medien wissenschaft
UNIVERSITÄT BAYREUTH

Computerspiel-Ontologien

Game Studies at the Museum

28. November 2015

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Ontologie

„Eine Ontologie ist eine explizite Repräsentation der Konzepte und der Beziehungen unter den Konzepten, die in einer Domäne (Weltausschnitt) existieren.“

Halder nach Gruber 1993

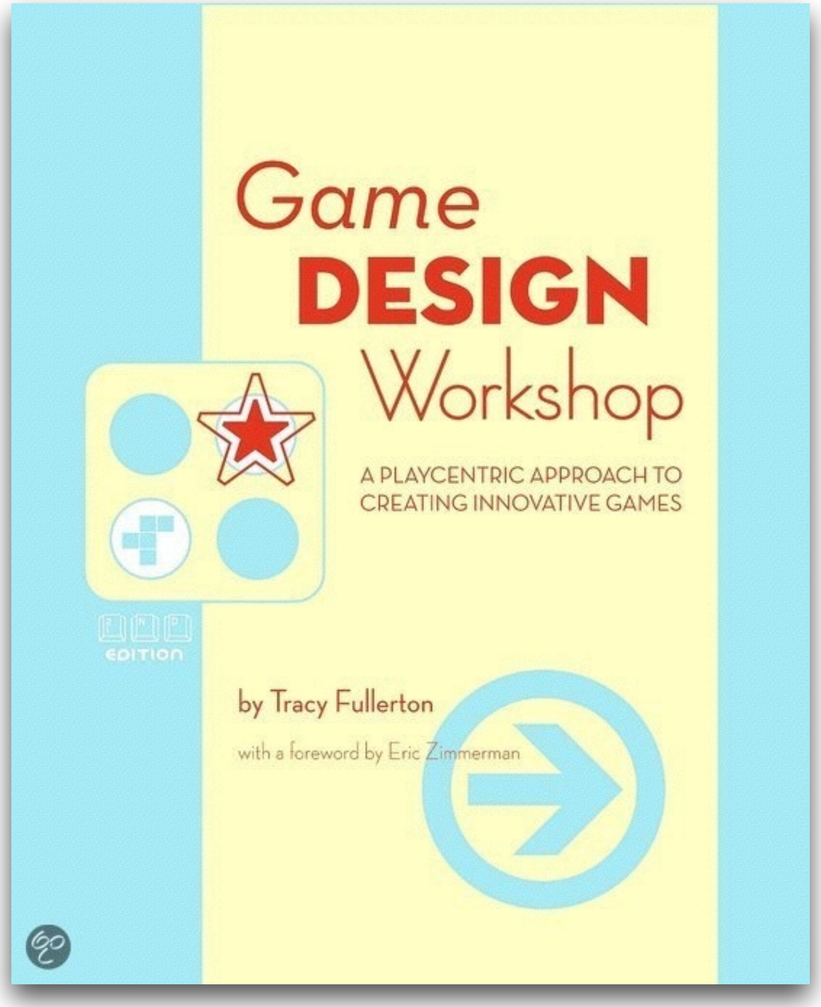
Beispiele

Rules | Play | Culture

Katie Salen/Eric Zimmerman (2004)

