

Until You Fall: Building Satisfying VR Combat on a Budget

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Who Are We?



Dave Bennett



Patrick Jalbert



SHELL GAMES



VRDC

VIRTUAL REALITY DEVELOPERS CONFERENCE
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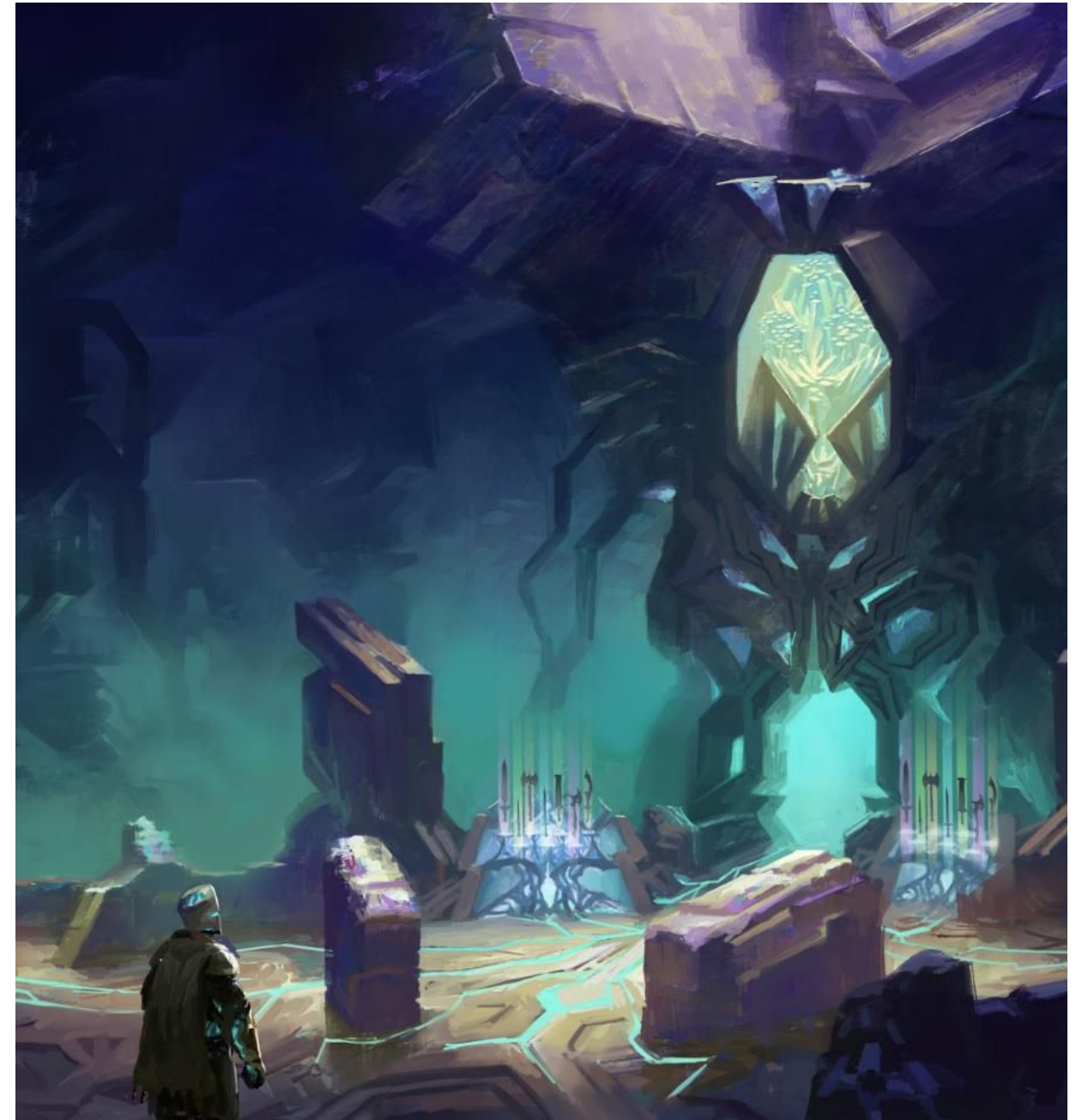
- ❖ Melee Combat Action Game
- ❖ Rogue-Lite Elements
- ❖ You are a Badass Glowing Knight
- ❖ Weird Blend of Neon and Fantasy with a Synthwave Soundtrack
- ❖ Rhythm-Lite Combat/Gameplay
 - Choreographed Attacks and Blocks





