

GDV4000 Introduction to Games Industry Practice.

Design Fundamentals

The Core Experience



"Quake III Arena" © Id Software



"WWE 2K24" © 2K/ Visual Concepts



"Sid Meier's Civilization VI" © Firaxis Games

1. Understanding the Core Experience of your game – both overall and the component parts. Be mindful of how the player is interacting and responding to your game...

Consider – Is it as much fun to play as a referee or a manager as it is to wrestle in "WWE 2K25"? It's a different experience within the game, but it ought to be fun to do.

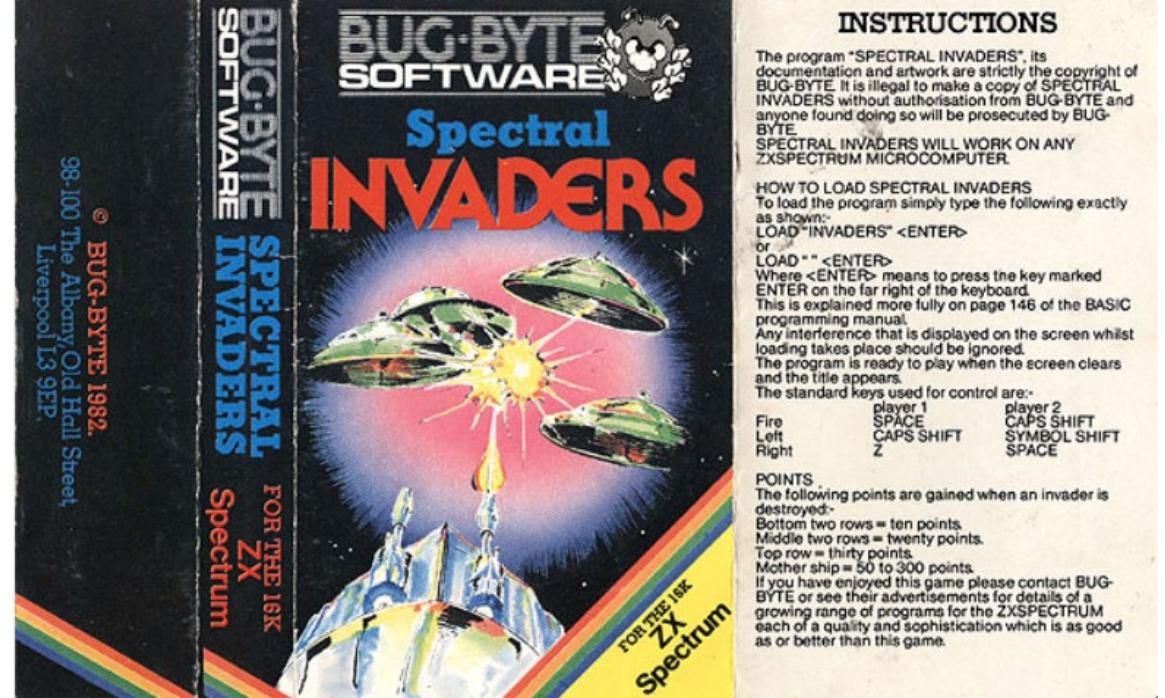
Are all the civilisations in "Sid Meier's Civilization VI" balanced enough to provide a fun but challenging experience, without any 'Civs' being overpowered?

The Core Experience

- How does that translate in game?
 - Identify what the game is and stick to it - Game Design Document.
 - Build mechanics that support the game.
 - How will your player interact with your game?
 - How does the game make them feel? Is it fun?
 - Test and test and test!

What back story??

- Space Invaders (or cheekily renamed variant) needed little explanation. Instructions were on the back of the cassette, and as soon as it (eventually) loaded and you got into the game, you could move left and right and shoot by pressing the fire button. Shooting would destroy the advancing enemy ships and add to your score on-screen. Everything that was needed to know was being directly relayed back through the actions of the player.



INSTRUCTIONS

The program "SPECTRAL INVADERS", its documentation and artwork are strictly the copyright of BUG-BYTE. It is illegal to make a copy of SPECTRAL INVADERS without authorisation from BUG-BYTE and anyone found doing so will be prosecuted by BUG-BYTE.
SPECTRAL INVADERS WILL WORK ON ANY ZX SPECTRUM MICROCOMPUTER.