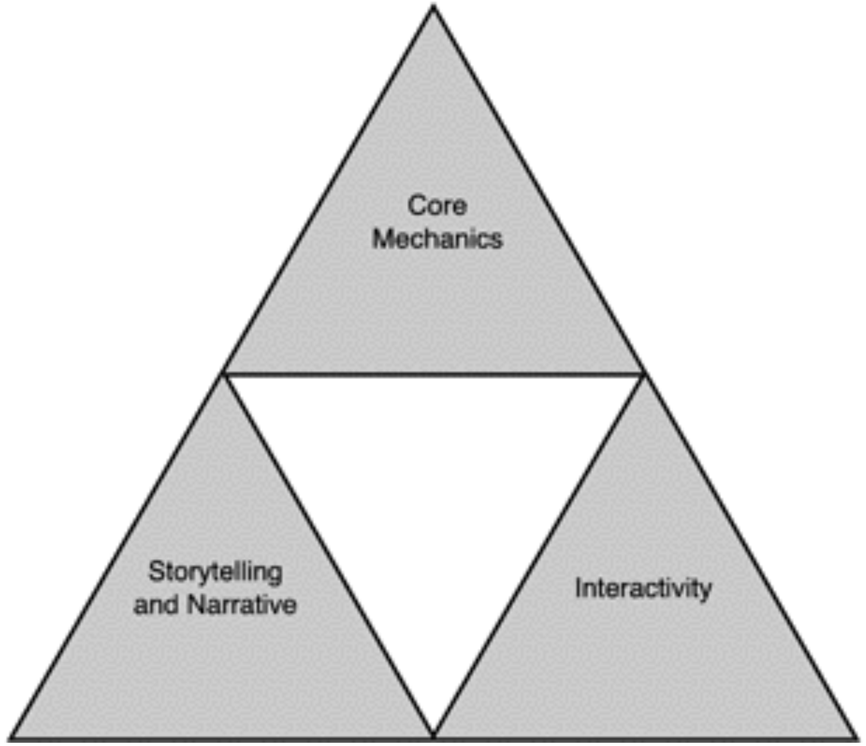
Form | Drama | Dynamic

Tracy Fullerton (2004, 2008)



Key Elements

Andrew Rolling; Ernest Adams (2003)



Core Mechanics

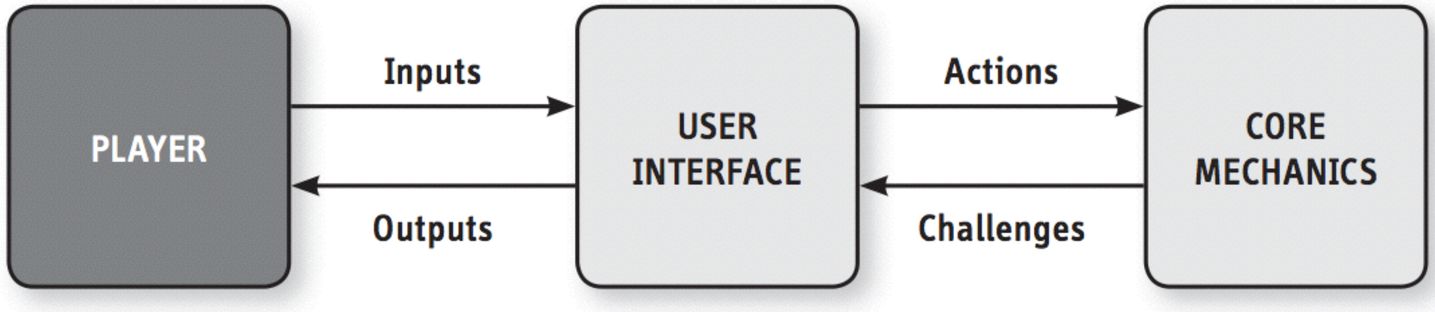
Interactivity

Storytelling and Narrative

For our purposes, **interactivity** is the way that the player sees, hears, and acts within the game's world —in short, the way the player plays the game.

Key Components

Ernest Adams (2006, 2010)



