

World Building



World Building One Slide Summary

- **World building** is the process of constructing an imaginary world (e.g., in a novel or game). World building produces a rich setting that appeals to certain types of players.
- In addition to **Aesthetics**, we can use **GNS Theory** and **Psychographic Profiles** as lenses to examine player (or reader, etc.) desires.
- Given a notion of what players want, we can allocate resources to world building, as well as to designing mechanics and dynamics, etc., as part of game design and development.

World Building Outline

- What is world building?
- Why build worlds?
 - Aesthetics and Motivations
- How to build worlds
 - In-class (“live”) discussion
- What can go wrong?
- Tips for success

Is “World Building” Just Genre?

World Building

Nope

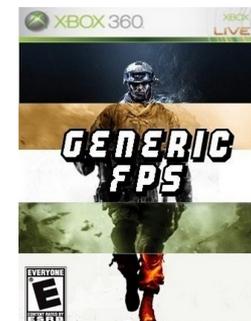
RPG



Puzzle



Shooter



“World Building” Is *Not* Genre

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Is “World Building” Just Plot?

- Is there a distinction between good plotting and good world building?

- Many stories and games **share** the same plot

“A hero ventures forth from the world of common day into a region of supernatural wonder: fabulous forces are there encountered and a decisive victory is won: the hero comes back from this mysterious adventure with the power to bestow boons on his fellow man.”

- Joseph Campbell summarizes the Monomyth

World Building Is *Not* Plot

- The same plot can be used by a game or story with a well-built world as well as by a game or story with a poorly-sketched one
 - Thus world building is not the same as plotting
- Example: Deep Impact vs. Armageddon

“One movie showed how families and modern civilization would be affected by an asteroid collision, while the other was a loud, action-packed thrill ride from director Michael Bay.”



World Building

- **World building** is the process of constructing an imaginary world. World building produces a rich setting.
- Common questions in world building:
 - Is it an alternate earth? Or not earth at all?
 - What are the climate, geography and history?
 - What are the rules of magic or science?
 - People and customs, ethics and values, population?
 - Society, government, crime, legal system, weapons, commerce, trade, public life, transportation, arts, dress, diet, education ... ?

"It is necessary to create constraints, in order to invent freely. In poetry the constraint can be imposed by meter, foot, rhyme, by what has been called the "verse according to the ear."... In fiction, the surrounding world provides the constraint. This has nothing to do with realism... A completely unreal world can be constructed, in which asses fly and princesses are restored to life by a kiss; but that world, purely possible and unrealistic, must exist according to structures defined at the outset (we have to know whether it is a world where a princess can be restored to life only by the kiss of a prince, or also by that of a witch, and whether the princess's kiss transforms only frogs into princes or also, for example, armadillos)."

– Umberto Eco, postscript to *The Name of the Rose*

Examples Beyond Cartography

- Rules of Magic or Superscience:
 - Harry Potter vs. Star Wars
- Crime and Government:
 - Grand Theft Auto vs. BioShock
- Arts and Dress:
 - Gone Home vs. L.A. Noire
 - or even PUBG vs. Fortnite
- Social Ethics and Values:
 - Deus Ex vs. Dragon Age
- Transportation and Commerce:
 - Assassin's Creed vs. Skyrim



Why Build Worlds?



Why Build Worlds?

- World building is one of many possible activities during game design and development.
 - Resources are limited and time-to-market is critical.
- Typically undertaken for two reasons:
 - To make the **developers/writers** (you) happy.
 - To make the **players/readers** happy.
 - And thus to sell more units.

What Do Players Want?

- World building can be independent of Mechanics and Dynamics (see other courses)
- “Aesthetics describes the desirable emotional responses evoked in the player, when she interacts with the game system.”
 - Fantasy (game as make-believe)
 - Narrative (game as drama)
 - Discovery (game as uncharted territory)
 - Expression (game as self-discovery)
 - Submission (game as pastime)

World Building and Aesthetics (1)