About this Talk

- ❖ Our Goal for Until You Fall
 - Make a game that was high action & replayable
- ❖ Our Roles
 - Dave is Project Director - High Level Vision & Theme
 - Patrick is Design Director - Vision for Combat Systems
- ❖ Even though it wasn't SG's first VR game, we faced plenty of difficult challenges
 - ...and learned some useful lessons we wish we knew much earlier on
- ❖ We wanted to share some of the more salient takeaways from each of our perspectives



Our Five Big Takeaways

- ❖ It's Okay to Reference Non-VR Games
- ❖ Be Wary of Secondary VR Interactions
- ❖ Know your Player Fantasy
- ❖ Set the Rules of Your Virtual Reality
- ❖ Incentivize the Fantasy





Takeaway #1: It's Okay to Reference Non-VR Games

Once Bitten, Twice Motion Sick

The Perils of Trailblazing

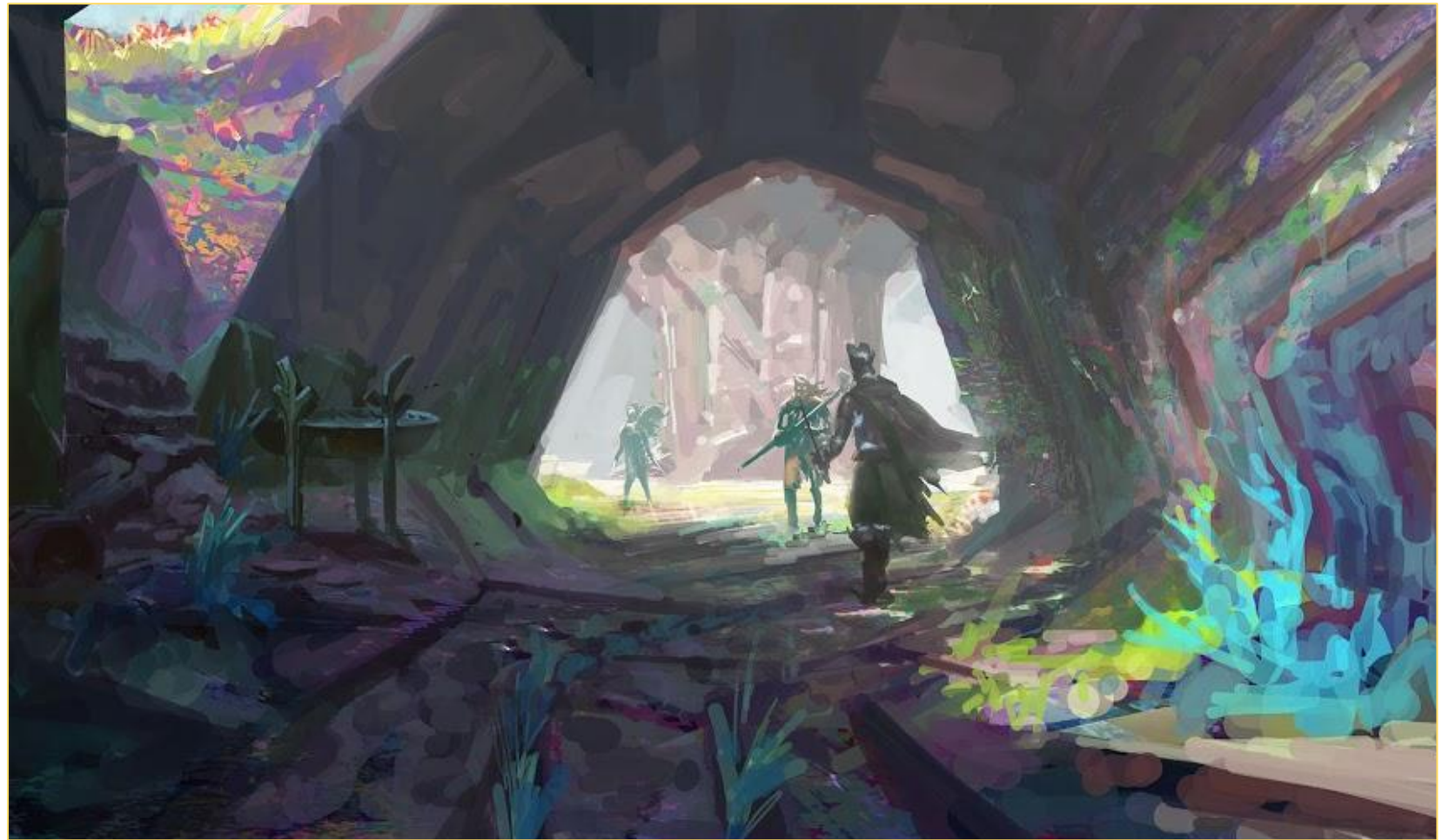
- ❖ There are lots of assumptions we've had to throw out as VR devs
 - See: Motion Sickness
- ❖ It can feel like our experience making games is leading us in the wrong direction
- ❖ It's easy to become gun shy about trying traditional techniques in VR
- ❖ Also leads to sweeping generalizations about things you "can't" do in VR
 - It's easy to assume that you have to invent new solutions for old problems