Core Mechanics

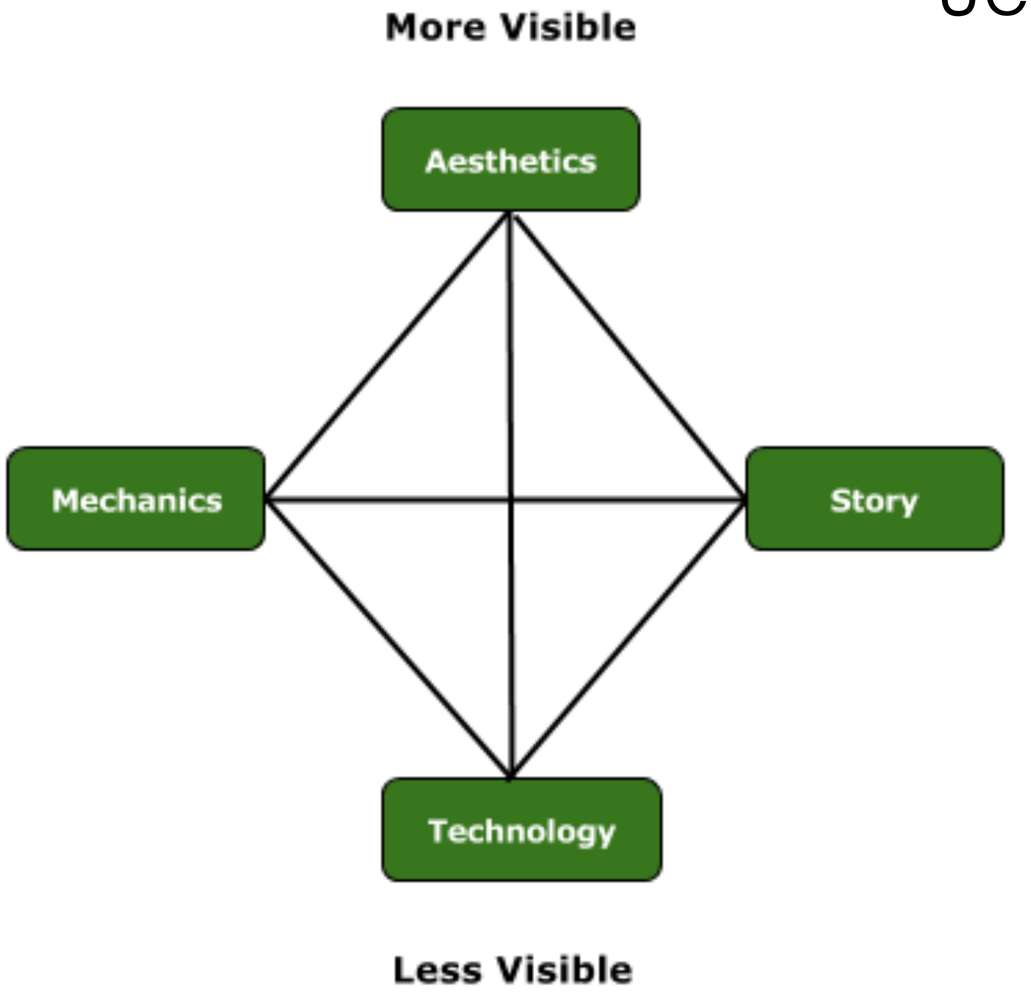
User Interface

Player

(Storytelling)

Elemental Tetrad Model

Jesse Schell (2008)



Aesthetics

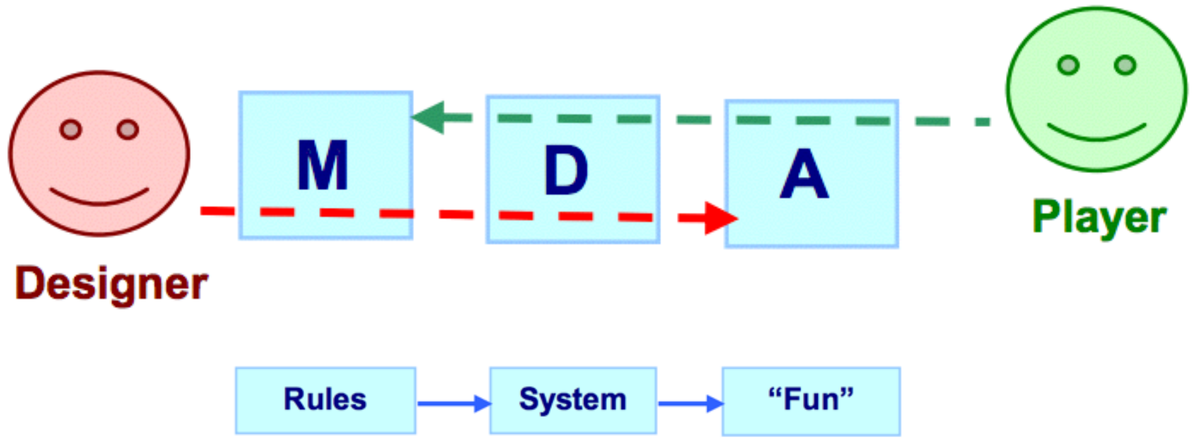
Mechanics

Story

Technology

Mechanics | Dynamics | Aesthetics

Robin Hunicke; Marc Le Blanc; Robert Zubek (2009)



