

#### Video Games as an Expressive Medium

**Expressive Games Seminar** 24. November 2014

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#### medien UNIVERSITÄT BAYREUTH

# Expressive Game

to explore psychological, social, cultural issues.

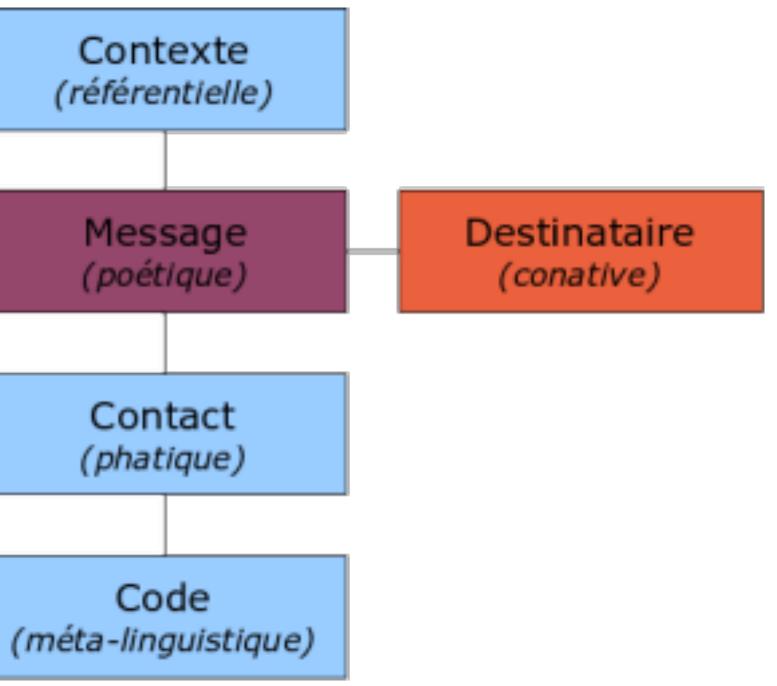
Games.

simulators, virtual training environments Aldrich 2009; Harteveld 2011

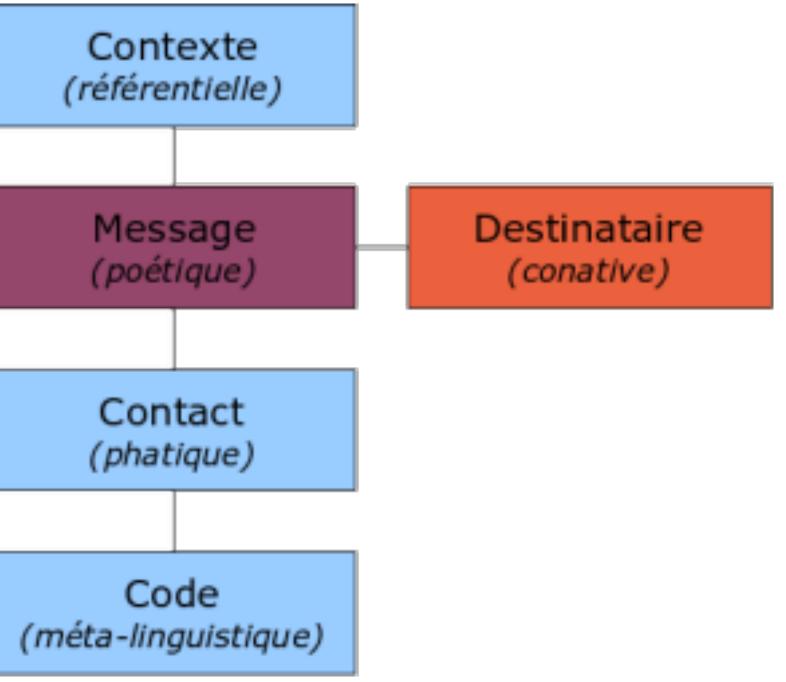
- CfP: We propose to qualify as an **expressive game** a game that allows
- As a game, it will confront the player to choices and dilemmas that
- these issues create. This kind of games allows to express individual or
- social issues while opening back the opportunity to think about it.
- Related Terms: Serious Games, Games with a Meaning, Meaningful Games, Games with a Purpose, Games with a Serious Purpose, Rhetorical Games, Persuasive Games, Games for Change, Personal Games, Biographical
- Virtual experiences, simulations, social impact games, practiceware, game-based learning, immersive learning environments, educational simulations, sims, epistemic games, edutainment, edugaming, simulation/gaming,

#### Expression (Utterance)

A thought, an idea, or a concept communicated by language



Destinateur (expressive)





# Functions of Language

#### Roman Jakobson

# Referential Function (Context)

#### Fantasy Games

Shadow of Mordor



### Economic Simulator

#### Farm Simulator 2015

IORSCH









#### Individual Context



### Expressive Function (Sender)

#### Autobiographical Games



### Conative Function (Receiver)

# Procedural Literacy

»playing video games is [a] kind of literacy ... not one that helps us read but ... that helps us make or critique the systems we live in« lan Bogost



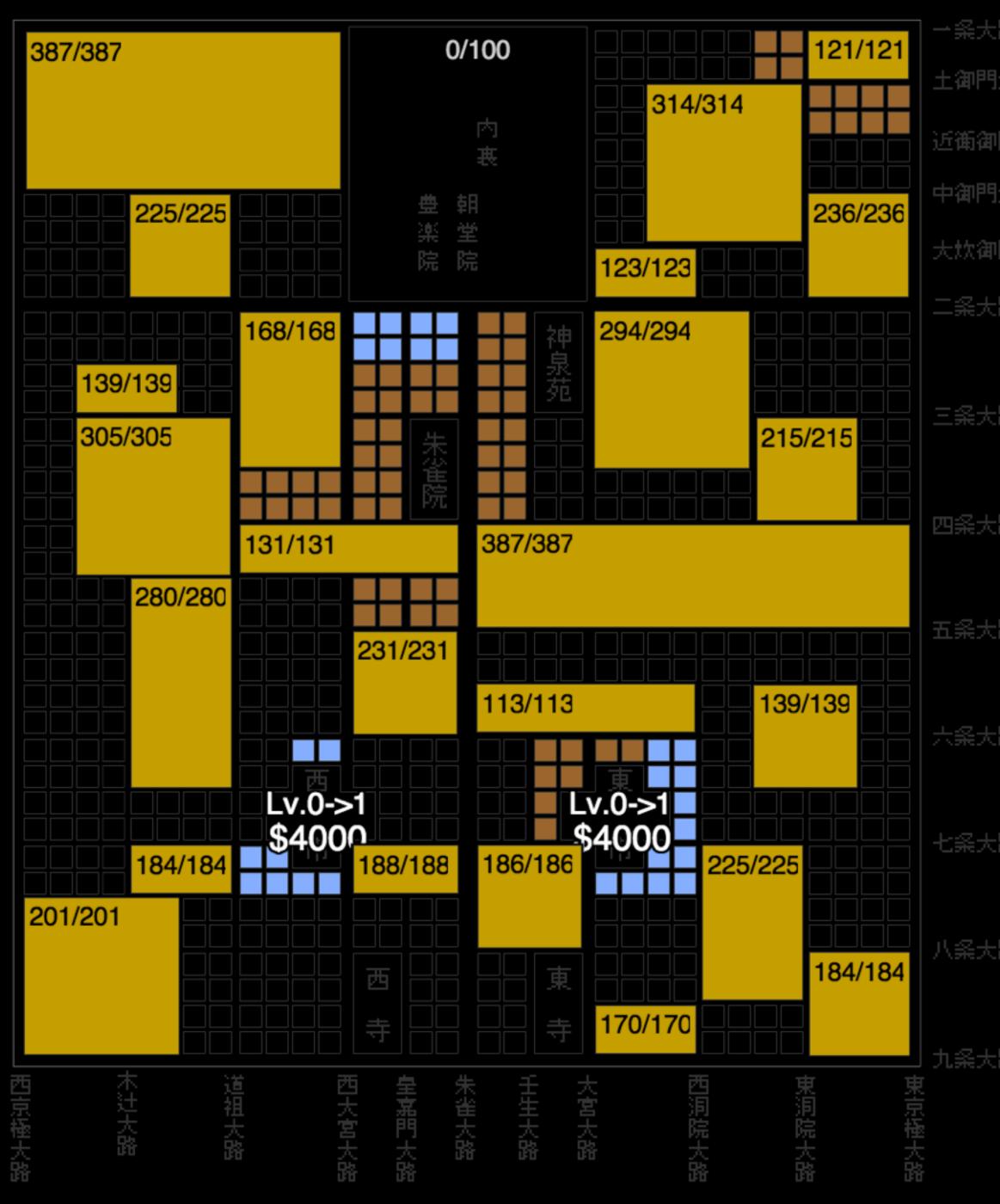


#### Persuasive Games



Darfur is Dying

# Poetic Function (Message)



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Heiankyo Parameters

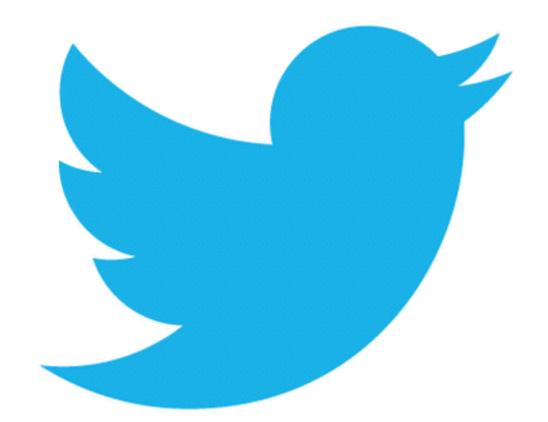


# Phatic Function (Channel)

# Social Gaming



#### Journey (Fan Art)



#### Social Networks

"Twitter is a massively multiplayer online RPG in which you choose an interesting avatar and roleplay a persona loosely based on your own, attempting to accrue followers by repeatedly pressing lettered buttons to form interesting sentences."

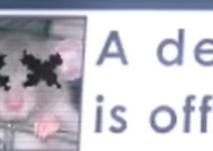
— Charlie Brooker

### Metalingual Function (Code)

#### 4th Wall Game

#### THE STANLEY PARABLE **THIS** YOUR SUPERIOR V





A dead rat is objectively ranked... 9327th Out of 9328 players worldwide. V THIS IS YOU V

Stanley[427] **7:37:33** is online. 9328th ?

9328th out of 9328 players worldwide.

# WORLDWIDE

How long does it take YOU to get to the correct door?