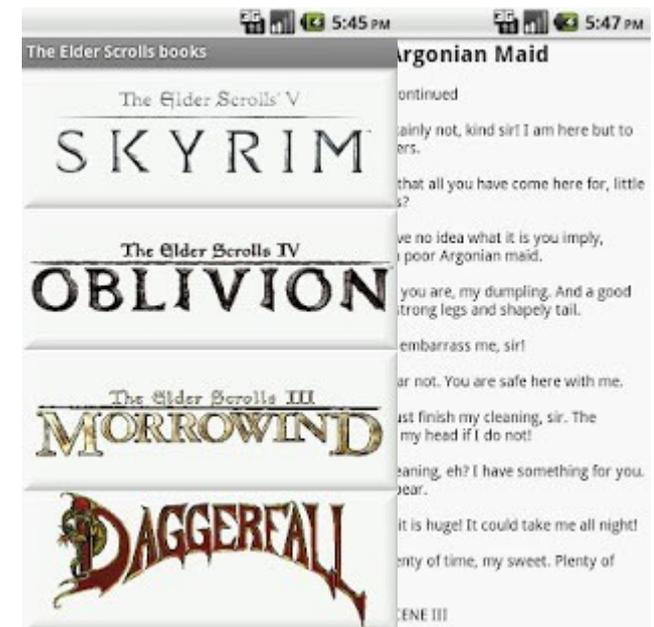
- **Fantasy** (game as make-believe)
 - World building is telling you what to believe.
- **Narrative** (game as drama)
 - World building establishes the motives.
- **Discovery** (game as uncharted territory)
 - World building provides the world to explore.

World Building and Aesthetics (2)

- **Expression** (game as self-discovery)
 - World building **sets out values** for self-comparison.
 - To express yourself as fair you need an unjust situation. To express yourself as compassionate you need an opportunity for mercy. And so on.
- **Example: Portal**
 - "You euthanized your faithful Companion Cube more quickly than any other test subject on record. Congratulations."
- **Example: Spec-Ops: The Line**
 - "And I murdered civilians. FEEL GOOD GAME OF THE CENTURY!"

World Building and Aesthetics (3)

- **Submission** (game as pastime)
 - World building admits a particular kind of submission aesthetic *external* to the default gameplay.
- Example: read Elder Scrolls literature off-line
- Example: learn Klingon or Quenya (ISO 639-3 qya)
- Example: Lost, Metal Gear



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What Do Players Want?

GNS Theory

- Ron Edwards' **GNS Theory** explains player interactions in terms of three core “reasons for play” (aesthetics). It explains why certain players play certain games.
- **Gamists** want to satisfy a goal in the face of adversity - to win.
- **Narrativists** want to create an engaging story that addresses a premise to produce a theme.
- **Simulationists** want to appreciate consistent development of character, setting and color.

Gamists

- A creative agenda emphasizing clever tactics, resource management, and character victory.
- Gamists often favor games with character parity, frequent conflict, many options at each choice point, and trading off risk for reward.
- Gamists typically care the least about world building.

Simulationists

- A creative agenda that prizes internal consistency and exploring the game elements as things unto themselves.
- Simulationism cares about character backgrounds, personality traits and motives, in an effort to model cause and effect within the intellectual realm as well as the physical.
- “That NPC wouldn't really do that.”
- Simulationists care about world building.

Narrativists

- A creative agenda desiring an engaging story that addresses a "premise" to produce theme.
 - Premise is usually framed as a statement (“Friends are worth dying for”) or a question (“Are friends worth dying for?”). Most decisions made by a narrativist will reflect on the premise, proposing answers to the question.
- Moments of drama that revisit character motives are critical. “I swore I'd save him!”
- Narrativists care about world building.

What Do Players Want?

Psychographic Profiles

- Wizards of the Coast groups players into four profiles to explain why they buy the product.
- **Johnny/Jenny**. Wants to use mechanics for creative self-expression. *This is a clever approach!*
- **Timmy/Tammy**. Wants to experience “big” dynamics. *This is so intense!*
- **Spike**. Wants to compete. *I will win!*
- **Vorthos**. Wants to appreciate flavor and creative consistency. *This theme is perfect!*



Who cares?



- Suppose one part of your sci-fi farming game *Fallout Crossing* offers three planting choices:
 - Dropping seeds from balloons (1-10 seeds / day).
 - Trained squirrel carriers (always 5 seeds / day).
 - Maglev seed launchers (always 6 seeds / day).
- Timmy. Balloon. You could plant 10 at once!
- Spike. Maglev. It's the optimal choice.
- Vorthos. Squirrels! My techno-dryad character rejects the evils of technology and favors returning the land to balance.

