

Game Design

Fundamental theory



Why theory?

Why is theory important?

- It provides a structure to think in

Thinking about game design without a structure is inefficient

- As if you're finding your way in the dark
- Lacking an overview of the situation



Theory



Game design theory

Game design theory is still work-in-progress

- Young research field

This lecture aims to provide future-proof theory

- Suitable for use in a game development context
- Should be used in Assignment 2 and Assignment 3

Mostly academic knowledge in this lecture



What is a game?

- Definition pitfalls

Experience

The magic circle

Classification of games

WHAT IS A GAME?



Definition of a game

How do you define a game?

- Notorious issue amongst game academics

Many definitions have been posed

- At least 15 well-known academic definitions
- Let's investigate several



Definition #1

"A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome."

— Katie Salen and Eric Zimmerman



Definition #1

"A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome."

– Katie Salen and Eric Zimmerman

So, is FIFA a game?

– Yes!



Definition #1

"A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome."

— Katie Salen and Eric Zimmerman

So, is soccer a game?

— Yes

But what about professionals?

— Is their job a game?



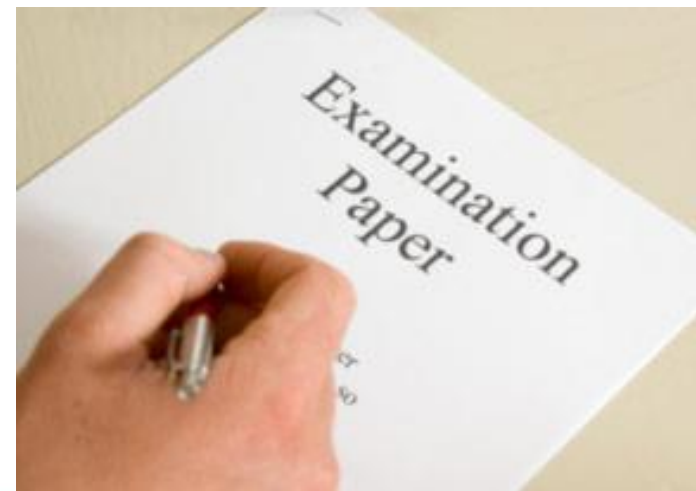
Definition #1

"A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome."

– Katie Salen and Eric Zimmerman

So, is an exam a game?

– Yes? **X**



Definition #2

"A game is an activity which is: Free (voluntary), separate [in time and space], uncertain, unproductive, governed by rules, make-believe."

— Roger Caillois



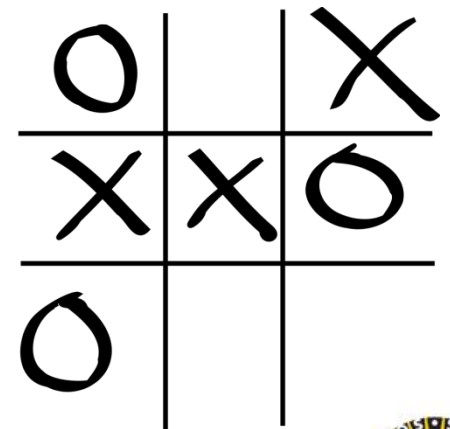
Definition #2

"A game is an activity which is: Free (voluntary), separate [in time and space], uncertain, unproductive, governed by rules, make-believe."

– Roger Caillois

So, is Tic-tac-toe a game?

– Yes



Definition #2

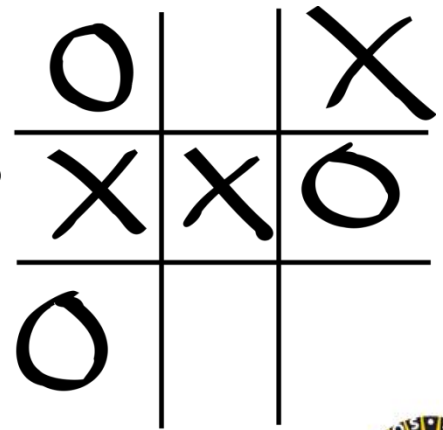
"A game is an activity which is: Free (voluntary), separate [in time and space], uncertain, unproductive, governed by rules, make-believe."

– Roger Caillois

But what if it's played by two players who know the dominant strategy?