**Compete** against others to improve your Stanley Parable Career! The Stanley Parable



### Expressions and Video Games

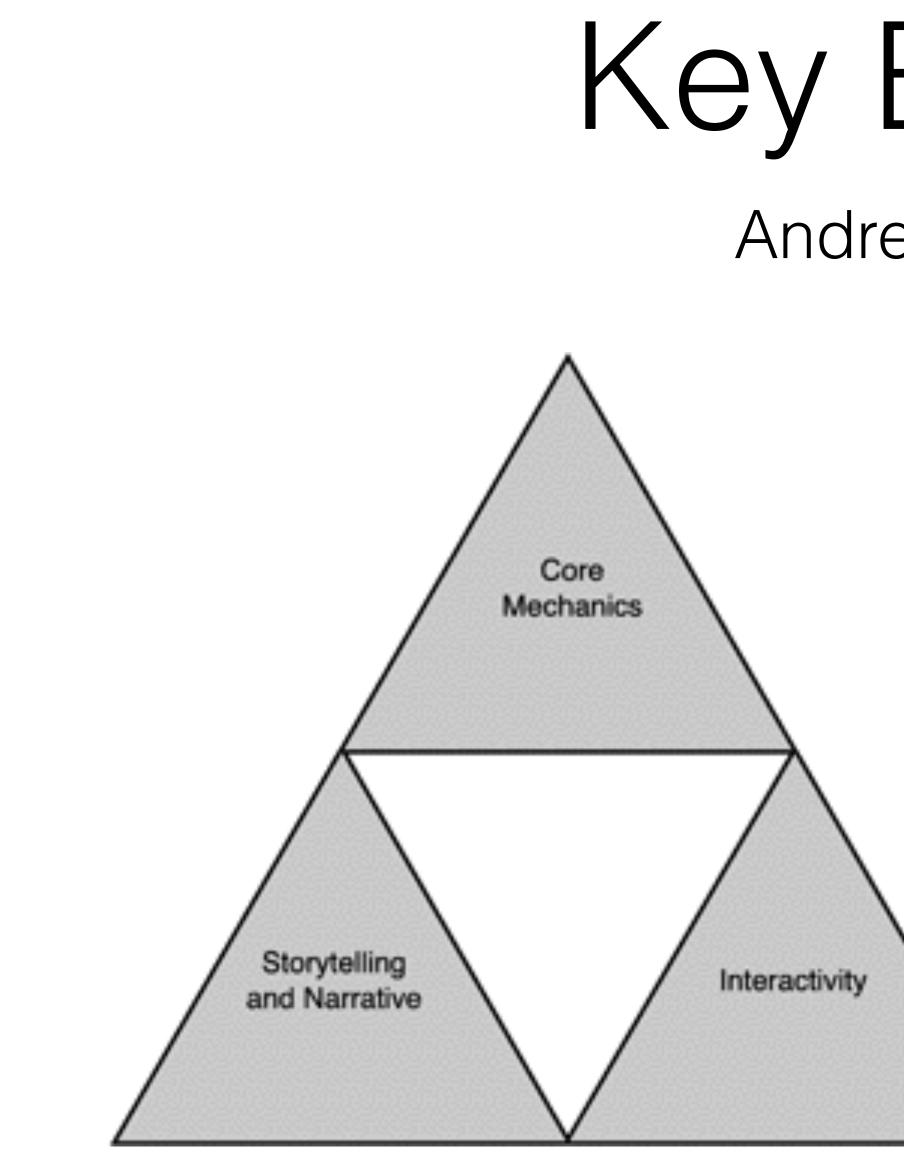
Every video game is expressive (meaningful).

Broad definition: Every speech act is an expression (utterance).

Narrow definition: Assuming the terminology of Jakobson (and sociolinguistics), every speech act has an expressive (emotive, affective) function.