The Non-VR Solution can still Work

- ❖ ...especially when it comes to **game feel**
 - Wanted to have **high intensity** combat and satisfying hits usually achieved with things like hit pause, screen flash, camera shake
- ❖ We studied a variety of other games
 - Used ideas from these games as starting points
 - Some solutions just worked! (Screen Flash / Camera Shake)
 - Iterated into the VR specific solutions as needed
- ❖ This Directly Lead to...
 - Movement System
 - Impact / VFX System
 - Weapon Weights



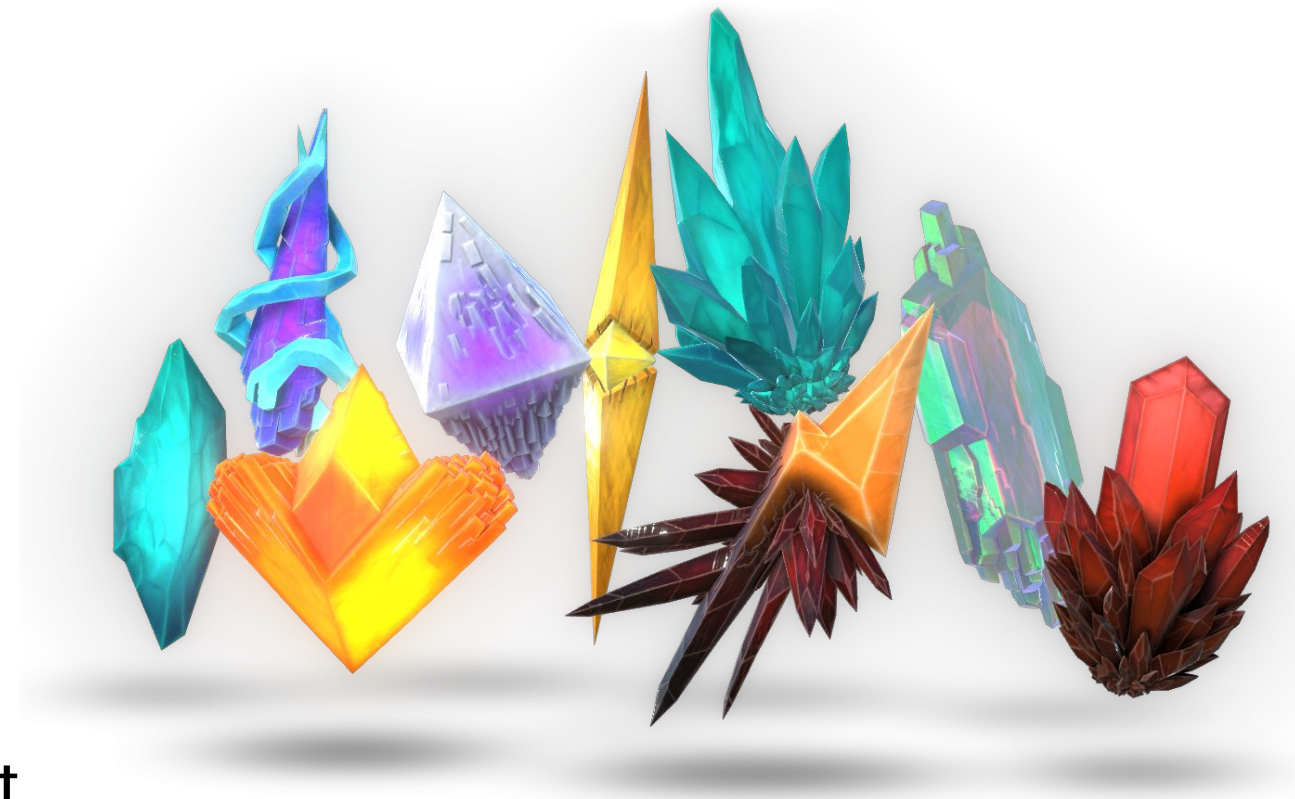


Takeaway #2: Be Wary of Secondary VR Interactions

A.K.A, Don't Drop the Sword

The Allure of Secondary Interactions

- ❖ High fidelity interactions are seductive in VR
 - “High Fidelity VR” = Touch everything. Pick up anything. Interact with everything!
- ❖ A lot of early VR based their gameplay on having a wide variety of novel interactions
- ❖ However, if your game is trying to pursue a specific fantasy, having a lot of interactions can become a trap
 - ...which we fell into during Until You Fall’s Development



The Lost Features of Until You Fall

- ❖ The pitch for UYF started with a solid combat prototype
- ❖ Needed to turn this prototype into a “**fully immersive, fully featured VR dungeon crawling game**”
- ❖ So, we started prototyping features that seemed necessary to keep it immersive in VR
 - Looting, Consumables, Weapon Holsters, Throwing, Weapon Pinning, Climbing, and More!