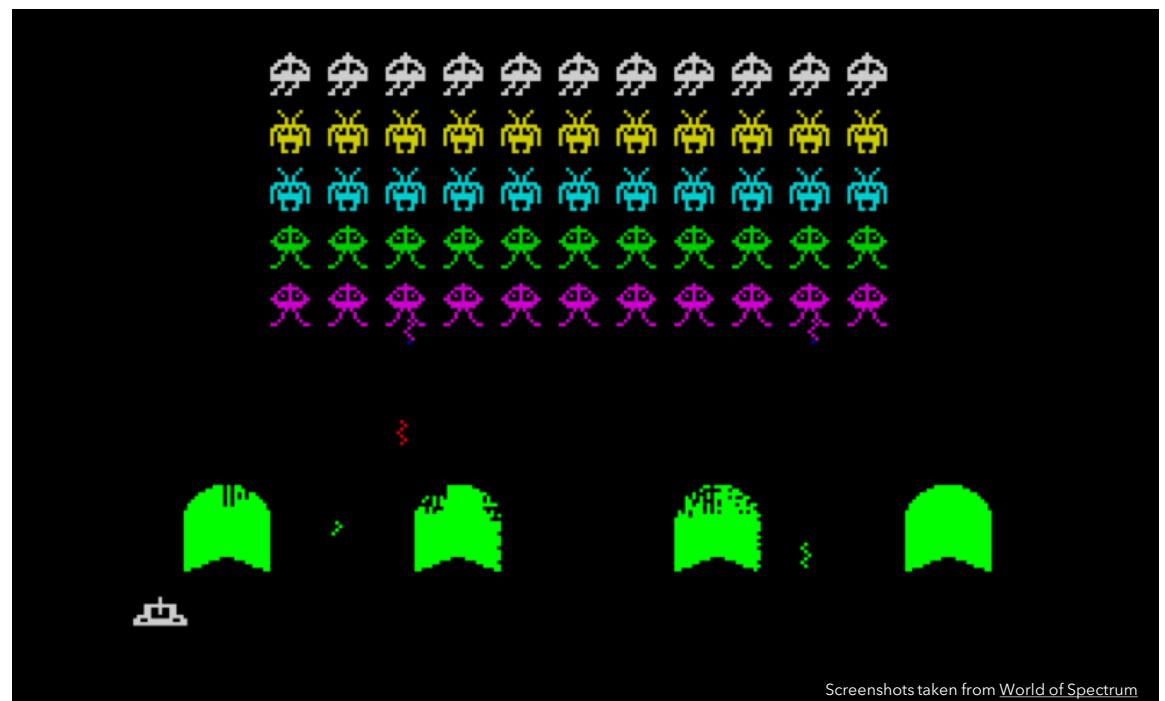
HOW TO LOAD SPECTRAL INVADERS
To load the program simply type the following exactly as shown:-
LOAD "INVADERS" <ENTER>

Where <ENTER> means to press the key marked ENTER on the far right of the keyboard.
This is explained more fully on page 146 of the BASIC programming manual.
Any interference that is displayed on the screen whilst loading takes place should be ignored.
The program is ready to play when the screen clears and the title appears.

The standard keys used for control are:-

Fire	player 1 SPACE	player 2 CAPS SHIFT
Left	CAPS SHIFT	SYMBOL SHIFT
Right	Z	SPACE

POINTS
The following points are gained when an invader is destroyed:
Bottom two rows = ten points.
Middle two rows = twenty points.
Top row = thirty points.
Mother ship = 50 to 300 points.
If you have enjoyed this game please contact BUG-BYTE or see their advertisements for details of a growing range of programs for the ZX SPECTRUM each of a quality and sophistication which is as good as or better than this game.



Screenshots taken from World of Spectrum

"Given the opportunity, players will optimize the fun out of a game." – Soren Johnson, Lead Designer on Sid Meier's Civilisation IV. (Kramarzewski & De Nucci, 2023, p.234)

Looking at you, Skyrim...