– The outcome is not uncertain...

– So it's no longer a game? **X**



Definition #3

"A game is a type of play activity, conducted in the context of a pretended reality, in which the participant(s) try to achieve at least one arbitrary, nontrivial goal by acting in accordance with rules."

— Ernest Adams



Definition #3

"A game is a type of play activity, conducted in the context of a pretended reality, in which the participant(s) try to achieve at least one arbitrary, nontrivial goal by acting in accordance with rules."

— Ernest Adams

So, is Call of Duty a game?

— Yes ✓



Definition #3

"A game is a type of play activity, conducted in the context of a pretended reality, in which the participant(s) try to achieve at least one arbitrary, nontrivial goal by acting in accordance with rules."

– Ernest Adams

So, is Dear Esther a game?

– No? **X**



Dear Esther

Dear Esther is a game where the player wanders over an island, investigate the landscape and hear fragments of a story.

– Is it a game?

It won countless major *game* awards!



Definition #4

"A *game* is a series of interesting decisions."

— Sid Meier

What are *interesting* decisions?!

What a horrible mess is this definition chaos!



What do you think?

What is your (personal) definition of “game”?



What is a game?

- Definition pitfalls

Experience

The magic circle

Classification of games



Intermezzo

Let's look at some problems with definitions.



Definition pitfall #1

Pitfall #1: Moving the problem to another vague term

"A game is a series of interesting decisions."

What is *interesting*? What exactly is a *decision*?

- Anything can be interesting
- Any action can be seen as a decision

Such a definition does not solve the problem

- It masks it



Definition pitfall #2

Pitfall #2: Exclusion

Person 1: "A game is a form of play with structure where you must achieve a goal"

Person 2: "What about The Sims? It has no goal."

Person 1: "Then it's not a game"

Or... the definition is imperfect



Definition pitfall #3

Pitfall #3: Overgeneralization

Person 1: "A game is a form of play with structure where you must achieve a goal"

Person 2: "What about The Sims? It has no goal."

Person 1: "Experiencing the game itself is also a goal."

So... what's not a goal then?

- "Goal" becomes an empty criterion



Definition

A perfect definition should be

1. Clear
 - Not vague
2. Inclusive
 - Contain all the necessary things (necessity)
3. Exclusive
 - Does not contain other things (sufficiency)



What is a game?

- Definition pitfalls

Experience

The magic circle

Classification of games

WHAT IS A GAME?



Definition of a game

Back to the definition of a game

Is it possible to find a perfect definition?

- No? Why not?
- Very similar to why “game design” cannot be defined.
(See introduction lecture.)

A game is not a material thing which exists objectively

- What a game is, is determined by us
- Everyone can determine it differently



Definition of a game

Defining the term “game” *objectively* is a political issue

- Definitions commonly try to protect the interest of their creator
 - Personal preference for a type of game
 - Protecting a culture
 - Professional working area



Definition of a game

So... why would we want a definition anyway?

- It helps to specify your personal perspective on games
- It is useful to make your perspective on games explicit in some conversations
 - Also for other terms such as narrative

Person 1: "I really like the narrative of Minecraft"

Person 2: "Minecraft doesn't have a narrative?!"



Perspectives

A definition is not necessary to talk about what a game is

- A definition is formal and very precise
- A perspective does not need to be so precise

Let's identify several common perspectives on what a game is



Perspectives

1. Games are **rule systems** with goals and challenge
 - Ludologist perspective
2. Games are a form of interactive **narrative**
 - Narratologist perspective
3. Games are a form of structured **play**
 - Play-centric perspective

What is your **main** focus?

- Or is it something else entirely?
- Or are you still forming your perspective?



Perspectives

Remember the game designer role from last Friday

- The game designer focuses on the **experience**
 - (This is a generally accepted industry perspective)
- Then... why not view games as being a form of experience?

4. Games are a form of **experience**

Some types of experiences are created by rules, others by narrative, and others by play



What is a game?

- Definition pitfalls

Experience

The magic circle

Classification of games

EXPERIENCE



Experience

This course will use the experience perspective

- It corresponds well with the game designer
- The other perspectives all have a place in this perspective
- It is an inclusive perspective
 - There is room for future types of games



Experience

Right, so what is the experience then?