# Video Game Analysis

There is no language of video games but a superposition of several codes



#### Key Elements

#### Andrew Rolling; Ernest Adams (2003)

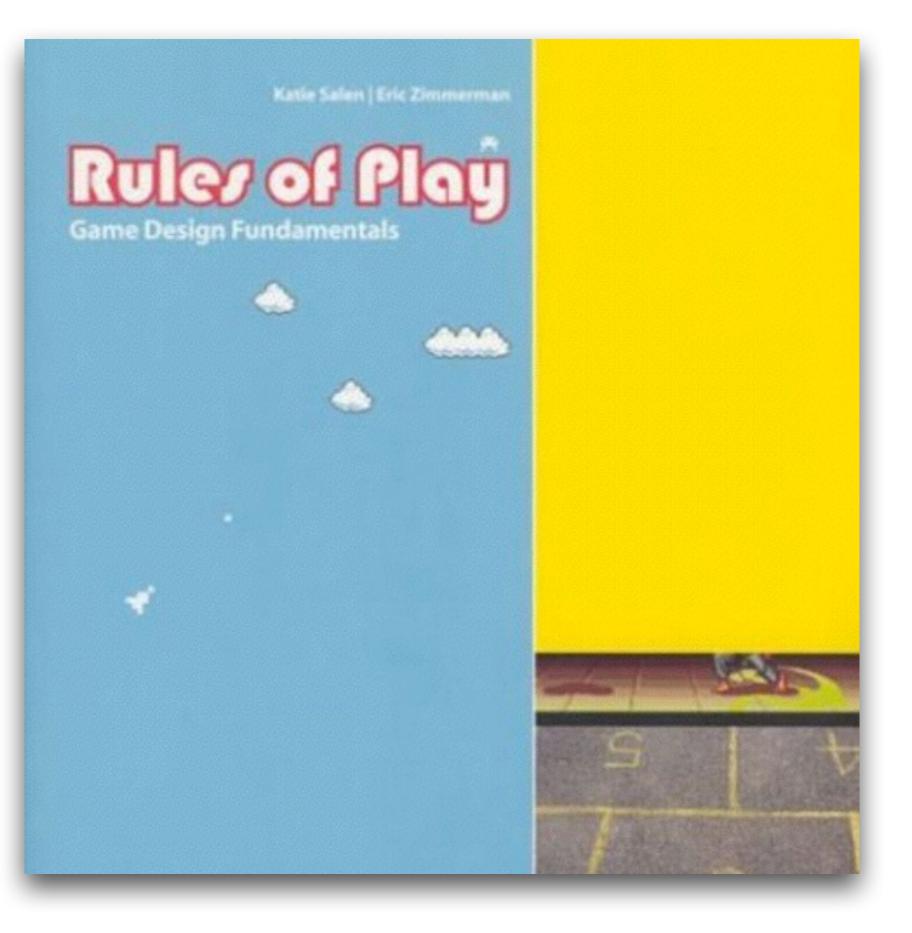
Core Mechanics

Interactivity

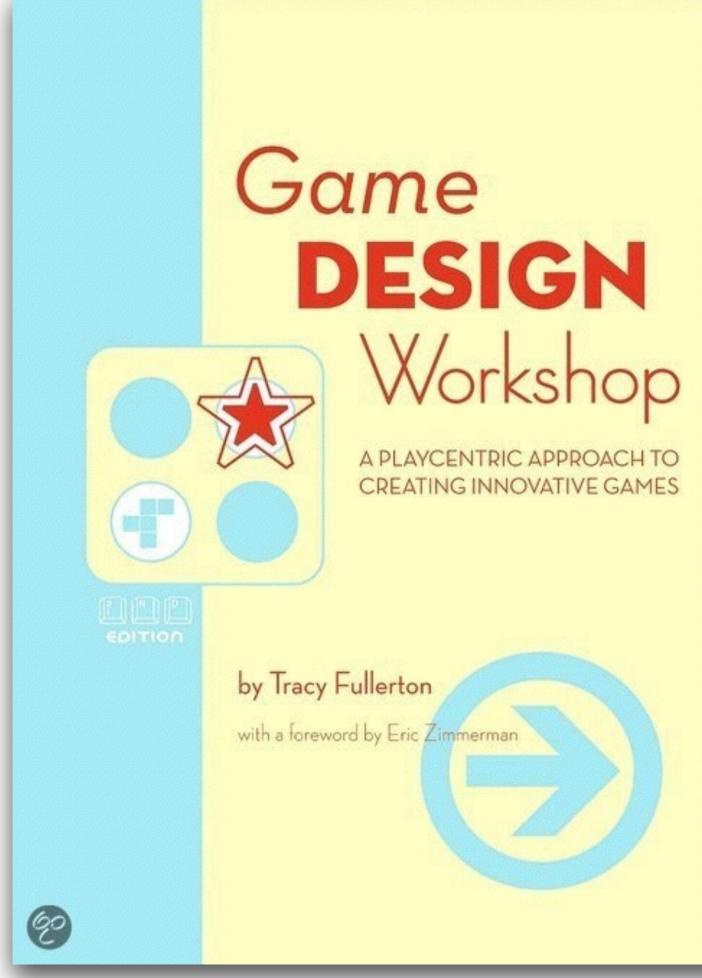
Storytelling and Narrative

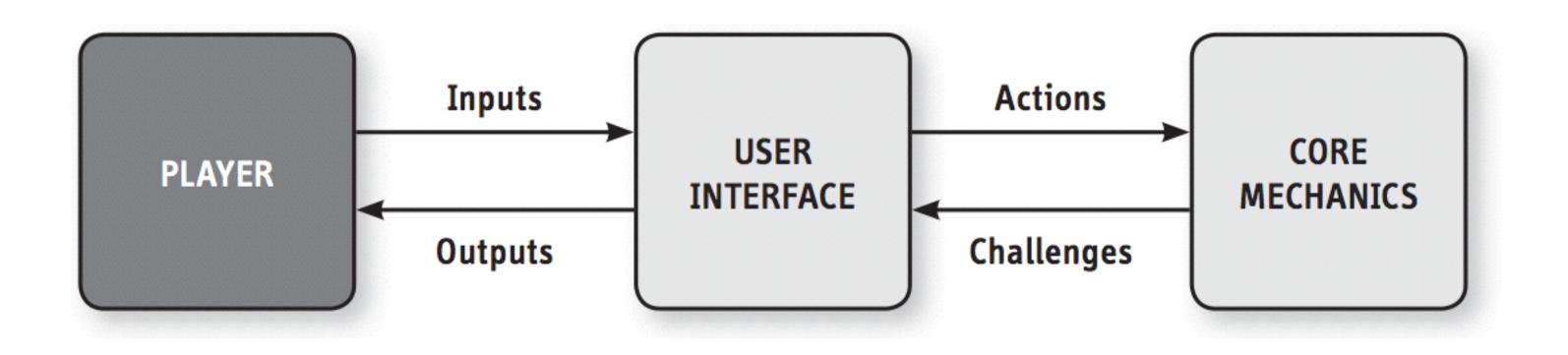


#### Rules | Play | Culture Katie Salen/Eric Zimmerman (2004)



#### Form | Drama | Dynamic Tracy Fullerton (2004, 2008)



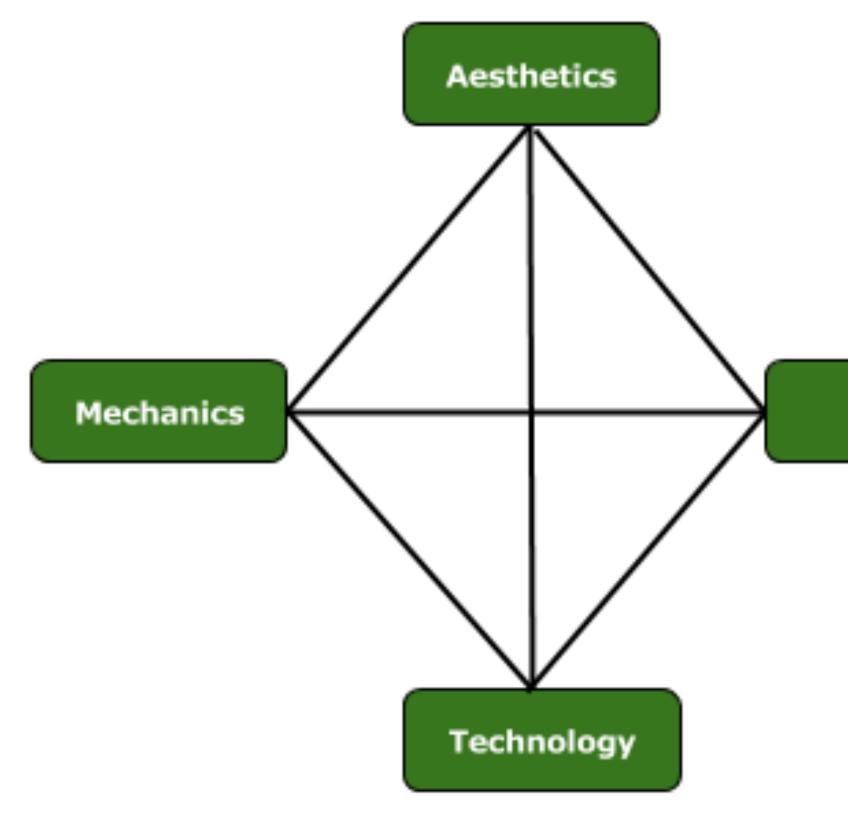


#### Key Components Ernest Adams (2006, 2010)

Core Mechanics User Interface Player

(Storytelling)

More Visible



#### Less Visible

#### Elemental Tetrad Model Jesse Schell (2008)

Aesthetics

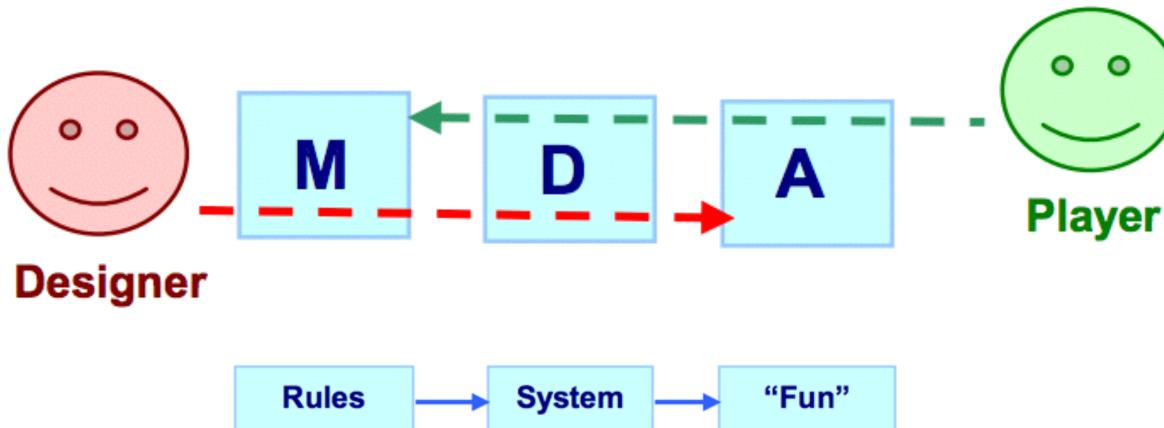
Mechanics

Story

Technology

Story

#### Mechanics | Dynamics | Aesthetics Robin Hunicke; Marc Le Blanc; Robert Zubek (2009)

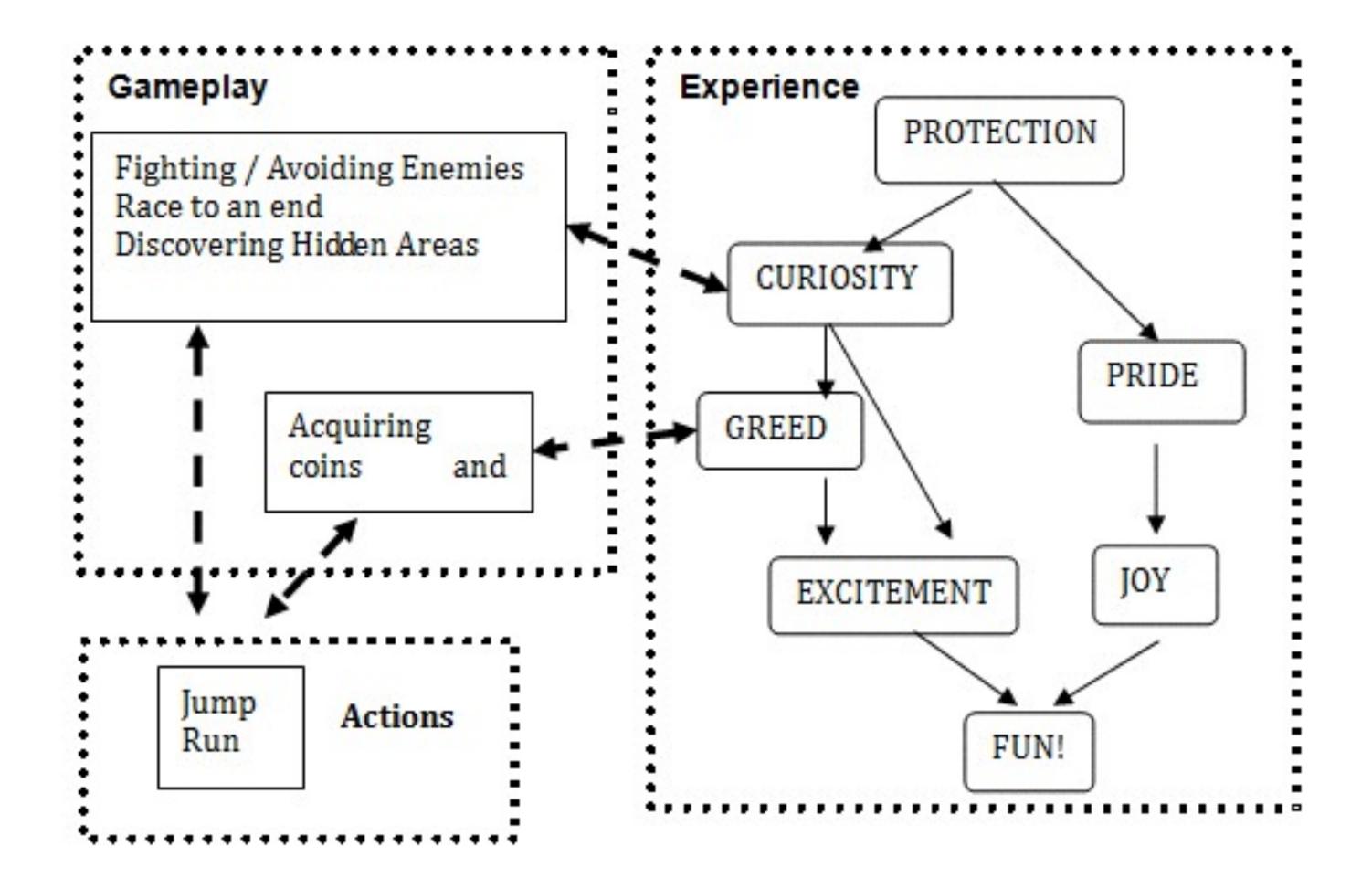


**Mechanics** describes the particular components of the game, at the level of data representation and algorithms.

**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.

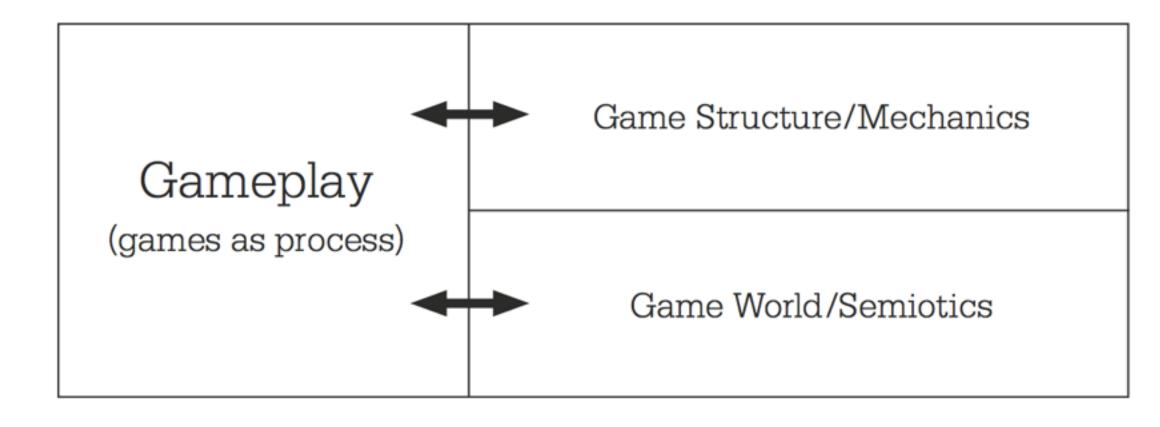
**Gameplay:** the resulting play that players achieve by combining and using the available "actions". These can be either verbs or higher level concepts, for example: fighting, race to an end, territorial acquisition etc.