- ❖ Each feature added inspired us to either add more depth or more polish to make sure it met players expectations



Dropping the Sword

- ❖ We noticed that, during playtests, players were dropping their Swords
 - This was a symptom of a bigger problem
- ❖ By adding all of these secondary interactions, we also added a bunch of new ways for the player to fail

Climbing = Falling

Throwing = Dropping with Style

Weapon Holsters = Weapon Dropping

Weapon Pinning = Weapon Stuck...ing

Looting = Grabbing wrong thing

- ❖ These were solvable problems, but it became obvious that the iteration & tutorialization costs would push us well out of scope



Don't Drop the Sword

- ❖ We took a hard look at what was really important to the experience
 - Spoiler: It was hitting enemies with swords
- ❖ Asked ourselves in what ways is it okay to be bad at the game, and looked at all of our features
 - Most of the “VR Interaction Polish” was removed or reimagined entirely
 - When possible, we tried to transform opportunities to fail into opportunities to feel cool
 - Weapon Summoning is a great example of this



How to Avoid Dropping Swords

- ❖ For every feature, ask yourself...
 - Does it do anything other than increase immersion?
 - Does it introduce more depth or confusion?
 - Does it support a core interaction in an important way?
 - Could another solution do that in a way that doesn't add complexity?
 - Does it support your player fantasy?



