Axis of virtuosity

Be careful: most of the time, an IA can easily be "inequitably" too high

# Gameplay indicators

- Generals characteristics:
  - **Perceptible**: easy to see, with high priority
  - **Without ambiguity** (formal) : obvious sense
- Sign (stimulus in the actions of the player):
  - **Understandable**: adapted and coherent form
- Feedback (answer to the action of the player):
  - **Immediate**: no lag with the action
  - **Connected to action**: clear association with action



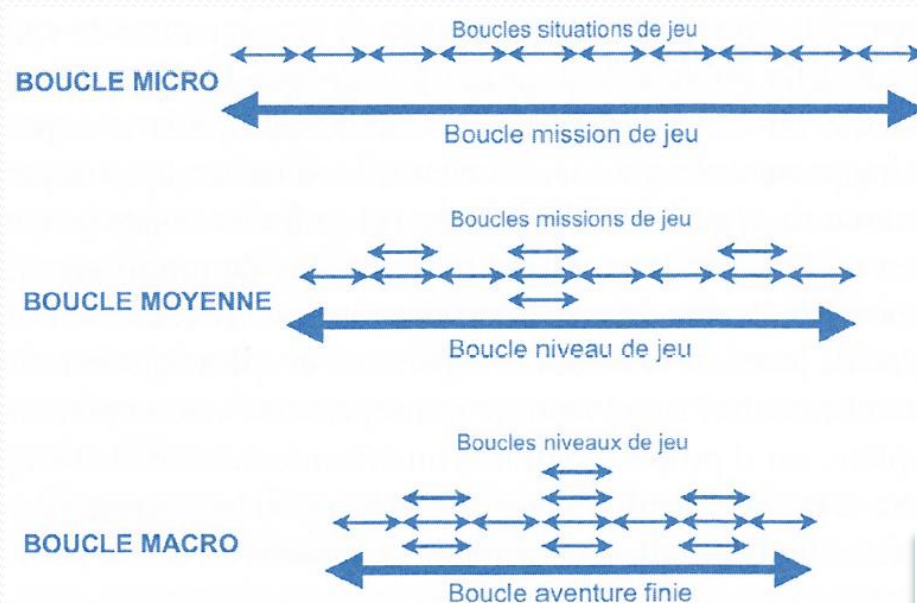
Gameplay indicators are not elements of the HUD, they must be staged and integrated into the game by protecting immersion and coherence



# Game loop



Gameplay loops give the rhythm of the game



Various game loops

Almost (Blizzard) : ensure that there is always a "almost" ended game loop: the closeness of an objective creates a strong attraction



# Reward

- Characteristics:

- Relative to **challenge level**
- Proportional to **effort**
- **Correlated with the universe**
- Several forms:
  - Game element: new possibilities, armor, potion, etc.
  - Universe element: kinematics, customisation, making-of, etc.