World Building and Game Design

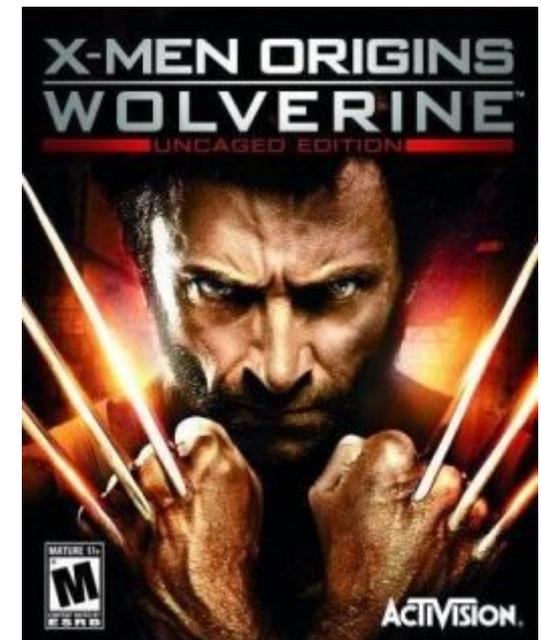
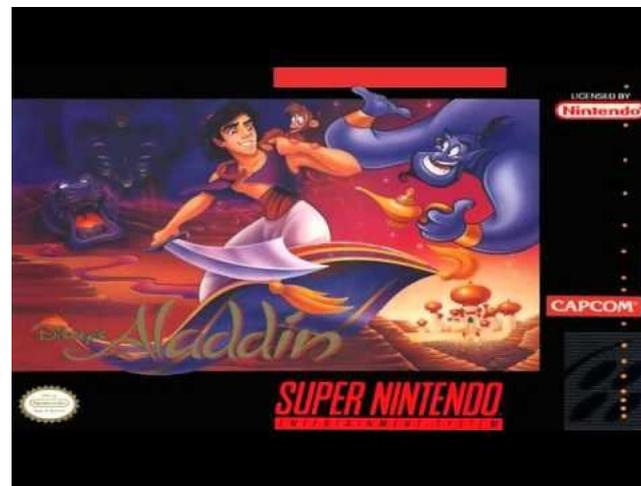
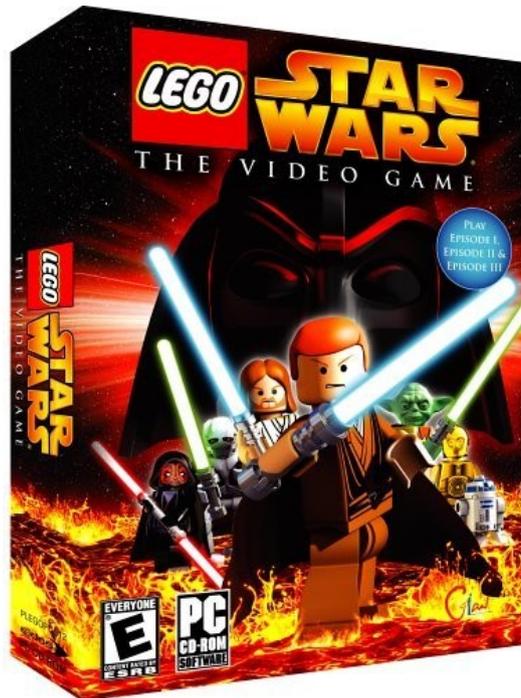
- Suppose one part of your sci-fi farming game offers three planting choices:
 - “Gun X” (1-10 seeds / day)
 - “Gun Y” (always 5 seeds / day)
 - “Gun Z” (always 6 seeds / day)
- Now there's nothing for Vorthos to do, and you lose part of your market.

A Blended Model

- Most players care about **multiple** aesthetics, care about G S and N, and embody a little of each profile.
- Game designers have limited resources.
- Spending resources on mechanics will appeal to Gamist Johnny or Timmy players but is irrelevant to Simulationist or Narrativist Vorthos players.
- Spending resources on world building has the reverse appeal.

How To Build Worlds

- From an SE process perspective, one important answer is: do **not**.
- License some intellectual property. Companies bid on such tie-in opportunities.



Classic World Building

- Top-Down
 - Paint the entire world in broad strokes. Then zoom in on a region of interest and detail it. Then zoom in further ...
- Bottom-Up
 - Firmly detail on place (e.g., a particular town in crisis). Then zoom out to the surrounding region and detail it. Then zoom out again ...