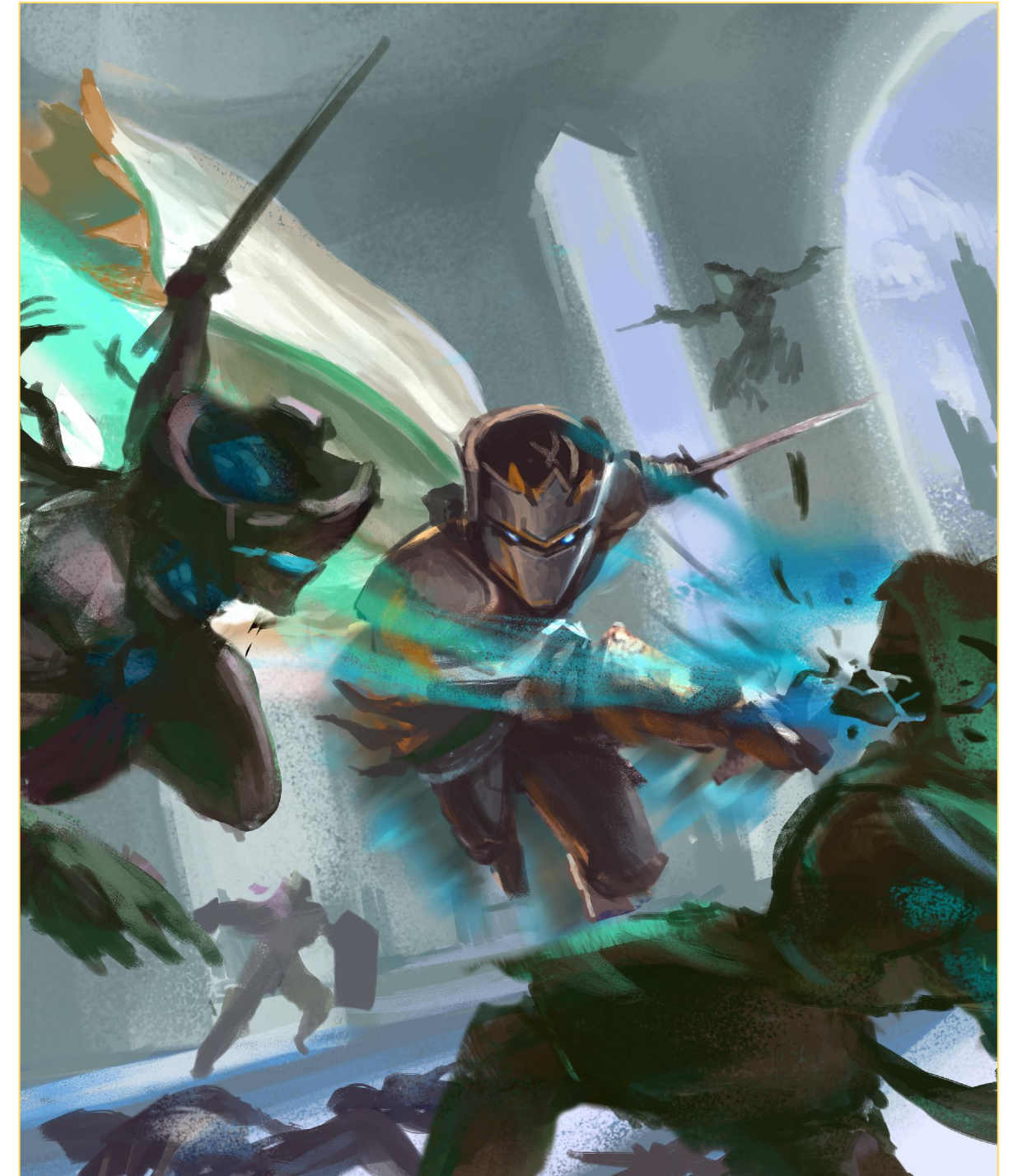
Takeaway #3: Know your Player Fantasy

The arbiter of affordance



Give 'em Context

- ❖ In Until You Fall you are an Awesome Magical Knight from the moment you start our experience
- ❖ This is a game about dying and learning from your mistakes and feeling okay about it
 - Death is expected, so make it feel worthy
 - You're not bad at the game, you fought valiantly until the end
 - ... and you will be rewarded for doing so