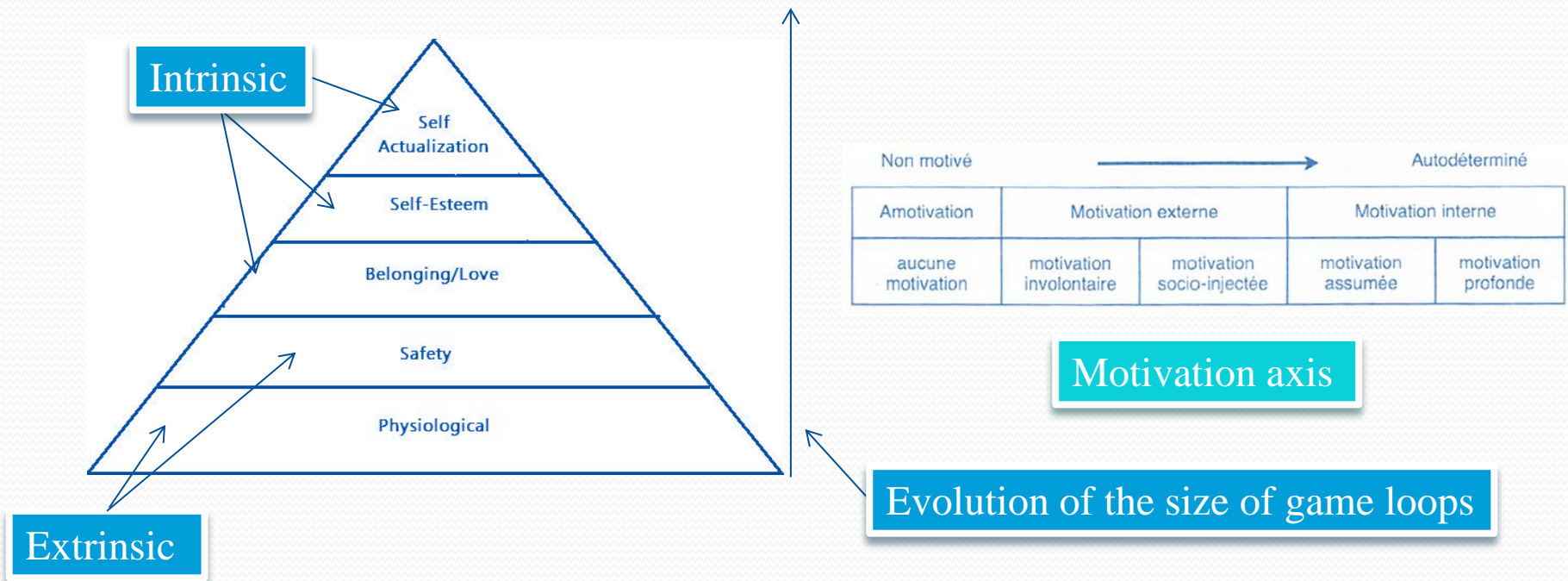


- **Choice rewards/"Punishment"** ← **Some games have no "punishment"**
- **Reward system:** define nature and frequency of rewards according to game loops ←

Rewards are directly linked to game loops

# Motivation

- Motivation type:
  - Extrinsic motivation (for the player): game bonus
  - Intrinsic motivation (for the player): "real" profits
- Motivation chain: linked to game loops



# Game pleasures

- Pleasures inferred by (game) experience:
  - Items **collection** and inferred pride
  - Growing power sensation
  - **Exploration**, map discovery, intrigues discovery
  - Completion feeling (secondary quests)
  - Speed sensation
  - **Competition** (especially inter-players)
  - **Creation and management**
  - **Emotions** (sadness, fear, etc.)
  - Player **accountability** (interactive investigations)
  - **Mutual aid** and solidarity with players or characters

# Game system

- Rules:
  - For the player
  - For the environment
  - For the artificial intelligence (AI)
- **Goal and objectives hierarchy**
- **Choice:**
  - Nature: strategic or tactical
  - Interest: often both positive and negative aspect
  - **Formalization** (balance)
  - **Nondominant strategies** (zero-sum games)



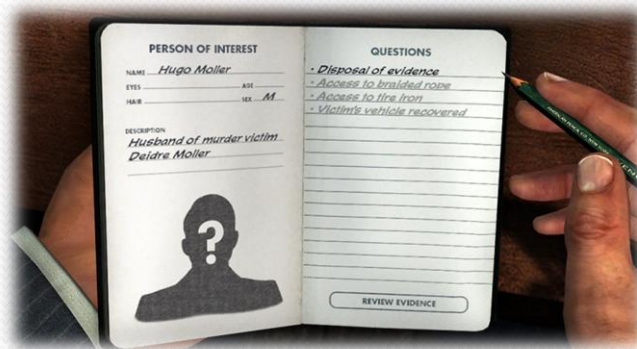
"A game is a sequence of interesting choices "  
— Sid Meier

↖ To preserve game interest : no dominant strategy (or a losing one)