Classic World Building

- ~~Top-Down~~
- ~~Bottom-Up~~
- “Requirements Elicitation”
 - To whom are you trying to appeal?
 - A narrativist? (“Are friends worth dying for?”)
Start by thinking of cultures, conflicts, themes, and tensions.
 - A simulationist? (“What would it be like if we had rocket ships?”) Start by thinking of one or two *points of departure*.

Worked Examples

- Let's work through two examples of appealing to players through world building
- To further demonstrate the difference between mechanics and world building, I will focus separately on just two of the hundreds of spells in Dungeons and Dragons and ask “what would the world be like if this were really possible?”
 - And to really drive it home, we'll only consider minor (“second-level”) spells.

Example 1: Invisibility

- Did it ever strike you as strange that the One Ring in Lord of the Rings had such a “minor” basic power?
- In fact, this goes back to 400 BCE, with Plato's description of the Ring of Gyges. The ring of invisibility is one of the oldest “magic items”.
Plato asks whether an intelligent person would be moral without fear of being caught and punished ... *(continued)*

Invisibility Made Manifest

- In the story, after Gyges finds the ring he uses it to travel to the palace, seduce the queen, murder the king, and assume the throne.
- “No man can be imagined to be of such an iron nature that he would stand fast in justice. No man would keep his hands off what was not his own when he could safely take what he liked out of the market, or go into houses and lie with any one at his pleasure, or kill or release from prison whom he would, and in all respects be like a god among men.” - Plato

Simple Invisible World Building

- Narrative (drama). Intrigue and politics. Can your friends still trust you? (cf. House of Cards, Game of Thrones, West Wing)
- Discovery (uncharted territory). From private mansions to untamed safaris ...
- Expression (self-discovery). How will you behave? Secret Santa or Gyges?
- Gamist (win). An invisible fighting game where the enemies weren't morons? (cf. Predator, Slenderman)
- Narrativist (story-premise-theme). “Is there morality without fear of consequence?”
- Simulationist (consistency). How does the rest of the world react? Can you see while invisible? (cf. Zahn's Thrawn Trilogy) ³¹

Complex Invisible World Building

- What if *everyone* could turn invisible?
- Would houses still have ground-floor windows? How would stadium seating be redesigned? Are you liable if you crash into an invisible person? How would you avoid getting mugged? Would everyone have to wear body armor? How would criminals ever be apprehended? How would you walk into a new room and be sure it was empty? Would ubiquitous invisible surveillance and anonymous whistle-blowing force good behavior on public figures? Would traditional religions still take hold? Would touch and physical intimacy become more important? Or vocal mimicry? How would you raise a child that could turn invisible and run away? Would the government try to force everyone to wear tracking devices? What would a polite greeting be?

Trivia: Game Designers

- Aya Kyogoku (京極あや) worked at Nintendo as a scriptwriter for **Zelda: Twilight Princess** and became a manager for the group there which oversees **Splatoon**, **Wii Sports** and *this franchise*, including directing its popular fifth entry in 2020. She credits the diversity of the team for that franchise's **New Leaf** installment's critical and commercial success: "when you are trying to create something that will appeal to many types of people, I have experienced how beneficial it is to have diversity on your team."

Example 2: Detect Lie

- Now it's your turn. What if humans could **detect lies** (i.e., detect when a speaker makes a claim that that speaker believes is false)?
 - Fantasy (game as make-believe), Narrative (game as drama), Discovery (game as uncharted territory), Expression (game as self-discovery), Submission (game as pastime)
 - Gamist (win), Narrativist (story-premise-theme), Simulationist (consistency)

One Built World

- James L. Halpern's *The Truth Machine*.
 - “Soon, every citizen must pass a thorough test under a Truth Machine to get a job or receive any sort of license. Eventually, people begin wearing them all the time, thus eliminating dishonesty in all parts of human interaction, and eliminating crime, terrorism and a great deal of general social problems. ... The protagonist places a back door in the book's otherwise infallible lie detector, allowing him to avoid detection when he repeats fragments of Walt Whitman's poem "O Captain! My Captain!" in his mind.”