**Experience:** the emotional experience that players perceive while playing.





#### Play | Structure | World Espen Aarseth: Game Ontologies (2011)

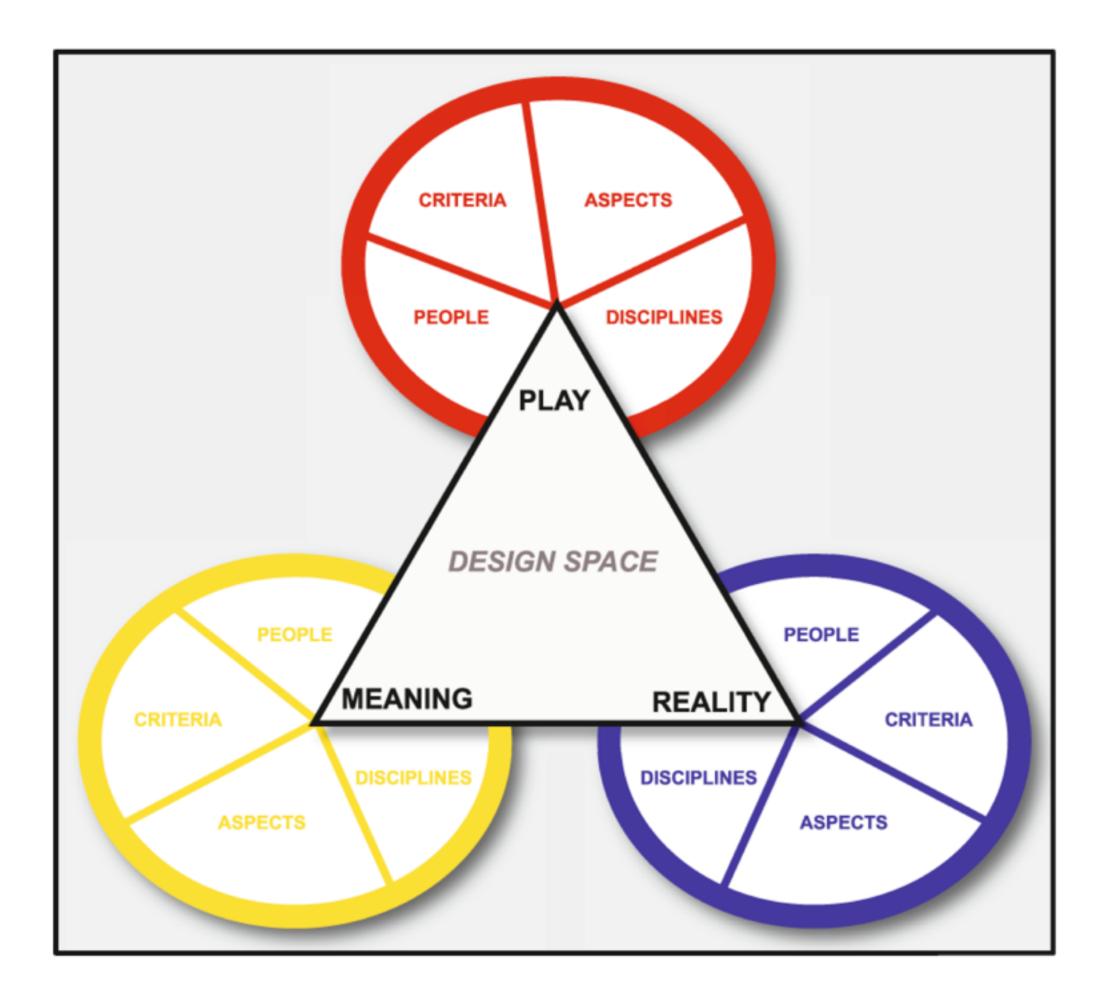


The **mechanical layer** of the game object (its game mechanics) is the engine that drives the game action, allows the players to make their moves, and changes the game state.

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



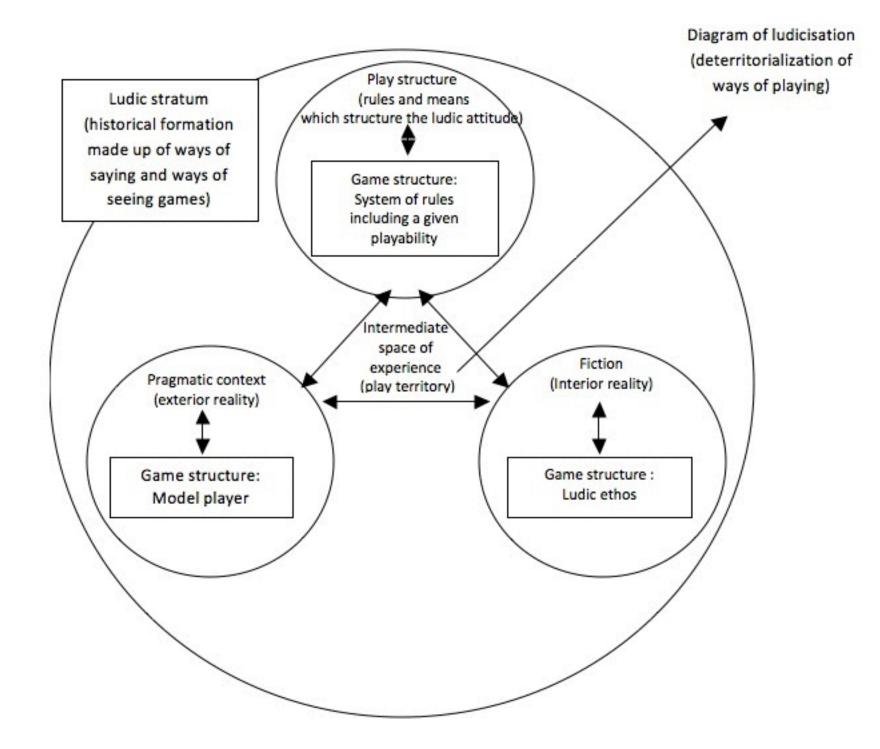
#### Casper Harteveld (2011) Citing: Aldrich (2004), De Freitas/Oliver (2006), Frank (2007), Hall (2009), Winn (2009)

Reality Simulation, Context, Realism, Content

Meaning Pedagogy, Training objective, Functionalism, Theory

Play Game, Representation, Engagement, Game Design

#### Ludicisation Sébastien Genvo (2014)



#### Play Structure Pragmatic Context Fiction

#### 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

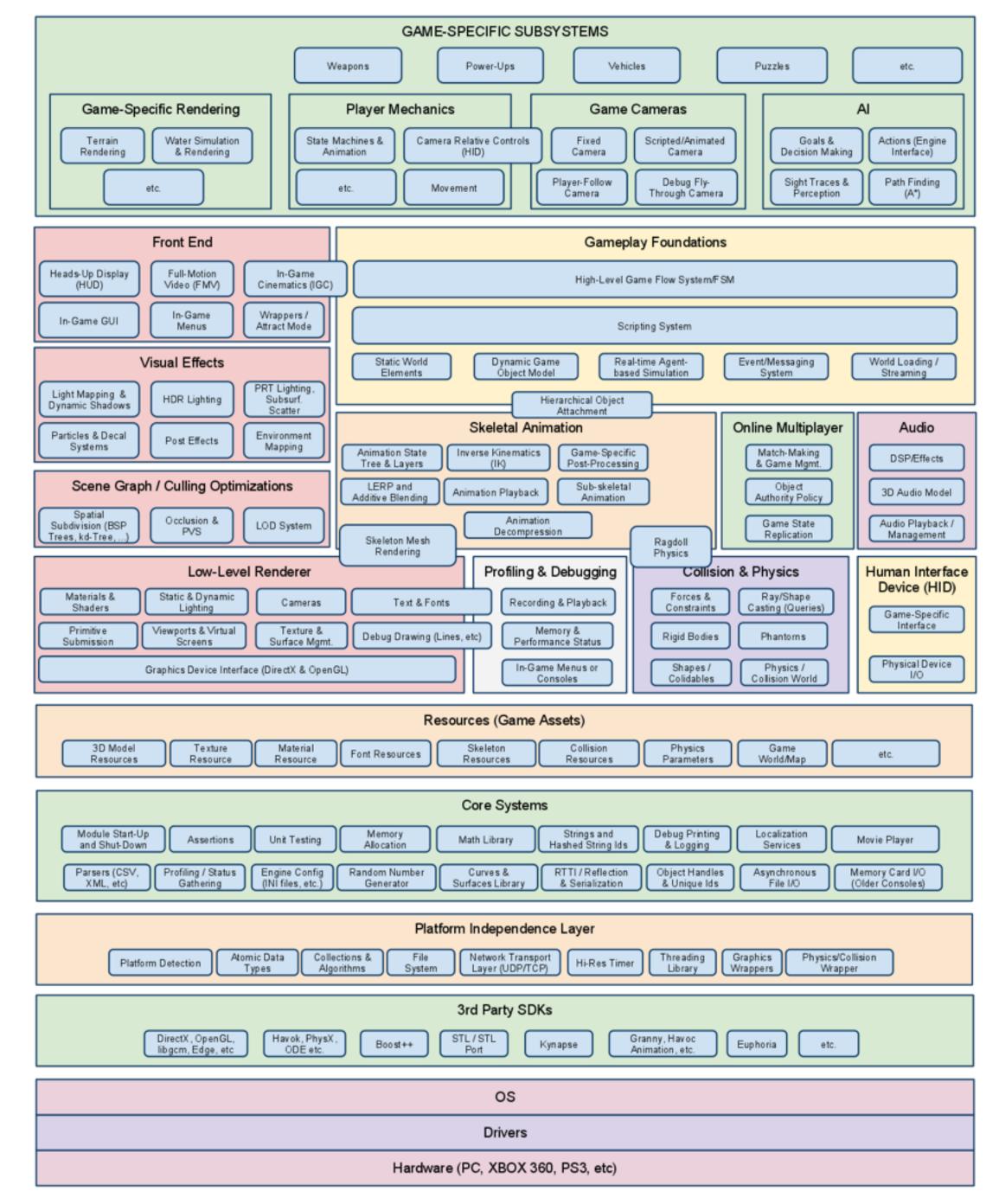
QA / Localisation Business / Analysis / Metrics Controlling / Payment / Finance HR / Recruitment Marketing / PR Sales Editor / Journalism Education / Training **Developer** IT / Technical Support Technical Artist