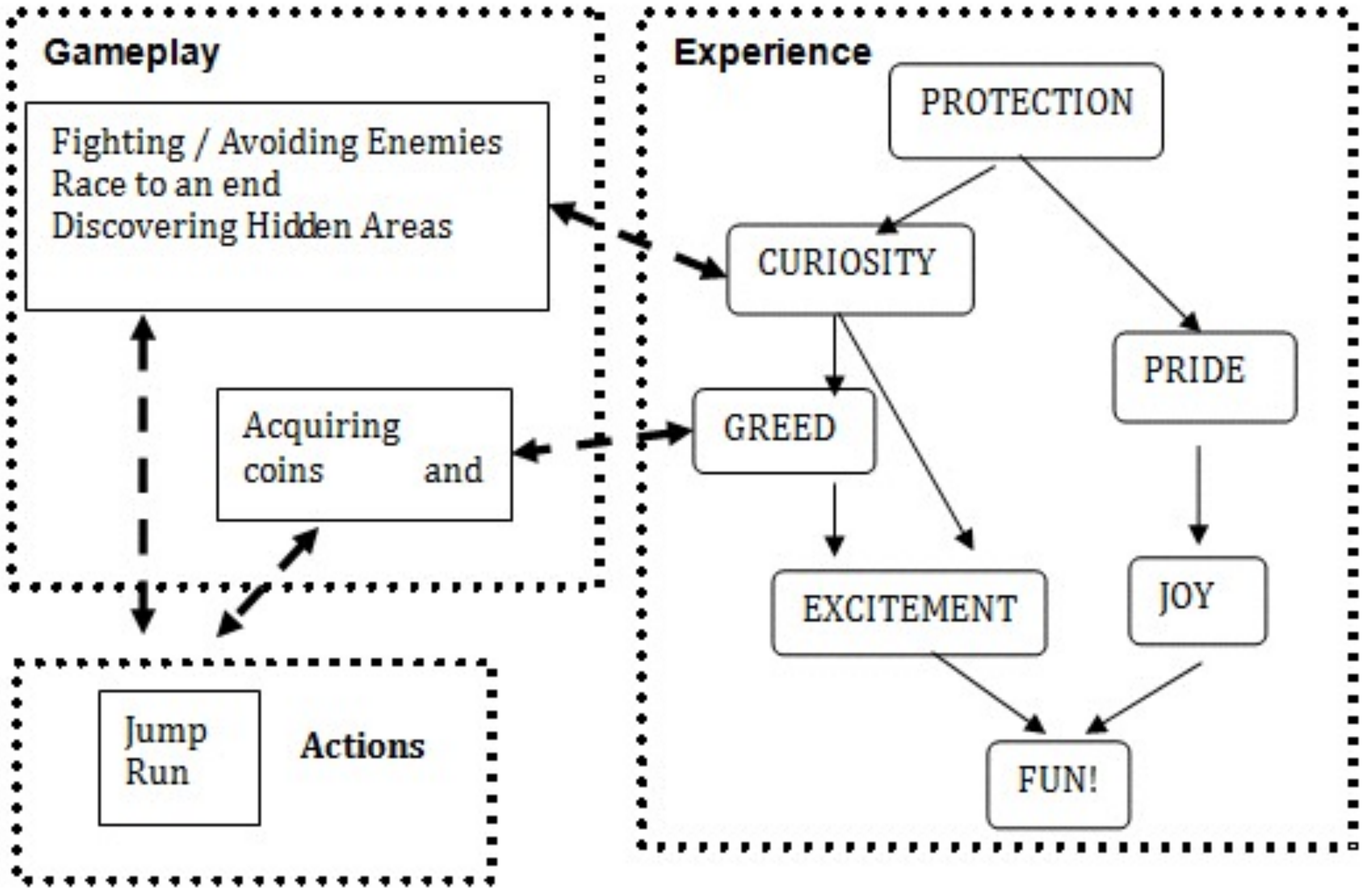
Mechanics describes the particular components of the game, at the level of data representation and algorithms.

Dynamics describes the run-time behavior of the mechanics acting on player inputs and each others’ outputs over time.

Aesthetics describes the desirable emotional responses evoked in the player, when she interacts with the game system.