World Building Woes

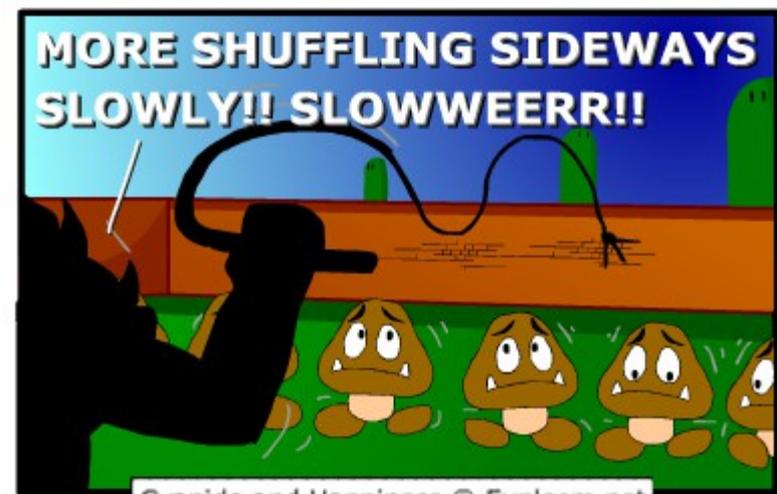
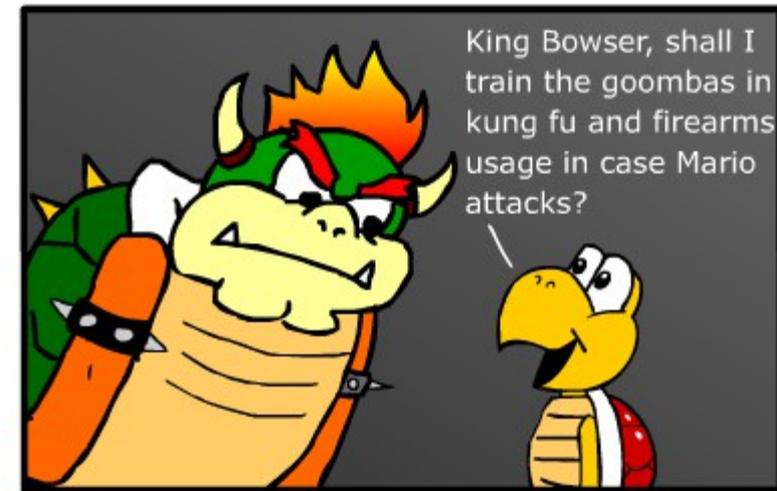
- What can go wrong with world building?
- It is one of many actions you can take at design-time, so it's worth remembering that one failure mode is “you put **too much** emphasis on world building”.
 - Few resources for other areas (mechanics, etc.).
 - “Believability comes from details.” vs.
 - “The players will get annoyed if every single person the party meets has a description that takes ten minutes to read through.”

Too Little World Building

- At best, your world is forgettable and you fail to attract and retain certain players
- At worst, your world is inconsistent and you **actively alienate** players and their desires.
- “Mommy, why couldn't they just use a Phoenix Down on Aeris?”
- Discussion: if you establish that resurrection is cheap and ubiquitous, you cannot then raise tension by naively killing a beloved character
 - Mods, fan outrage, etc.

World/Plot Holes

- Players tend to overlook the usual “it's a simple game” foibles
- But there are examples of significant backlash
 - Mass Effect 3 Ending, Tali, FF8 Orphanage
- As well as controversy
 - COW:MW2 “No Russian”
 - Spec Ops: The Line



World Building Tips

(think “SE Process”)

- You are the game designer.
- *“How do I draw sprites?”*
 - You hire artists.
 - The real question is “what should be in my art design document and specification?”
- *“How do I build a world?”*
 - You hire a creative team.
 - The real question is “what should I request in my world building specification document?”

Wizards of the Coast's Process

- **Design**. Vision. “How might we represent Greek gods in our game?”
- **Development**. Execution. “Does this expression of Greek gods work? Can we simplify it?”
- **Creative**. Narrative. “What creative story are we telling involving the Greek gods?”
- (cf. Microsoft's older Dev, PM and Test jobs.)
 - “Flavor and story are absolutely more important to Magic’s design process than they ever have been before, and I only see that continuing to grow.” - Doug Beyer, WotC

World Building Conclusion

- **World Building** “formalized” around '70s sci-fi novels
 - “how to” guides for authors; questions listed here.
- In the context of Game Design, remember:
 - **Aesthetics**: Fantasy, Narrative, Discovery, Expression, Submission
 - **G**amist, **S**imulationist, **N**arrativist Theory
 - Johnny, Timmy, Spike, Vorthos **Profiles**
- The act of world building has a cost and a potential benefit. Know **why** you're doing it.
- *To whom are you trying to appeal?*