- If we are giving our player options as part of the experience of playing our game, how are we balancing those out?
- Is there a particular weapon that is being favoured during testing? Why is that?
- Testing is **crucial!**
- *"Feedback is fact insofar as it reveals how our game makes people feel, but after that, it's our job to come up with the right solution to that problem"* – Sid Meier (2020, p. 248)



The Elder Memes
@TheElderMemes

i am definitely not playing sneak archer this playthrough



7:32 AM · Mar 8, 2021

Implement the Core Game Experience Early On

- This is a fundamental rule and can save you so many problems later.
 - What is the game you are making?
 - What are the Core Mechanics driving the game?
 - Are the objectives clear to the player without needing to be explained?
- Communicate ideas, changes, and iterate until it's right!
- Get feedback from people outside your group - How you *think* your game plays may be very different to how it is interpreted from outside your dev team.



"Crash Bandicoot" © Naughty Dog

Note - We have spoken of our game and this idea of experience, but they are *not* the same thing.

The game is not the experience; the experience comes from the game...

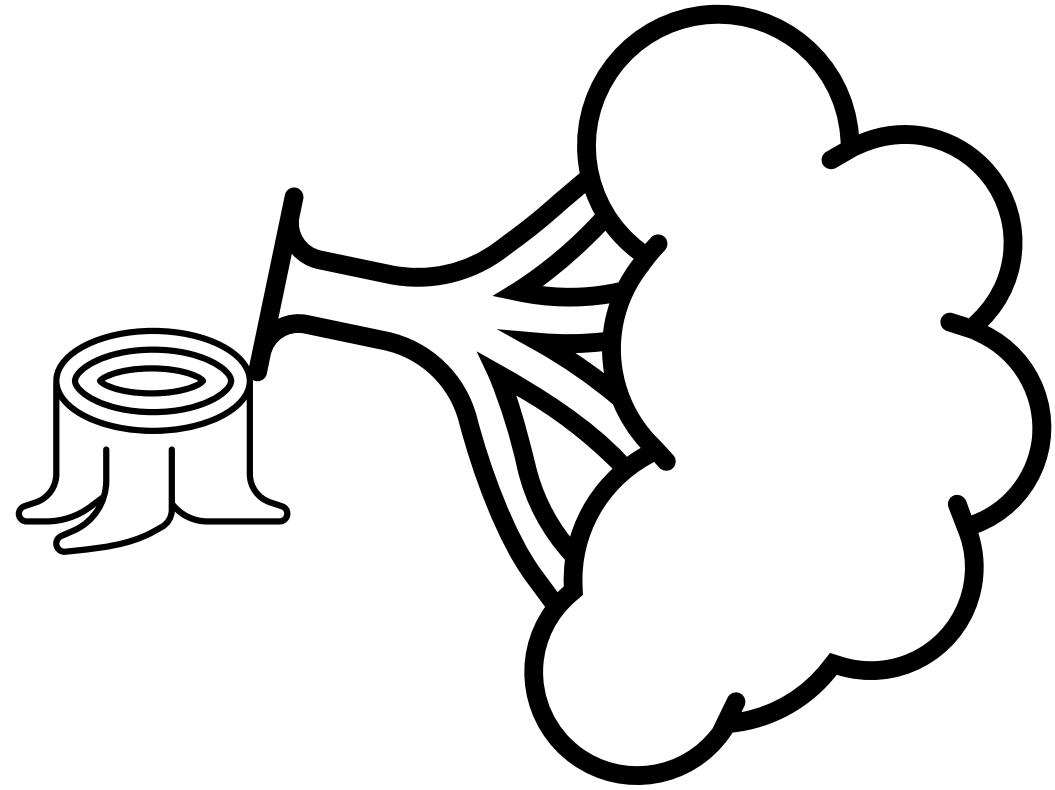
A word from Game Designer Jesse Schell...

- From 'The Art of Game Design: A Book of Lenses'

"The game is not the experience. The game enables the experience, but it is not the experience. This is a hard concept for some people to grasp. The ancient Zen question addresses this directly:

"If a tree falls in the forest, and no one is there to hear it, does it make a sound?"