Sound / Music Art / Animation Web Development / Design

Writing Localization

Game Design / Level Design Programming

Interaction Design Community Management



Jason Gregory: Game Engine Architecture

#### Technology (Platform, Dispositiv)

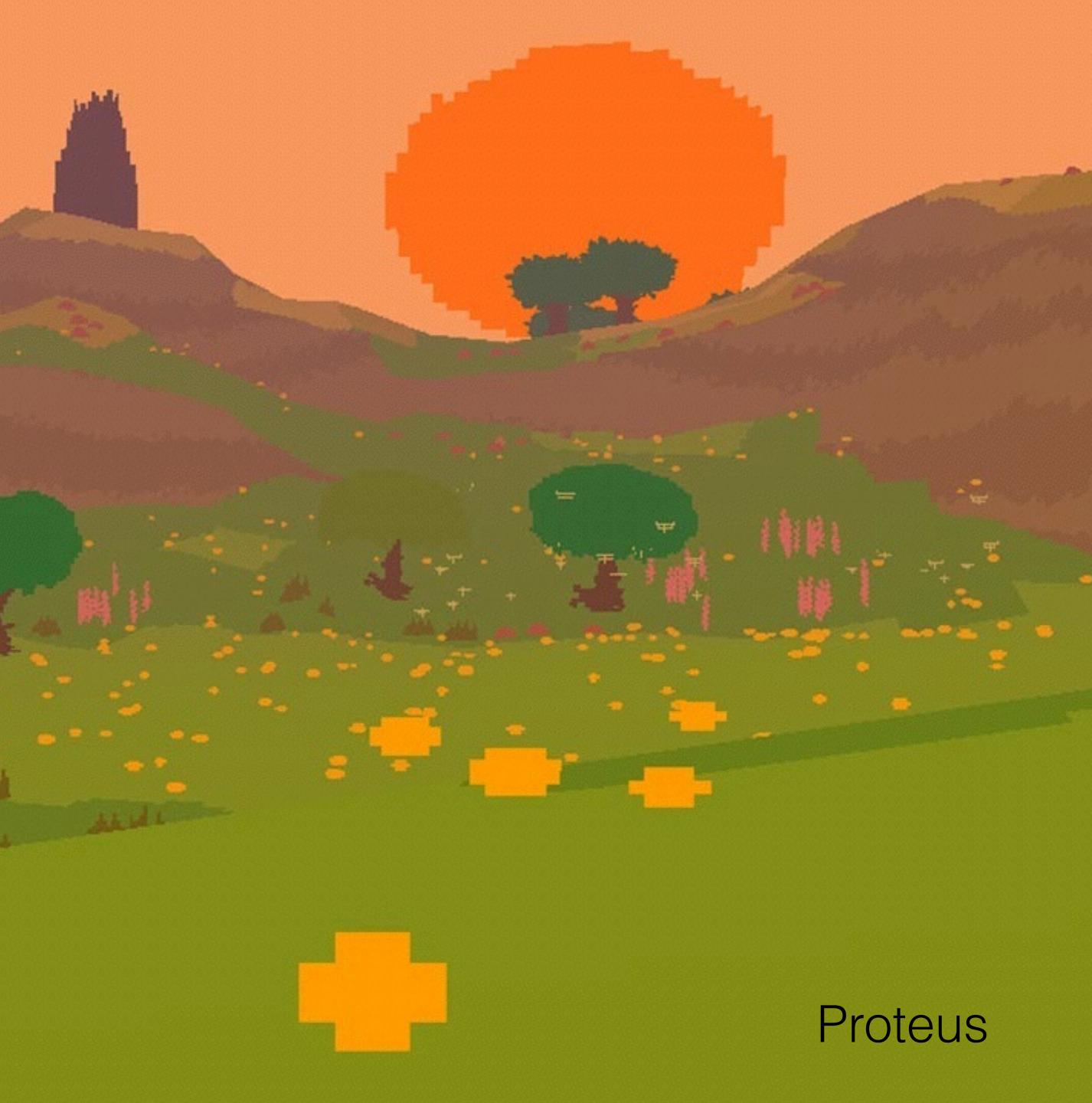
Audio-Visuals (Art, Aesthetics, Interface) Narration (Story, Drama) Ludition (Form, Mechanics, Dynamics) Performance (Play, Experience)

Context (Culture, Discourse)



# Video Game Expressions

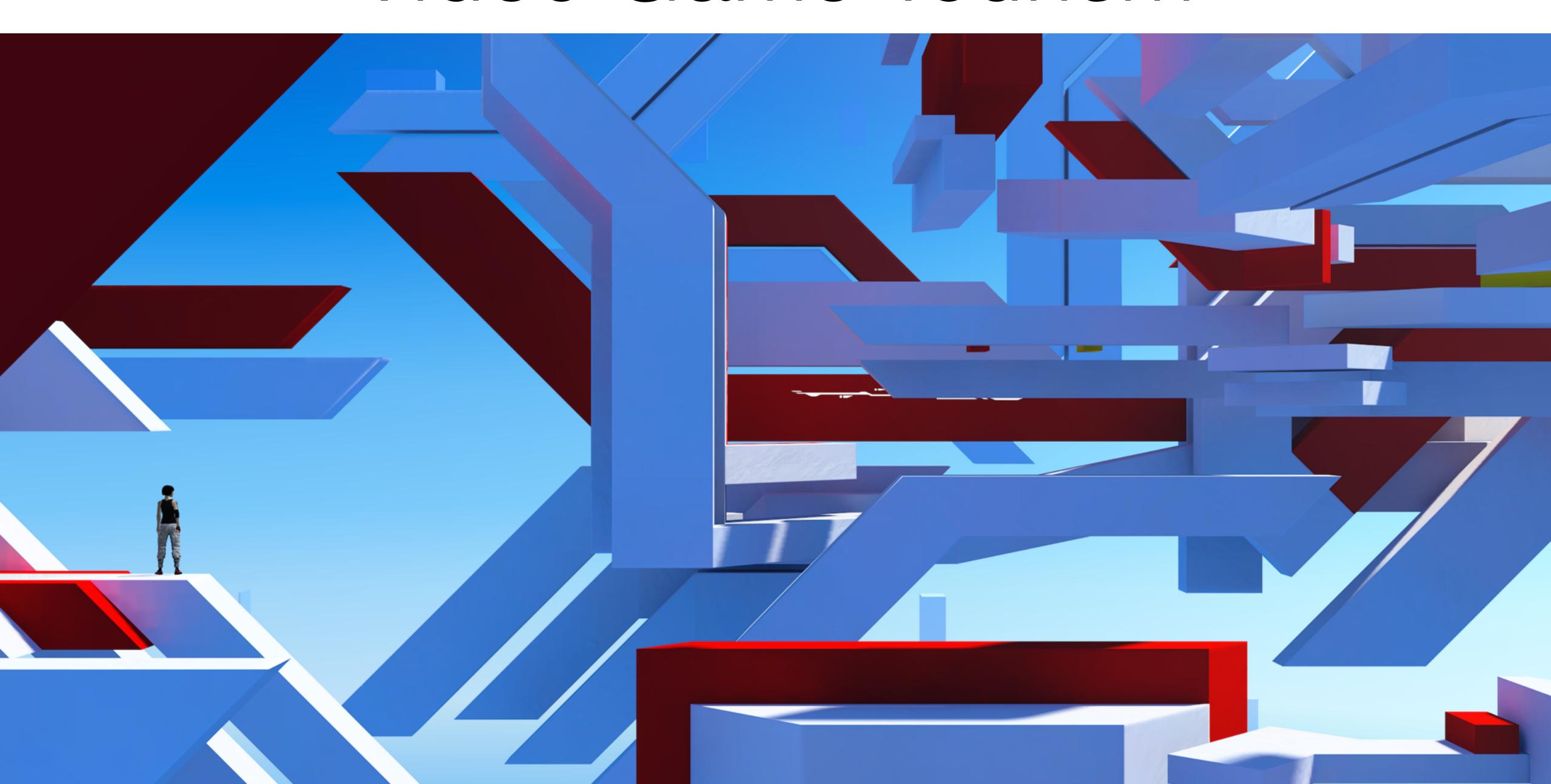
## Audiovisuals



<u>http://www.youtube.com/watch?v=zsb-WQiPick</u>



# Video Game Tourism



# Narration

### 🞔 🔆 🛜 📶 93% 🔲 11:15

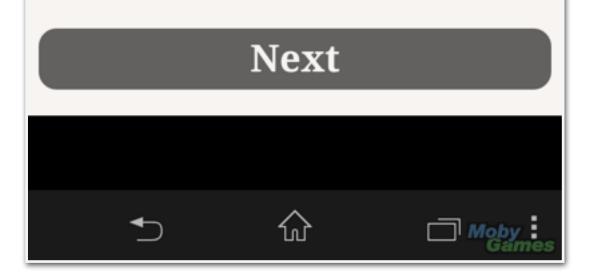
### **Choice of Broadsides**

👞 93 😭

The Captain yells out, "Fire as the guns bear!" You give your gun crews orders to load and fire as quickly as they can, without waiting for the rest of the broadside.

They swab out the bore, push in a charge of powder, push wadding down on the powder, load the shot, push the gun out through the gunport, and fire the cannon, with you commanding each step of the process. "Swab, powder, wadding, shot, fire! Swab, powder, wadding, shot--"

The world turns upside down as the enemy's broadside rips through the hull some ten feet away.



### 93% 🕄 🖓 🖓

Choice of Broadsides What do you do?

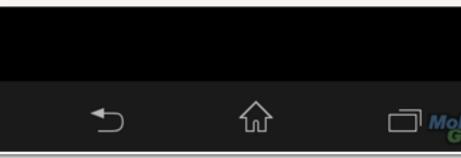
93 👞 🔓

Attend to the wounded personally-safety of my sailors is my top concern.

• Give some quick orders for them to taken to the surgeon in the cockpit, ther turn back to my duty in commanding th guns.

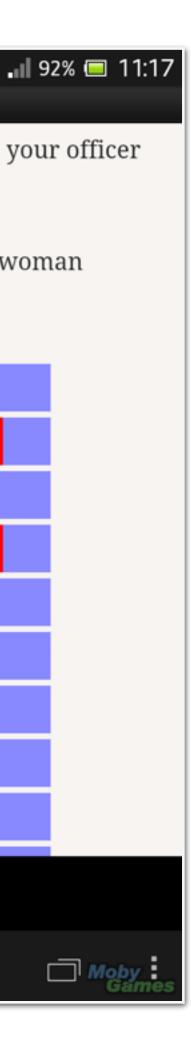
With a gut wound like that, Davies is done for, but Fisher can still be saved. I order some sailors to take Fisher to the cockpit but leave Davies on the deck to die. I need the extra sailors to use the gue effectively.

My duty to the ship outweighs my duty to two sailors. I ignore the wounde and concentrate on firing my guns as quickly and accurately as I can.