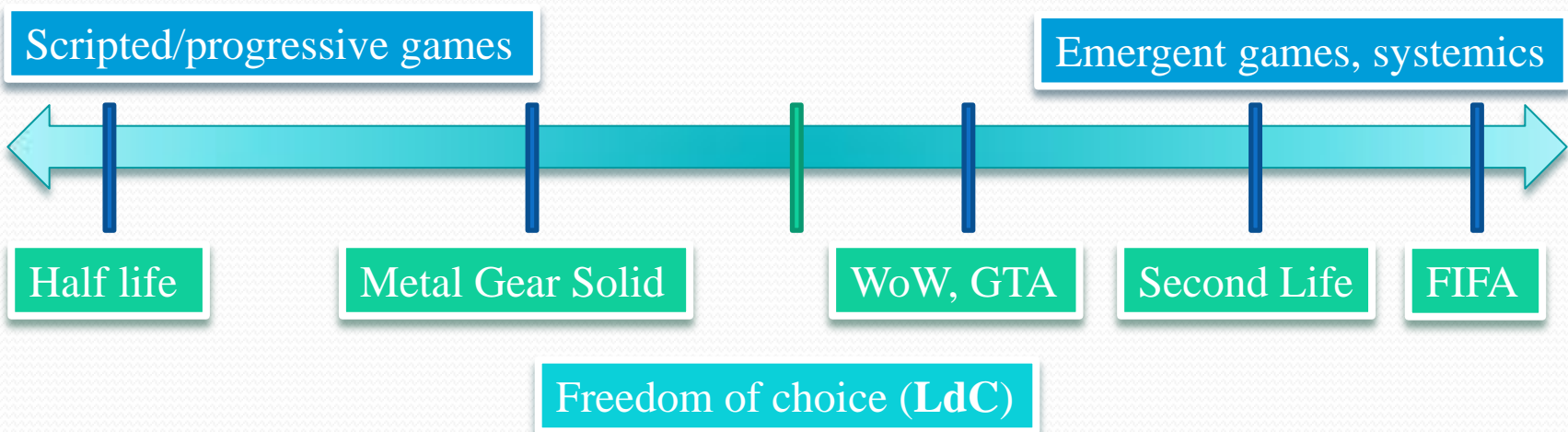
# Narration

- **Backbone with nodes**
- Immersion methods in game experiences
- Writing within space (rarely within time for video games)
- **Consumer centric** approach (as IHM) :
  - Progressive learning of game system (5-6 infos at a time)
  - Game adaptation to player (AI player manager)