This has been repeated so often that it sounds hackneyed, but it is exactly what we are talking about. If our definition of "sound" is air molecules vibrating, then yes, the tree makes a sound. If our definition of sound is the experience of hearing a sound, then the answer is no, the tree makes no sound when no one is there. As designers, we don't really care about the tree and how it falls—we care only about the experience of hearing it. The tree is just a means to an end. And if no one is there to hear it, well, we don't care at all."



What is the appeal?

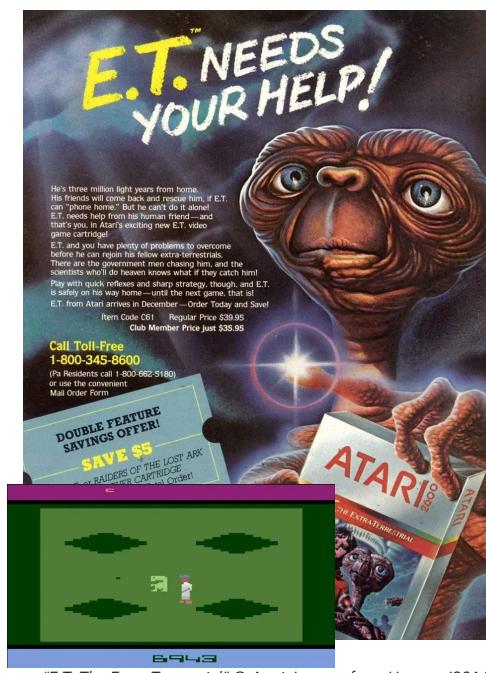
- Who is your game targeting? Why will people want to play your game?
- Some titles are tied to Intellectual Properties, owned by film studios, which present the player with a world and characters they may know from other media.
- It could also be an art style, a unique or interesting game mechanic ('Viewfinder', 'Portal'), an open-world experience ('Elden Ring', 'Elder Scrolls V: Skyrim').



"FC 24" © EA



"Daley Thompson's Decathlon" © Ocean



"E.T. The Extra-Terrestrial" © Atari. Images from Hooper (2016)



"Shadows of Mordor" © Monolith Productions



"Star Wars Rogue Squadron II: Rogue Leader" © Factor 5/Lucasfilm Games LLC

Beyond the Star Wars setting, part of the appeal of *Rogue Squadron II: Rogue Leader* was being able to take part in the Death Star Run from *'Star Wars Episode IV: A New Hope'*.

Focal Point

- Have an established focal point for each part of your game.
- This can be an obvious focal point in the game world that you are working your way towards, or an exit point in the level that you need to reach.
- This is not just for expansive, open world games either - Closed linear puzzle games such as '*Portal 2*' make it very clear where the focal point of each level is.
- Clear goals and objectives - How are you relaying this information to the player?

'*Half Life 2*' was a linear game of progression cunningly disguised as an open world game due to its clever design.



"Half Life 2" © Valve



"Portal 2" © Valve

Anticipation

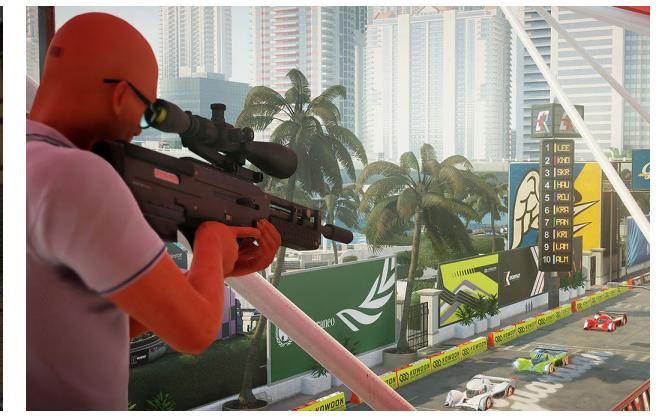
- Designing elements in your game to create anticipation around an event - A good fit in stealth games like '*Hitman*' and the Great-Grandfather of them all: '*Thief*', where you may be concealed in shadow waiting for that guard you have been watching to pass by.
- How are these moments being related to the player? A visual cue? A sound cue?
- Looking Glass Studios, the developers of '*Thief: The Dark Project*' developed the concept of a 'light gem' at the bottom of the screen, which informed the player when they were concealed in shadow or in a well-lit area.