– “Experience” is a vague concept

We will identify various types of experiences



Types of experiences

The types of experiences are closely related with the question why games are appealing

- What type of experience are you looking for in games?

- Other perspectives on this question are for example:

- Types of motivations to play games
- Types of fun in games
- Motivational player types



Types of experiences

Let us consider several classifications of experience types

- They use various perspectives on the question why games are appealing



MDA Framework

The MDA framework defines 8 aesthetics

– By Robin Hunicke, Marc LeBlanc, Robert Zubek

A type of fun is called an *aesthetic*

– Has nothing to do with nice visuals

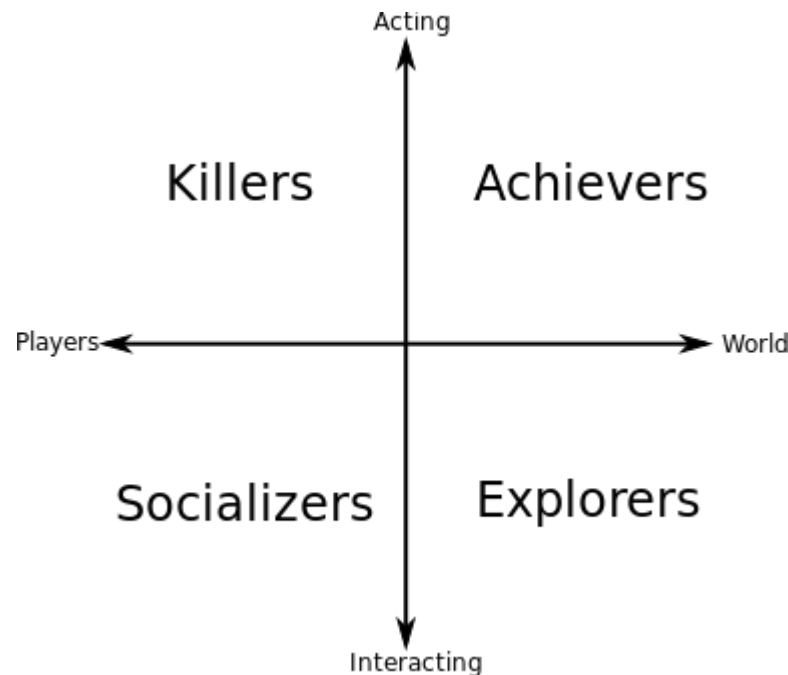
- | | |
|--------------|---------------|
| 1. Sensation | 5. Fellowship |
| 2. Fantasy | 6. Discovery |
| 3. Narrative | 7. Expression |
| 4. Challenge | 8. Submission |



Bartle types

Categorization of MUD players by Bartle from 1996

– What type of activity do they enjoy most?



Roger Caillois

Defined four types in his 1961 book “Man, Play and Games”

- Agon – competition
- Alea – chance
- Mimicry – role-playing
- Ilinx – excitement / altering perceptions



Self determination theory

One of the most popular general motivation theories.
It is also applied to games.

Intrinsic motivation arises from core needs

- Need for **Competence**
 - Skill
- Need for **Autonomy**
 - Freedom to create/discover/...
- Need for **Relatedness**
 - Social aspects



Yee's MMORPG motivations

Player motivations in MMORPGs by Nick Yee

TABLE 1. SUBCOMPONENTS REVEALED BY THE FACTOR ANALYSIS GROUPED BY THE MAIN COMPONENT THEY FALL UNDER

<i>Achievement</i>	<i>Social</i>	<i>Immersion</i>
Advancement Progress, Power, Accumulation, Status	Socializing Casual Chat, Helping Others, Making Friends	Discovery Exploration, Lore, Finding Hidden Things
Mechanics Numbers, Optimization, Templating, Analysis	Relationship Personal, Self-Disclosure, Find and Give Support	Role-Playing Story Line, Character History, Roles, Fantasy
Competition Challenging Others, Provocation, Domination	Teamwork Collaboration, Groups, Group Achievements	Customization Appearances, Accessories, Style, Color Schemes
		Escapism Relax, Escape from Real Life, Avoid Real-Life Problems



Motivation theories

Many theories available. We have seen:

- MDA Framework
- Bartle Types
- Roger Caillois' types
- Self determination theory
- Yee's MMORPG motivations

We will focus on the MDA framework in this course

- Next lecture!