Actions | Gameplay | Experience

Roberto Dillon (2010)



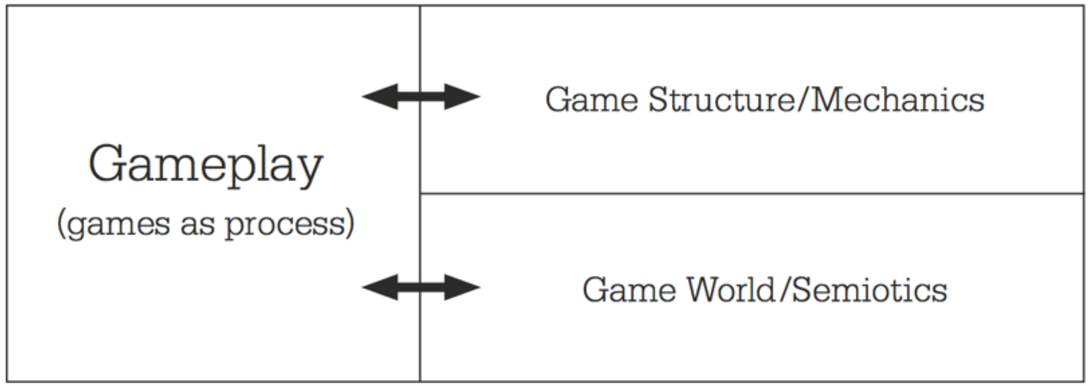
Actions: the core, atomic actions that a player can perform in a game, usually described in terms of verbs. Examples are moving, jumping, kicking a ball, punching, shooting, taking cover etc.

Gameplay: the resulting play that players achieve by combining and using the available “actions”. These can be either verbs or higher level concepts, for example: fighting, race to an end, territorial acquisition etc.

Experience: the emotional experience that players perceive while playing.

Play | Structure | World

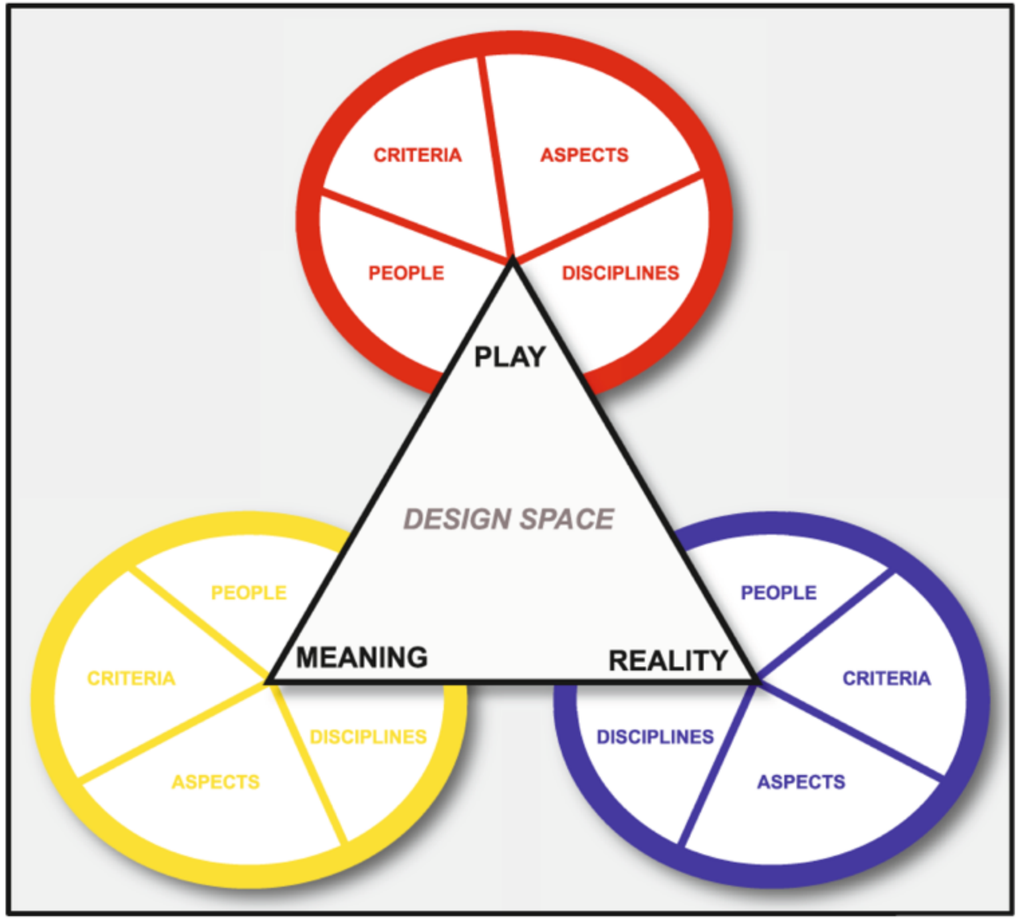
Espen Aarseth: Game Ontologies (2011)