"Splinter Cell" © Ubisoft



"Thief 2: The Metal Age" © Looking Glass Studios



"Hitman 3" © IO Interactive

Announce Change - When important events occur, ensure the player is aware of them.

- The map on '*Civilisation VI*' can get very busy, so sound plays an important role in keeping the player informed of important events. Declarations of war, creation of units, and awarding of Great People are all related through their own unique sound.
- The light gem in '*Thief*' is purely a visual clue, which fits in with the silent and stealthy theme of the game. Also, because the diegetic sound in the game is crucial to the game-play, non-diegetic sounds are kept to a bare minimum.
- '*No Man's Sky*' uses very obvious on-screen prompts to alert the player to new technologies that are available to utilise. The style and pacing of your game will help to suggest which approach is more appropriate to adopt.



"Sid Meier's Civilization VI" © Firaxis



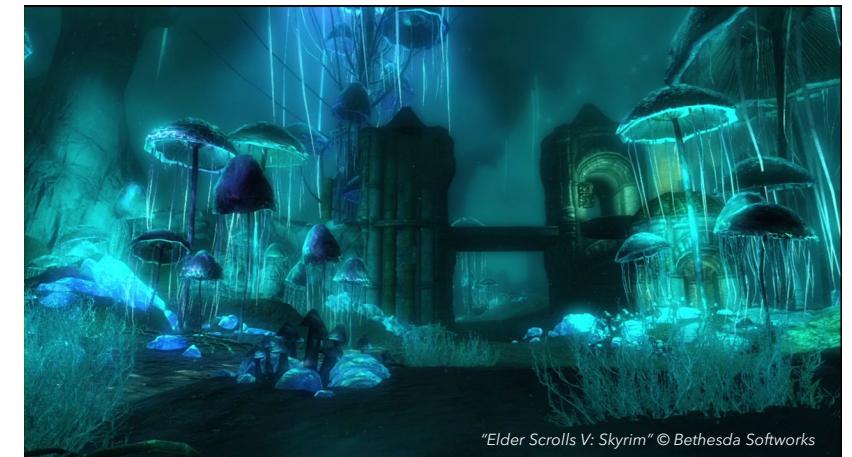
"No Man's Sky" © Hello Games

Pacing - Get it right!

- Urgency vs Admiring the scenery
- Unless your game is a Bullet-Hell on-rails shooter, you might be inclined to give your player a little breather now and then and allow them to appreciate the hard work of the artists and level designers; and to learn more about the game world and the lore.
- From the perspective of immersion and player experience, allowing our player some respite after a particularly tough boss battle or a challenging situation can create the illusion of having been through something BIG, despite the abstraction of it having happened as part of the in-game narrative.



"Horizon Zero Dawn" © Guerrilla Games



"Elder Scrolls V: Skyrim" © Bethesda Softworks

Hey you, you're finally awake.



- Bethesda have a pattern when it comes to pacing, particularly post-tutorial.
- In '*Elder Scrolls VI: Oblivion*', '*Elder Scrolls V: Skyrim*', and '*Starfield*' the game begins either underground or in an enclosed space and remains there for the duration of the opening tutorial. Once you have had a chance to practice the core mechanics sufficiently, you are ejected into the massive open world.
- This shift really helps sell the idea that you are now free to explore and go anywhere you choose, after the rather linear and confined opening.