← (Game) experiences have to be the same for all players



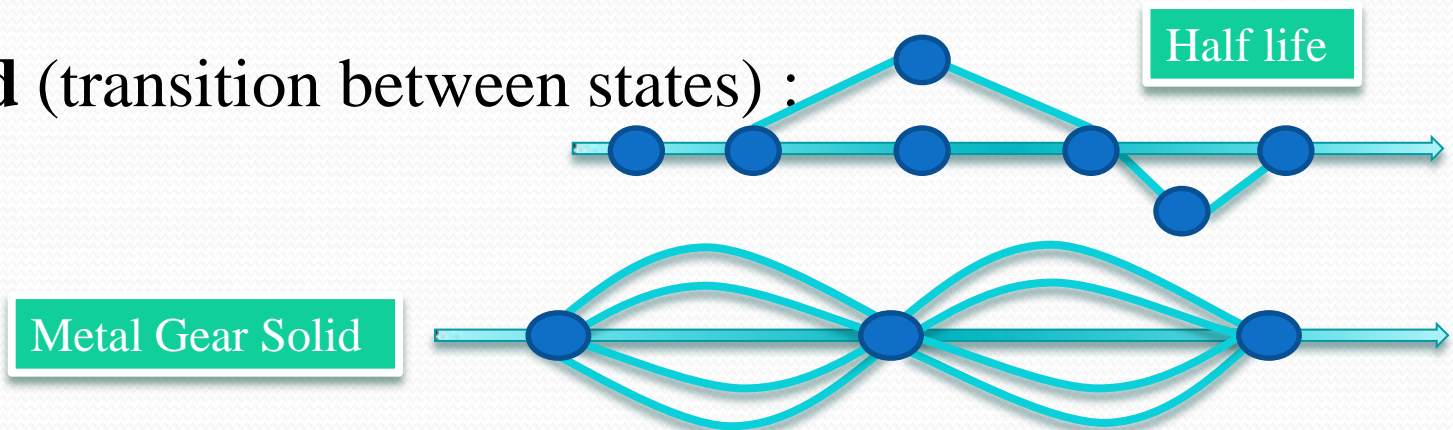
# Freedom of choice



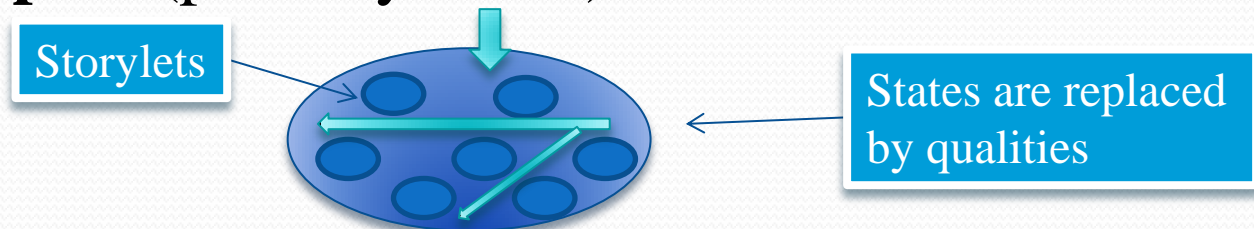


# Narrative structures

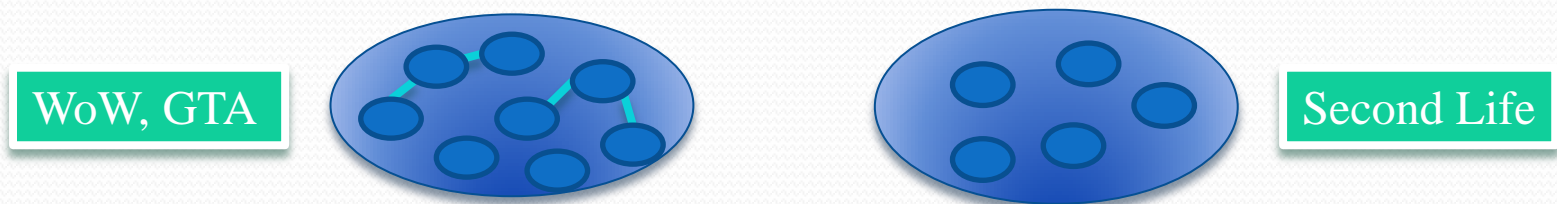
- **Scripted** (transition between states) :



- **Weakly coupled** (partially linear) :



- **Emergent** (dramaturgic coherence) :