The **mechanical layer** of the game object (its game mechanics) is the engine that drives the game action, allows the players to make their moves, and changes the game state.

The **semiotic layer** of the Game Object is the part of the game that informs the player about the game world and the game state through visual, auditory, textual and sometimes haptic feed- back.

Triadic Game Design



Casper Harteveld (2011)

Citing: Aldrich (2004), De Freitas/Oliver (2006), Frank (2007), Hall (2009), Winn (2009)

Reality

Simulation, Context, Realism, Content

Meaning

Pedagogy, Training objective, Functionalism, Theory

Play

Game, Representation, Engagement, Game Design

Reviews

Mirror's Edge

PS3

				TV-Ausgabe
Für Fans von	Parkour, Geschicklichkeit	**Schwierigkeit**	mittel	○ 4:3 ● 16:9
Einarbeitungszeit	ca. 10 Minuten	**Spieldauer**	ca. 6 bis 8 Std.	○ VGA ● HDTV
Speichersystem	Speicherpunkte	**Speicherplatz**	1 MB	

ACTION

Szenario: Science-Fiction
Spielbare Charaktere: 1
Anzahl der Waffen: 3
Anzahl der Level: 8

Team-Feature: ja ■ nein
Steuerung: einfach — komplex
Geschwind.: langsam — schnell
Fahrzeuge: ja ■ nein

EINZELWERTUNGEN

GRAFIK	✪ flüssig ✪ Animationen ✪ Anime-Cutscenes ⊖ Zeilenverschiebungen ⊖ wenige Details ⊖ Kantenflimmern ⊖ steril	8
SOUND	✪ Effekte ✪ gute Sprachausgabe ⊖ Musik etwas eintönig	9
BEDIENUNG	✪ intuitiv und präzise ✪ Wegmarkierungssystem ✪ Tutorial	9
GAMEDESIGN	✪ innovatives Spielkonzept ✪ intensives Mittendrin-Gefühl ✪ alternative Routen ⊖ auf Dauer monoton ⊖ viel Trial and Error	8
STORY/ SPIELWELT	✪ Science-Fiction-Setting ✪ coole Heldin ⊖ wenige Schauplätze ⊖ lahme Handlung	7
UMFANG	✪ versteckte Extras ✪ Time-Trial-Modus ⊖ Story-Modus könnte länger sein	7

SPIELSPASS

Benedikt	Macht trotz nerviger Probier-Passagen viel Spaß.	8
Henry	Schnell, innovativ, kurzweilig!	9
Markus	Ist mir zu steril. Die Stunts sind aber schon cool.	8
Kai	Das Gehüpfe macht Laune: Endlich mal was Neues!	8

FAZIT Erfrischend innovatives Ego-Gehüpfe mit massig Stunts, fordernden Geschicklichkeitstests und eigenwilliger Ästhetik, dem es auf Dauer allerdings etwas an Abwechslung fehlt.