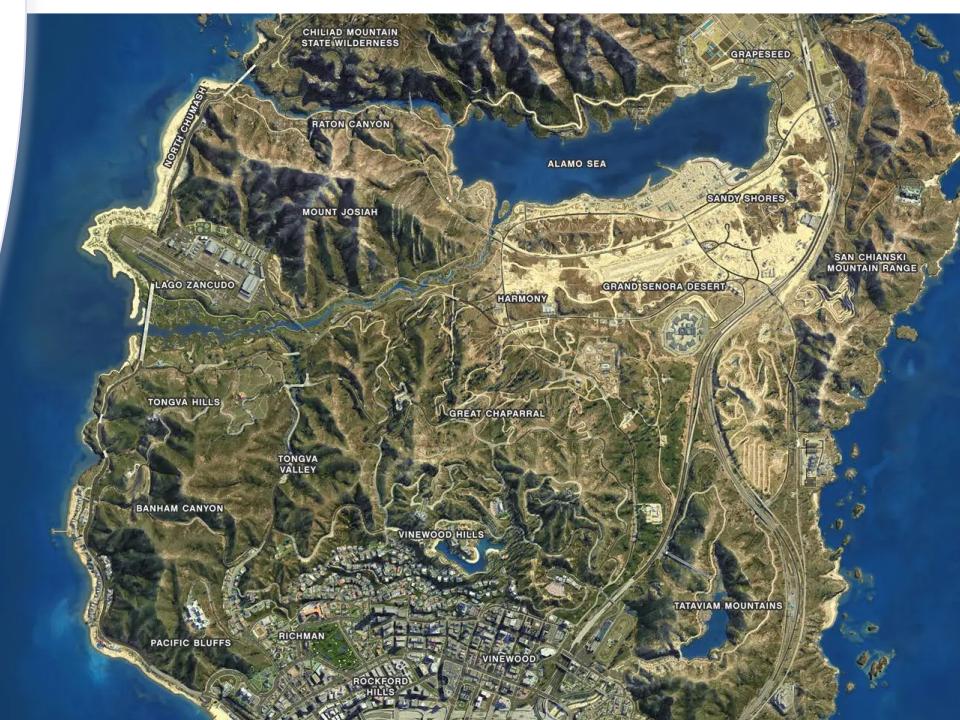
"*Elder Scrolls V: Skyrim*" ©Bethesda Softworks

Spacing - Get that right too!

- Avoid environments that are too small or unnecessarily large!
- '*The Room*' is set within one environment, whereas the '*GTA*' games encompass entire cities. But these settings work ideally for those kinds of games.
- Each environment is ideal for the gameplay, and also the size of the team making it! It took over 1000 people to make *GTA V* (French, 2013), *The Room* was made by just 2 people (Dredge, 2013).



"The Room" © Fireproof Studios



"GTA V" © Rockstar North

Model Believable Events and Behaviours

(Unless you have a good reason not to!)

- Actions in the game should fit the expectations of the player, based on their knowledge of those events
 - Which may be subconscious.
 - Example - Explosions cause things to fly apart; objects fall in accordance with the laws of gravity.
 - Model events to react to the setting and the narrative you have created, and if they change for any reason, make sure that you convey this to the player.
- Poor AI can be immersion-breaking.
 - When a dragon or Vampires attack a village in Skyrim, the villagers run indoors but the town guards start to fight back. The villagers are weaker and not well-armed, so this would make sense... Only players were finding that the Vampires were killing off important NPCs and traders during these attacks. Bethesda stopped the attacks from happening in the Special Edition of the game.

- But... does AI that is too realistic make for good gameplay?

- In the stealth genre, avoiding patrolling guards and cameras is a given, with guards generally adhering to set routes and only breaking the pattern if they come suspicious of your presence.
- This behaviour can seem unrealistic, especially if you're in an NPC's face but just outside their cone of vision!
- There is a balance at play here, between making the NPCs seem real, but also creating an achievable experience for the player. **Testing** is important for finding this balance.



Use sound appropriately - And don't make it an after-thought!

- Diegetic sound – Sound which happens in the game and is registered by the characters in the game.
- Non-Diegetic sound – Sound which happens in the game but is there solely for the benefit of the player.



- *Phasmophobia* (Kinetic) makes sound pivotal to the game, from setting the atmosphere as soon as you enter the house, to providing clues to the location of the ghost. All sound in the game is **diegetic**, down to the ghost being able to hear you talking to your teammates.



- *Super Mario Bros* (Nintendo) is all **non-diegetic** sound. The music playing during the game, the sound when Mario jumps, collects pick-ups... Every sound is there to inform the player that they have successfully performed an action, but there are no sounds directly relating to the game-world.

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