<b>11:15</b>	92 🖬 📔 😯 🛠 🅱 📲 92% 🔲 11:17	92 🖬 😭 🛛 🤝 🖓 🖄 🖬 92% 🗖
lythe n. a to be	Choice of Broadsides Show Stats This game is set in a fictional world, similar to our own but with some differences. For example, perhaps the ships are crewed by women. You are a young and gallant	Choice of Broadsides         Excellent. As the game begins, your off may be described as follows:         Name       Madam Midshipwoman Horatia Baker         Age       19
hen g the es is	by women. You are a young and gallant officer, but are you a young gentleman or a young lady?	Sailing65Gunnery80Leadership54
d. I he to e guns	<ul> <li>I'm a young gentleman, of course, and rather confused by the question.</li> <li>I'm a young lady. The idea of gentlemen going to sea and being exposed to the horrors of combatit's a frankly</li> </ul>	Fighting80Patronage30Tact21
nded s	revolting idea. Next	Likeability 43 Honor 45 Courage 50
Moby Games	► ŵ ⊡ Moby : Games	

Choice of the Broadsides



Late Thursday night. You've had a hard day and the last thing you need is this: shopping. Luckily, the place is pretty empty and you're progressing rapidly.

On to the next aisle.

>

Interesting... fresh Gnocchi--you haven't had any of that since... Rome.

The aisle stretches to the north, and back to the south. The shelves on either side of you block your view of the rest of the supermarket, with only the brightly coloured aisle markers visible.

You have stopped your trolley next to the pasta section, bright plastic bags full of pale skin-tone shapes.

There is a brunette woman a few metres ahead, filling her trolley with sauces.

### Sam Barlow: Aisle

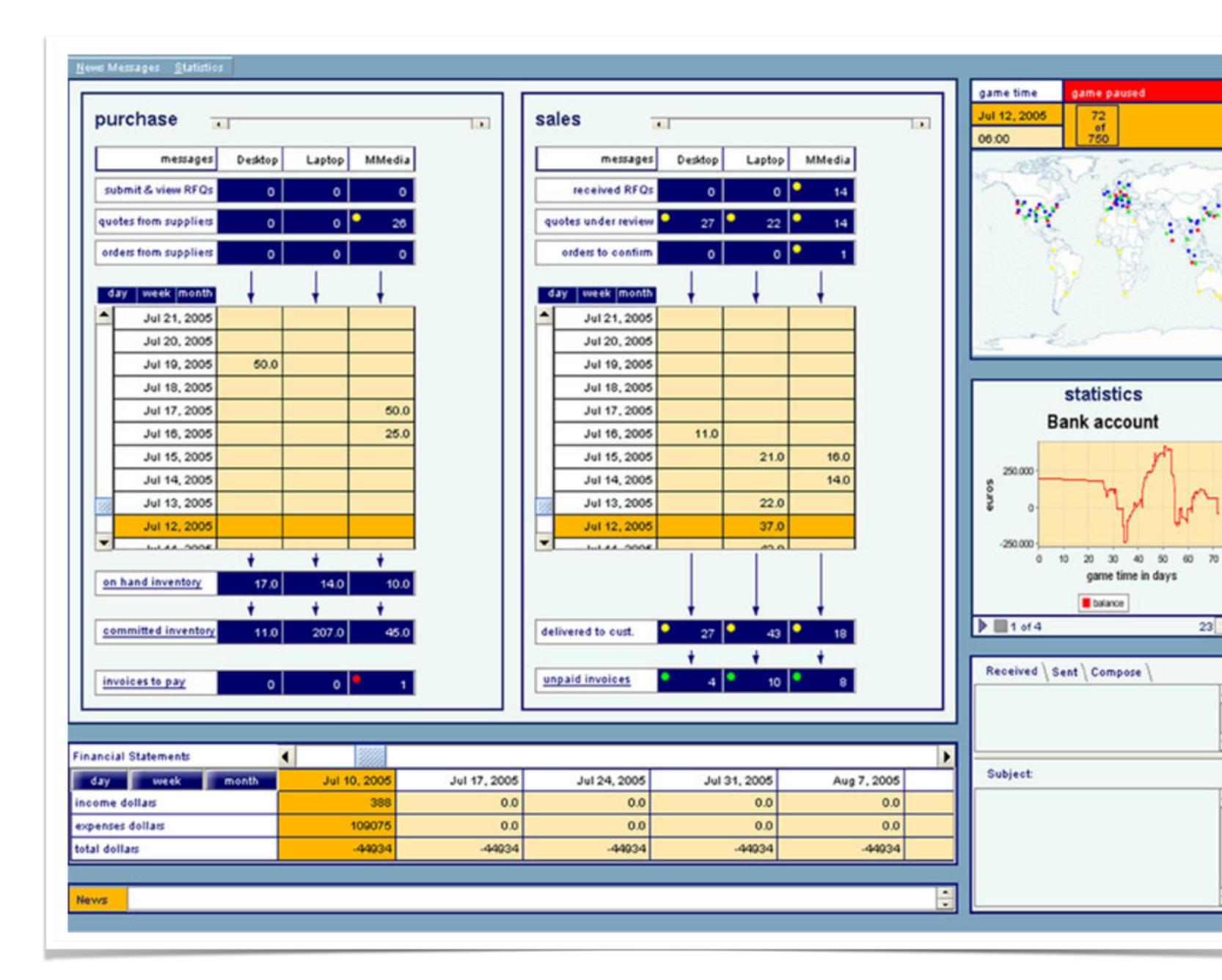
# Ludition

ANNUAL STATE OF THE KINGDOM REPORT For year 1 of your most royal rule

There were 0 people who starved. Over 5 new people moved to the city. The population is now 100. The city now owns 1000 acres. You harvested 3 bushels per acre. You have 2800 bushels stored. The rats ate 200 bushels.

Land is trading at 25 bushels per acre, how many acres do you wish to buy?

## Hamurabi



## Global Supply Chain

.....

100

-

23

-

		our Rows Refresh			
row_id 4 14 24 34					
namo	testy	test2	test3	test4	
owner	jack	jack	jack	jack	
money_factories	10	10	10	9	
noney	3550	4180	3470	3105	
fuel_factories	5	2	1	3	
fuel	1775	714	347	1035	
attackers	0	0	0	0	
attack_multiplier	10.0	3.0	1.0	6.0	
defenders		3	3	3	
defense_multiplier	10.0	5.0	3.0	4.0	
row creators		0	0	0	

Scanning Upgrades Units Transfers Rows Cliques Cha					
	Units				
cost	query				
0.25 fuel per attacker * distance	ATTACK rows WHERE row_id= FROM row_id=4 WITH attackers=0 ;				
next: 20 money	UPDATE rows SET attackers = attackers+1 WHERE row_id = 4;				
next: 10 money	UPDATE rows SET defenders = defenders+1 WHERE row id = 4;				

go

go

90

### shard 1 - now playing as jack - click here to log out - discuss - contact us - wiki - sqldump r rows will become vulnerable to deletion if you stay logged out for 92 days (based on row upgrades)

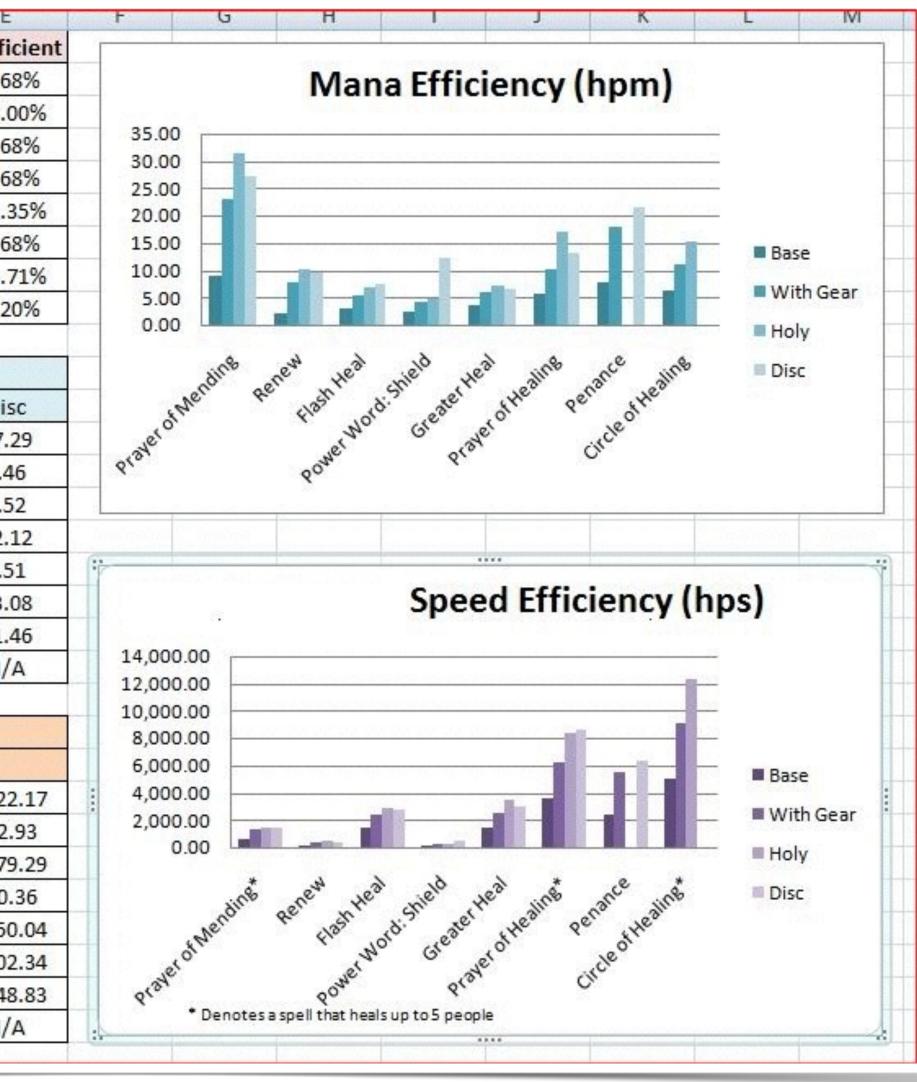
		Browse Rows SELECT * FROM rows WHERE row_id>=0 and row_id<10; [cost 1 fuel - refresh] rows 10 to 19 >>				
4	row_ id	name	owner	money_ factories		fuel_ factories
	0	First!	Stevo (Root)	15	442343	12
	1	Mostly Harmle	ProcessBlue (	18	1948581	15
	2	Indigo	nailbnny	10	3520	15
	3	egg	diego (NV)[S]	12	4212	10
	4	tosty	jack	10	3560	5
	5	row your boat	Jackanapes	14	123466	11
	6	my other row	diego (NV)[SJ	11	4551	10
	7	internetexplo	Adrian	10	3540	5
	8	Row 13	ifoundthetao	12	644750	9
refs	9	lower	borkencode	10	3530	10