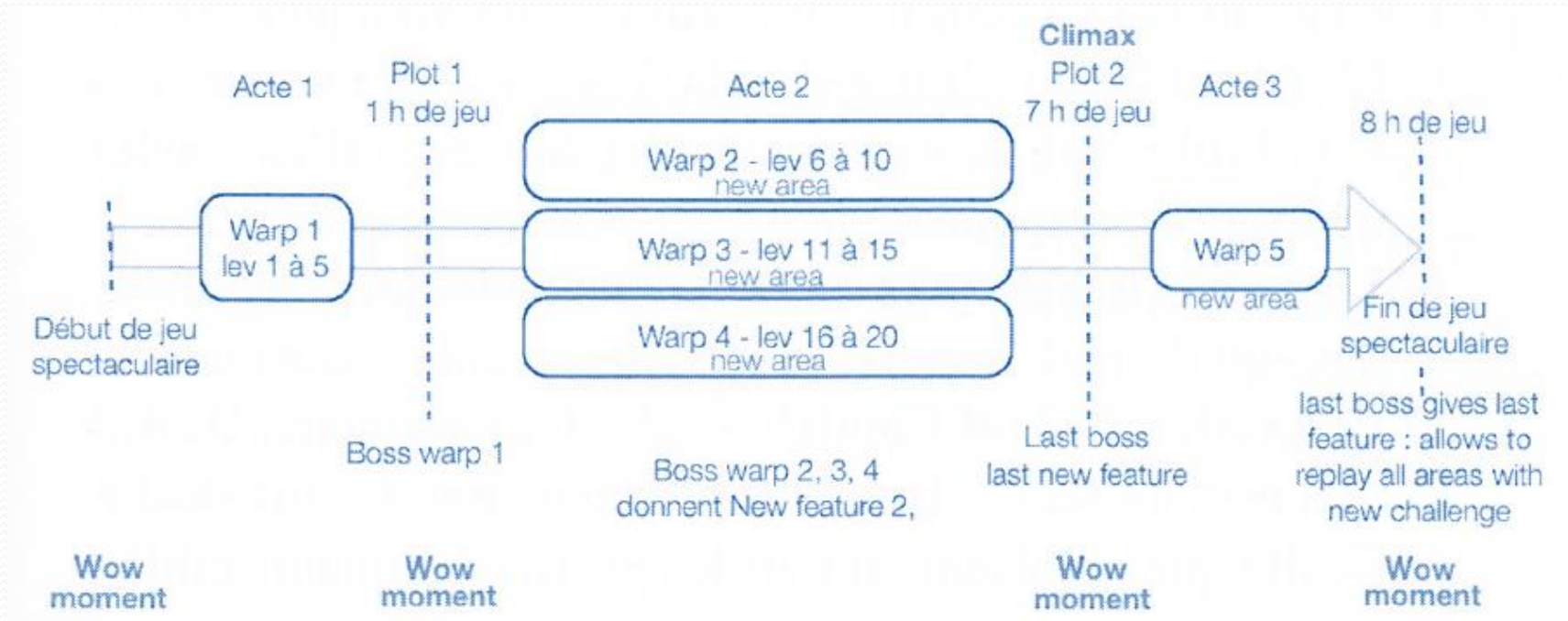


# Scenarios



Script ("playful package"): (partial) order of events

# Progression



Progression strucutre (Prince of Persia)

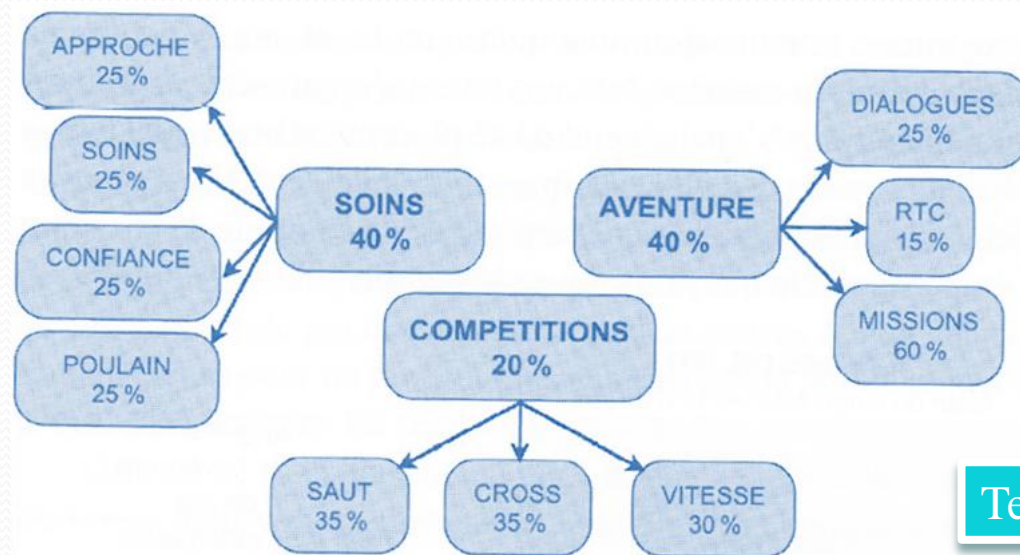
Warp (rooms): area with "central place"

Wow moment: great unforgettable moment

# Cosmogony and game structure

- **Cosmogony:**

- Environment
- Rules, geography, universe history
- **Game structure:** spatiotemporal distribution of recreational activities



Temporal structure

# Emergent gameplay

- Possibility of unexpected actions made possible by game system:
  - **Artificial emergence** (willingly) :
    - GTA, WoW (Role-playing)
  - **Emergence** (under control) :
    - Deus Ex (Allied or enemy faction, etc.)
  - **Natural emergence** (unintentional)
    - Quake rocket jump (bug exploit)





# Credits

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