What is a game?

- Definition pitfalls

Experience

The magic circle

Classification of games

THE MAGIC CIRCLE



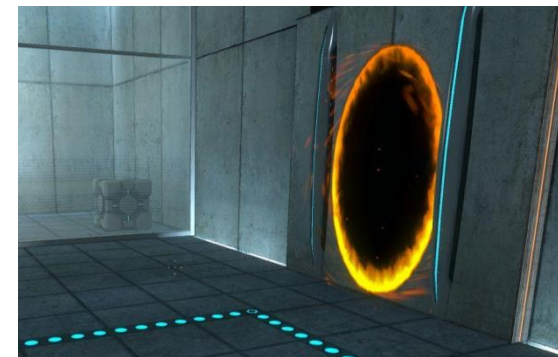
The magic circle

Concept proposed by Johan Huizinga in 1938

- Important property of games

The boundary between the game and reality

- When entering the magic circle the player accepts the game as the temporary reality
- Inside the magic circle it feels safe to play



The magic circle

Example

- When playing the game Bioshock, the player accepts that (s)he's playing in an underwater world with supernatural powers. Objectively it seems ridiculous, but you *suspend your disbelief* to play.



The magic circle

Example

- When playing golf, the goal is to get the ball in the hole. When inside the magic circle, the player accepts the rules and doesn't just drop the ball in the hole.



The magic circle

There is a difference between real-life and play
– The magic circle is the boundary

Write down example situations showing this difference



Immersion

Immersion can be seen as the inside of the magic circle

- The magic circle is the boundary

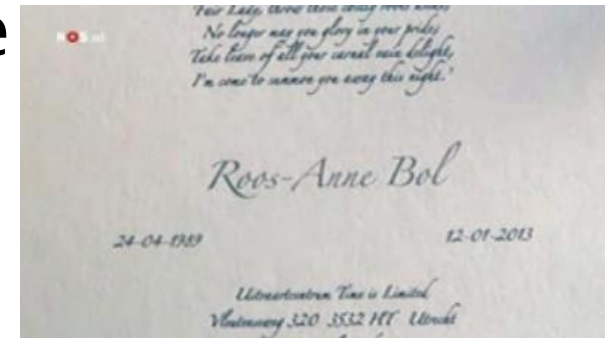


Consent

The player has to know of the game and agree with it to be in the magic circle

You cannot force people into a game

- The commotion about the game “Roos-anne Bol”



Sometimes people want out of the circle

- When it's no longer fun



Permeability

Some things seep through the magic circle

- Real world consequences of a game

Examples

- Buying and selling virtual goods for real money
- Learning things about the real-world
 - E.g.: Rome: Total War teaches about the Roman Empire
- The passing of time



What is a game?

- Definition pitfalls

Experience

The magic circle

Classification of games

CLASSIFICATION OF GAMES



Game classification

How can we group games into categories?

Traditional genres

- Real-time strategy
- First-person shooter
- Role-playing game
- Platformer game
- Adventure game
- ... 50+ more

Describes the external characteristics



Genres

Easy classification based on external similarity

- Grown historically this way

Limited description of the content

- How similar are Splinter Cell and Tomb Raider?
 - Both are action-adventure third-person shooters
- Splinter Cell has stealth, strategy and puzzle elements
- Tomb Raider has drama, survival and exploration elements



Genres

Not an ideal classification

- Not likely to change

Movies also have genres as classification

- Classification is not a problem unique to games



Alternative classifications

Classification on the type of game:

- Casual games, social games, pervasive games, ...

What could be a better classification system?



What is a game?

- Definition pitfalls

Experience

The magic circle

Classification of games

Todo's

Work on Assignment 1.2 (Pitch presentation)

- Meet with your tutor TA
- E-mail your presentation pdf tomorrow before 17:00

Your tutor TAs are in the following rooms

- BBG-175 – Hugo Hogenbirk
- KBG-228 – Tijmen van Nesselrooij
- BBG-109 – Kerim Sevingil
- UNNIK-209 & 222 – Berry van Someren

These are their rooms on the education page

Don't
forget the
Mini-test