GESAMTWERTUNG IN % **81**

GamePro 2008

Game Industry Job Categories

http://www.games-career.com/de/Fachrichtungen/

http://www.gamesindustry.biz/jobs

http://creativeskillset.org/creative_industries/games/job_roles

Producer

QA / Localisation

Business / Analysis / Metrics

Controlling / Payment / Finance

HR / Recruitment

Marketing / PR

Sales

Editor / Journalism

Education / Training

Developer

IT / Technical Support

Technical Artist

Sound / Music

Art / Animation

Web Development / Design

Writing

Localization

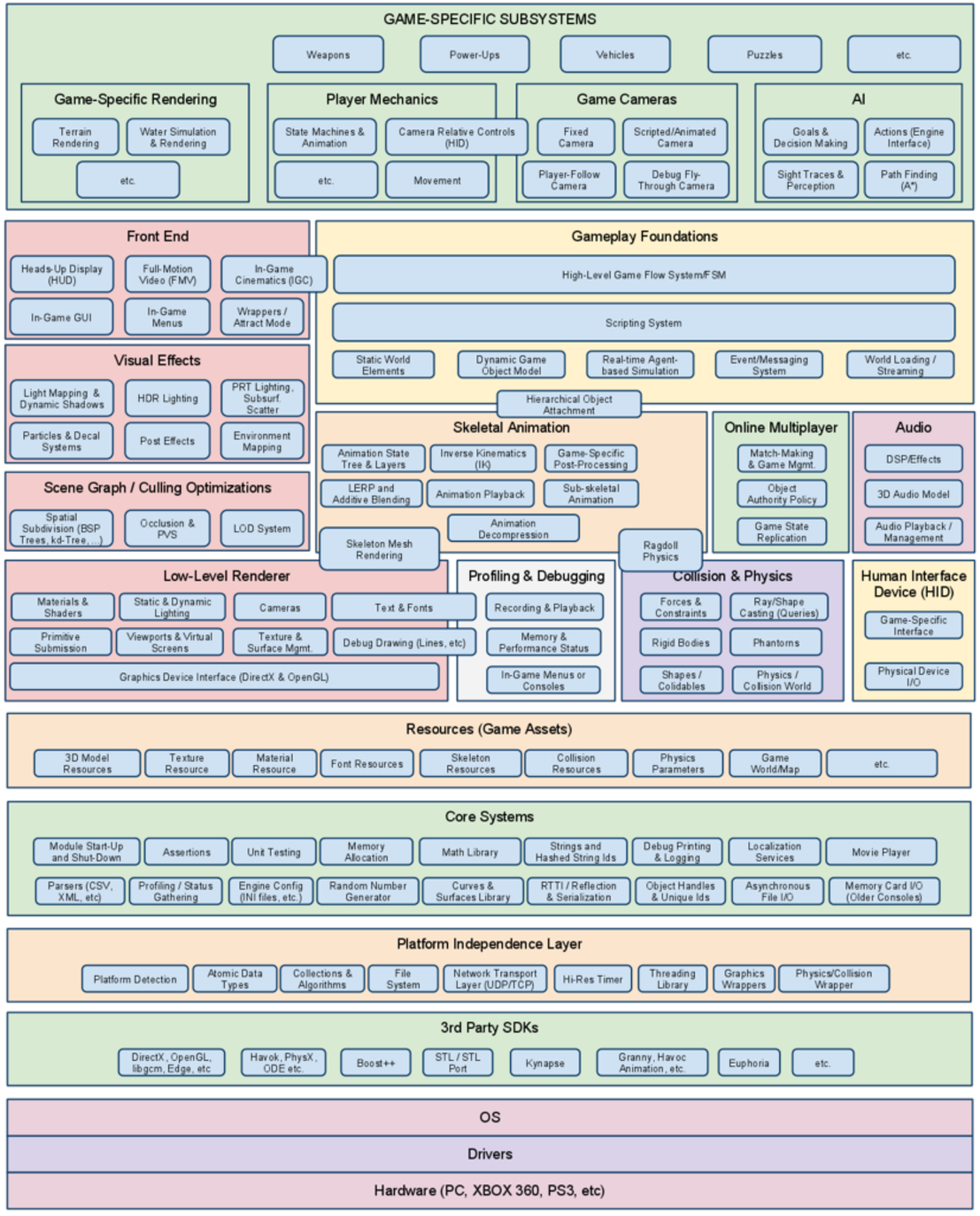
Game Design / Level Design

Programming

Interaction Design

Community Management

Game Engine Modules



Jason Gregory: Game Engine Architecture

Anwendungen

In Forschung und Lehre

Analyse: Ästhetische Form

Didaktik: Kompetenzmodelle

Geschichte und Kontexte

Game Design, Level Design: Aufgaben, Berufsbilder

Game Studies: Ethik, Genre, Körper, Medialität, Patterns etc.

Publikationen: Einführungen, Lehrbücher

Prozess

Zusammenarbeit von Experten des Wissensgebietes

1. Begriffe sammeln
2. Definieren
3. Beziehungen herstellen
4. Review
5. Refine