	Query Log Refresh   Global   Personal	
21:17:52UPC mor WHE UPC def		0.123
Today run 21:17:36UPD mor WHE UPD def		0.128
Today run		0.169

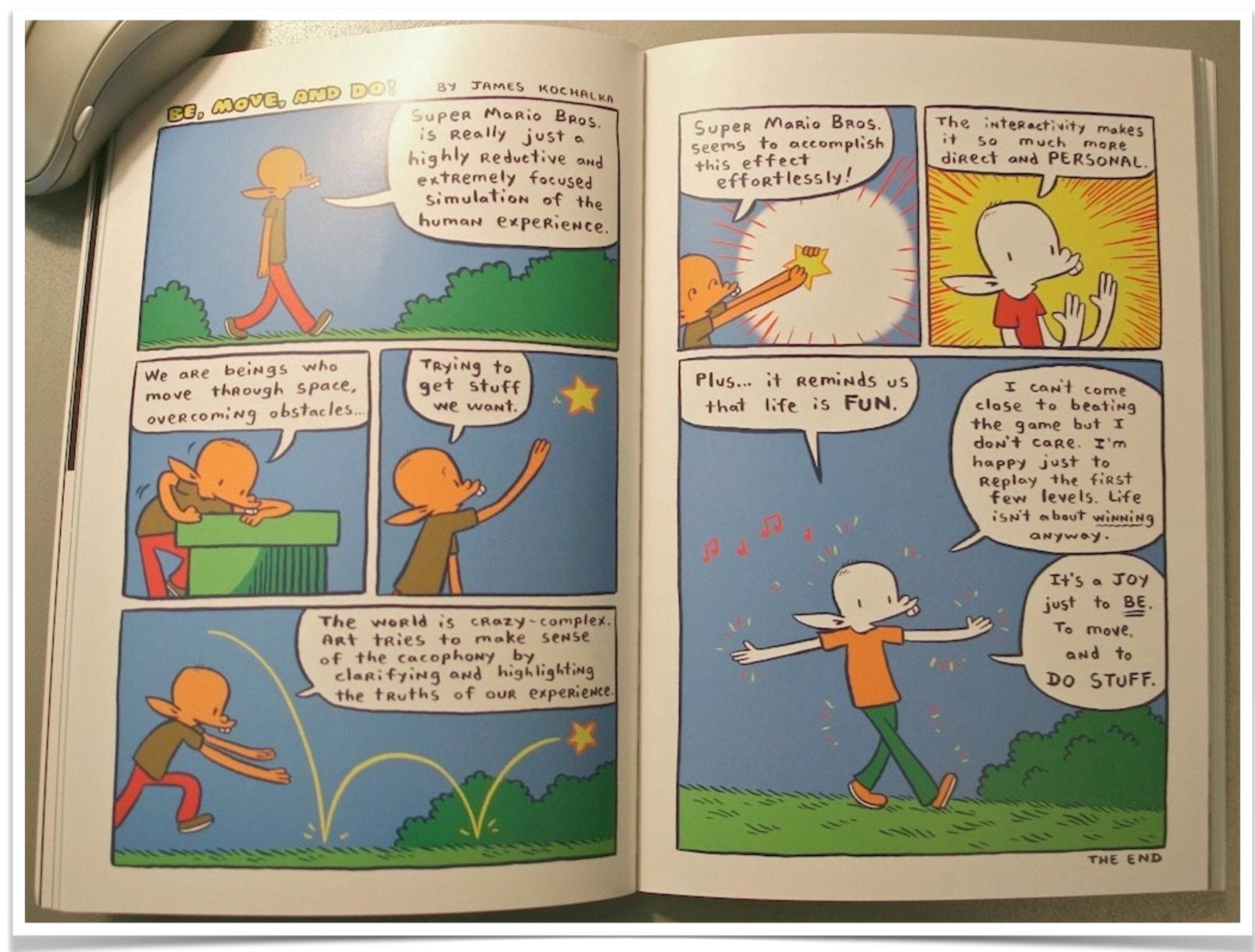
## MySQL Game

# TheoryCraft

	A	В	L	D	E
	Spell Name	Cost(%bm)	Mana Cost	Avg Heal	Coeffi
	Prayer of Mending	15%	579	1043	80.6
	Renew	17%	657	1400	188.0
Î	Flash Heal	18%	695	2040	80.6
	Power Word: Shield	23%	888	2230	80.6
	Greater Heal	32%	1236	4270	161.3
	Prayer of Healing	48%	1854	2150	80.6
	Penance	16%	618	1580	105.7
	Circle of Healing	21%	811	1008	40.2
)					
L		Mana Effici	iency (hpm)		
2	Spell Name	Base	With Gear	Holy	Dis
3	Prayer of Mending	9.01	22.94	31.49	27.2
1	Renew	2.13	7.85	10.29	9.4
5	Flash Heal	2.94	5.26	6.81	7.5
5	Power Word: Shield	2.51	4.33	4.71	12.3
7	Greater Heal	3.45	6.07	7.06	6.5
3	Prayer of Healing	5.80	10.15	16.96	13.0
)	Penance	7.67	17.93	N/A	21.4
)	Circle of Healing	6.21	11.17	15.27	N/.
L					
2		Speed Effic	ciency (hps)		
3	Spell Name	Base	With Gear	Holy	Disc
1	Prayer of Mending*	521.50	1,328.30	1,458.68	1,422
5	Renew	93.33	344.00	432.73	372.
5	Flash Heal	1,360.00	2,435.73	2,838.40	2,779
7	Power Word: Shield	148.67	256.24	278.54	430.
3	Greater Heal	1,423.33	2,499.00	3,489.60	3,050
9	Prayer of Healing*	3,583.33	6,272.67	8,387.20	8,602
)	Penance	2,370.00	5,541.30	N/A	6,348
Ĺ	Circle of Healing*	5,040.00	9,060.00	12,384.00	N/



# Procedural Metaphors



### **Play Is Metaphorical**

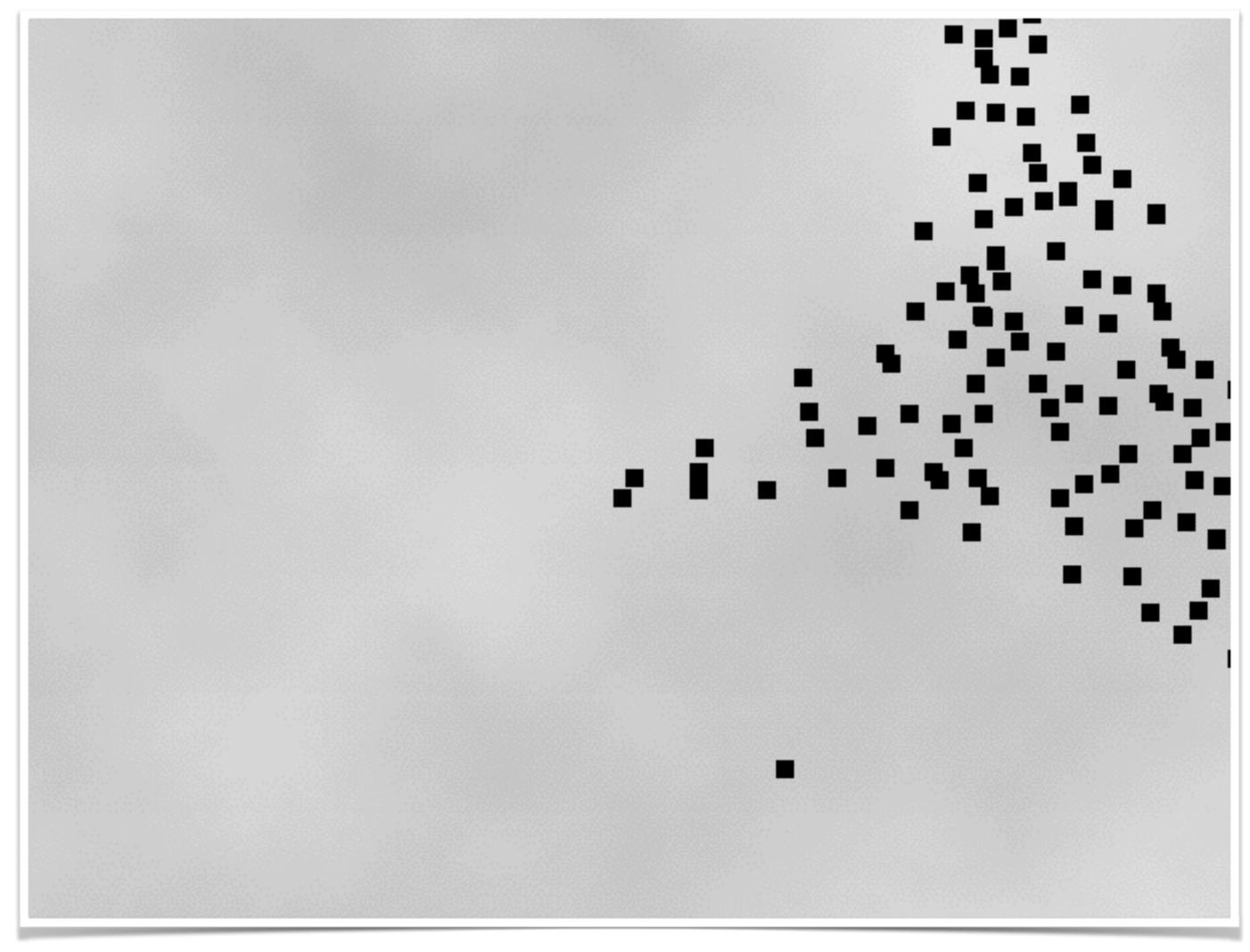
»All play in some sense represents something from the non-play universe. [...]

Good games do not simulate physical reality; they mirror emotional reality.«

- Chris Crawford

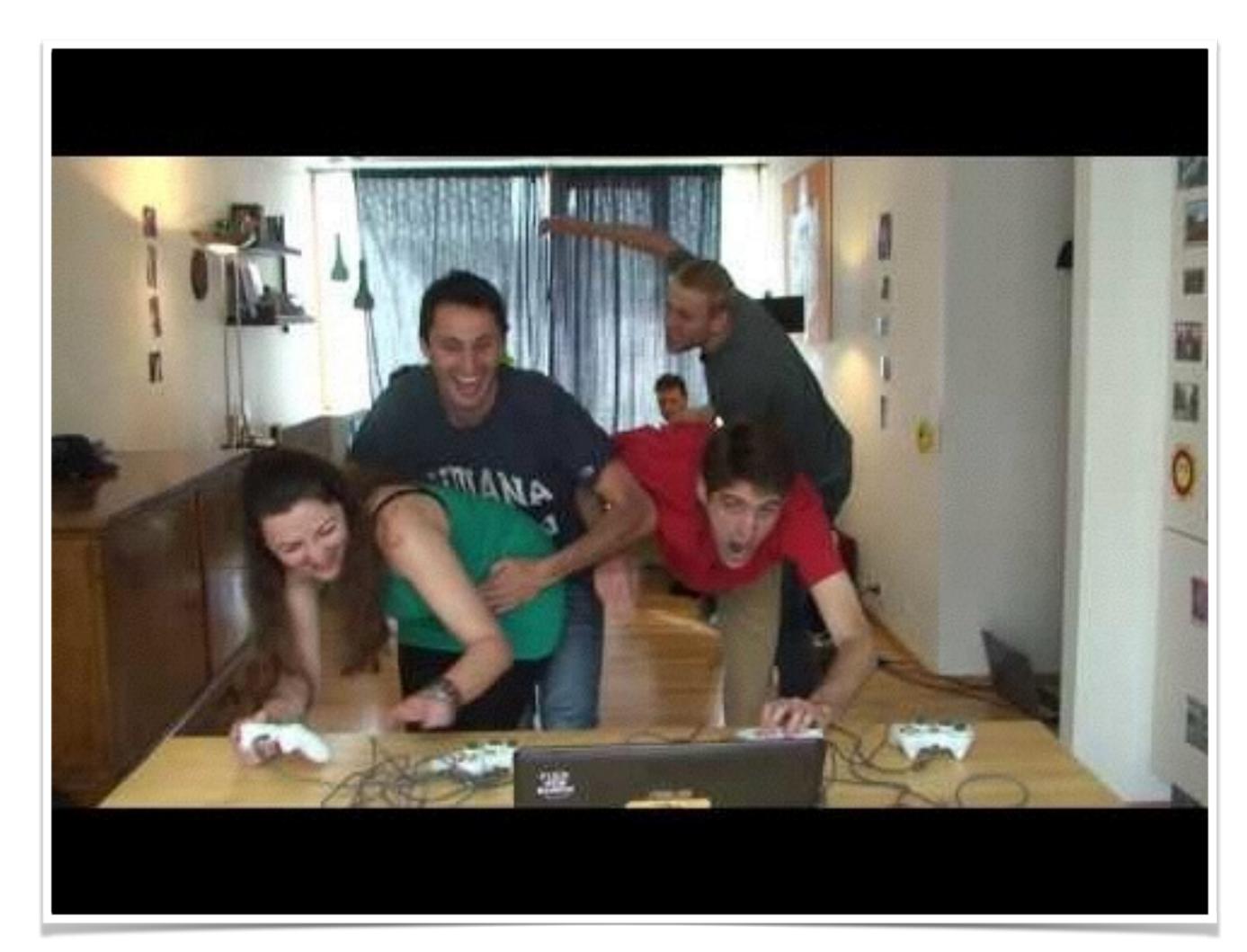


# Procedural Rhetoric



## Loneliness

# Performance



## B.U.T.T.O.N.

Batches (purity is Unhealthy) 20,261.1 6.5 per second (net)

### COOK!

Cash Money (\$3.5 ea) \$2,109.7 \$92.8 per second

### SELL!

You have purchased a Drug Mule You have purchased a Drug Mule Game saved! You have purchased a Drug Mule You have unlocked Industrial HVAC Game saved! Game saved! You have purchased a Storage Shed You have purchased a Used RV Game saved! You have purchased a Small House Game saved! Game saved! You have purchased a Storage Shed You have purchased a Dealer

### Manufacturing

### Abandoned Warehouse

\$55,000 — A large abandoned warehouse with vaulted ceilings

Small House

\$13,500 - A small house in a bad neighborhood

Used RV \$3,600 - A low cost RV, perfect for remote cooking

Storage Shed \$4,410 — A cheap shed with electricity

### Distribution

Drug Cartel \$55,000 — Drug cartels can move a lot of product, but they cost so damn m

Night Club

\$6,000 — Purchase a run down night club and sell your classy product to the

### Drug Mule

\$3,600 - Someone to stuff drugs in their rectum and distribute them

### Dealer

\$720 — A common street thug to sell your goods

## Game Experience

	Upgrades
Cooks 150 per second (base)	Hardened Glass Boilers Further improves meth purity by 3 \$15,000 IPUs Purchase
2 Cooks 10 per second (base)	Glass Flasks Further improves meth purity by 1 IPU
5	Stainless Steel Cookware Improves meth purity by 0.5 IPU
Cooks 1.5 per second (base)	Cheap Cookware  Used to cook stuff
<b>6</b> Cooks 0.5 per second (base)	Titanium Burners       \$35,550         Spaceship-grade burners improve meth purity by 7 IPUs         Purchase
	Steel Burners
Onuch Sells 150 per second (base)	Gas Stove 🗸 Improves meth purity by 0.5 IPU
1	Electric Hotplate  Used for cooking
patrons Sells 15 per second (base)	Hazmat Suit \$15,000 Now you can cook without regard for personal
5	safety! Make an additional 100 batches at a time Purchase
Sells 1.5 per second (base)	Portable Power Generator Provides extra power to your RVs - adding 0.5 production per second
Sells 0.5 per second (base)	Spinnin' Rims Roll with style! Improves the sale rate of your dealers by .2/s

## Clicking Bad

# Allegoric Performance



Augmenting Anger Control Therapy with a Videogame Requiring Emotional Control: A Pilot Study on an Inpatient Psychiatric Unit

http://www.benthamdirect.org/pages/ b\_viewarticle.php?articleID=3182314

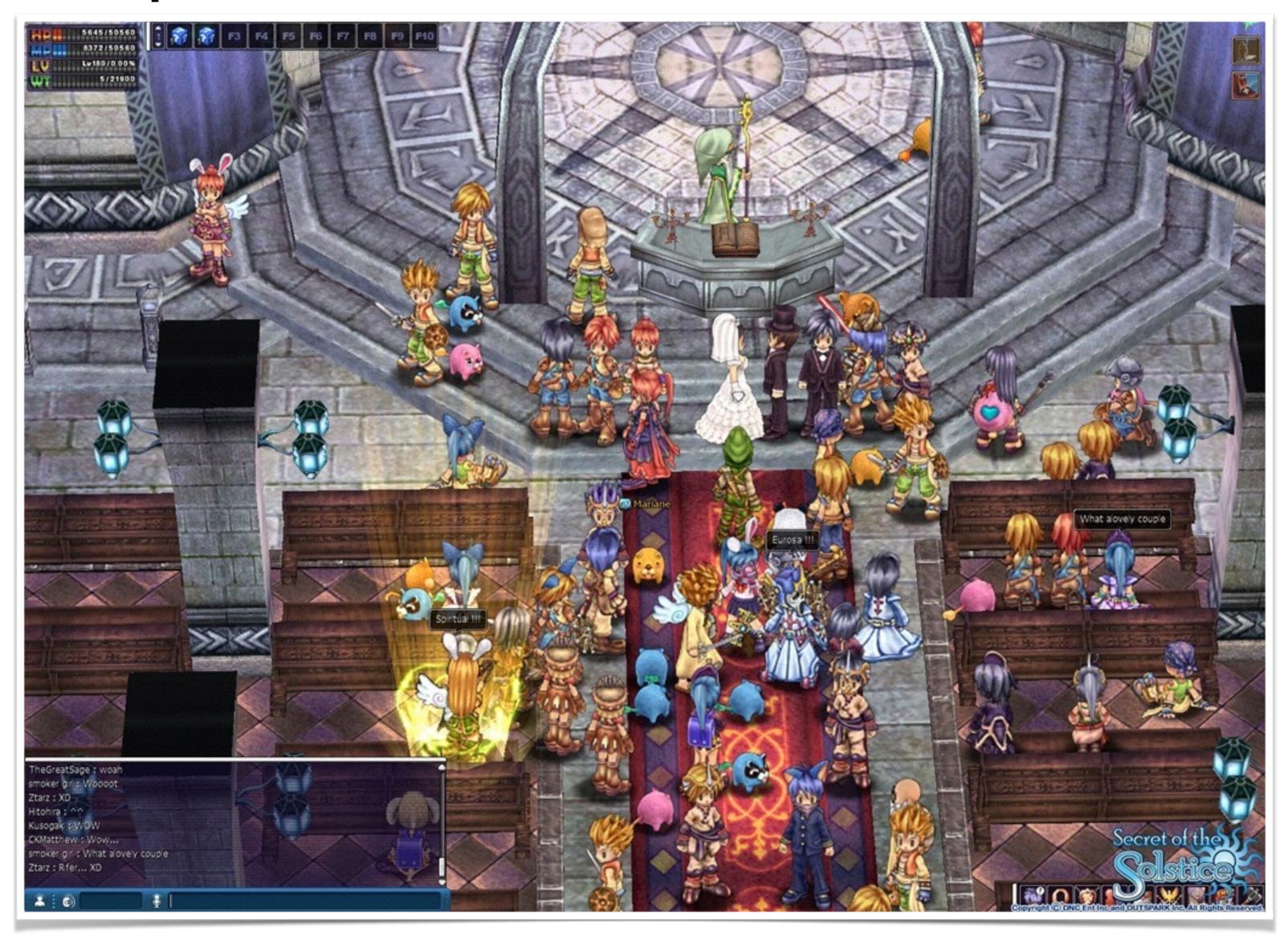
Rage Control

**Re-Mission 2** 

A Video Game Improves Behavioral **Outcomes in Adolescents and Young** Adults With Cancer: A Randomized Trial http://pediatrics.aappublications.org/content/ 122/2/e305.full



## Expressive Performance



### Secret of the Solstice

# Interpreting Performance



### http://themessagebehindthescreen.blogspot.de/2013/03/how-tomb-raider-saved-my-life-in-one.html



# Expressive Games: Revisited

allows to explore psychological, social, cultural issues. [Referential function: Real world contexts] think about it [*conative function*].

- CfP: We propose to qualify as an **expressive game** a game that
- As a game, it will confront the player to choices and dilemmas [mechanics] that these issues create [narration]. This kind of games allows to express [*expressive function?*] individual or social issues [*context*] while opening back the opportunity to

# Conclusion

Every video game is expressive.

The expressive-ness of a game can be analyzed in audiovisual, narrative, ludic and performative categories.

The term ,Expressive Game' refers to games with constraints to its referential, expressive and conative functions.

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