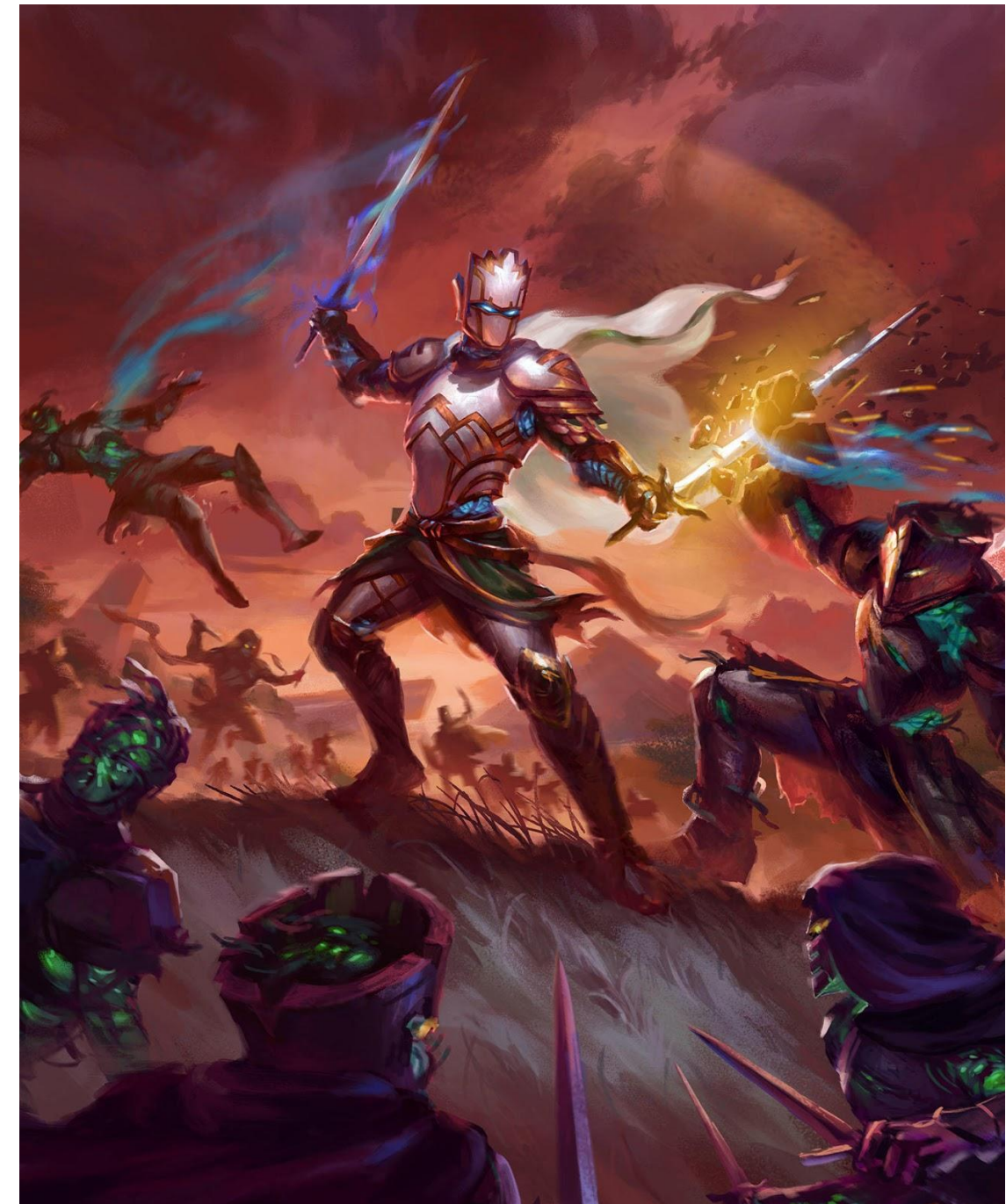
Becoming a Sword God

- ❖ To reiterate, in *Until You Fall*, you're supposed to feel like a **Sword God**
- ❖ Preserving this heroic identity became the guiding light for many Features:
 - Upgrades are chosen by crushing them in your mailed fist
 - The game's narrator was designed to pump you up, reinforcing that you are powerful / worthy
 - 'Lesser Husks' as a weaker-than-weak enemy
 - Husks teach basic combat
 - Lesser Husks remind you that you are STRONG
- ❖ All of these features became ways to invite players to believe in the power fantasy, even when learning how to use VR



Indirect Reinforcement

- ❖ This feeds back into reinforcing the important part of the game: the combat
- ❖ When you believe you're a badass knight, you act like one
 - Heroic Poses and Posture
 - Big, Exaggerated Swings
- ❖ Bonus: Clear Player Fantasy is excellent for scope control
 - If the feature didn't make you feel powerful, we removed it
 - ...or changed the rules for how it worked



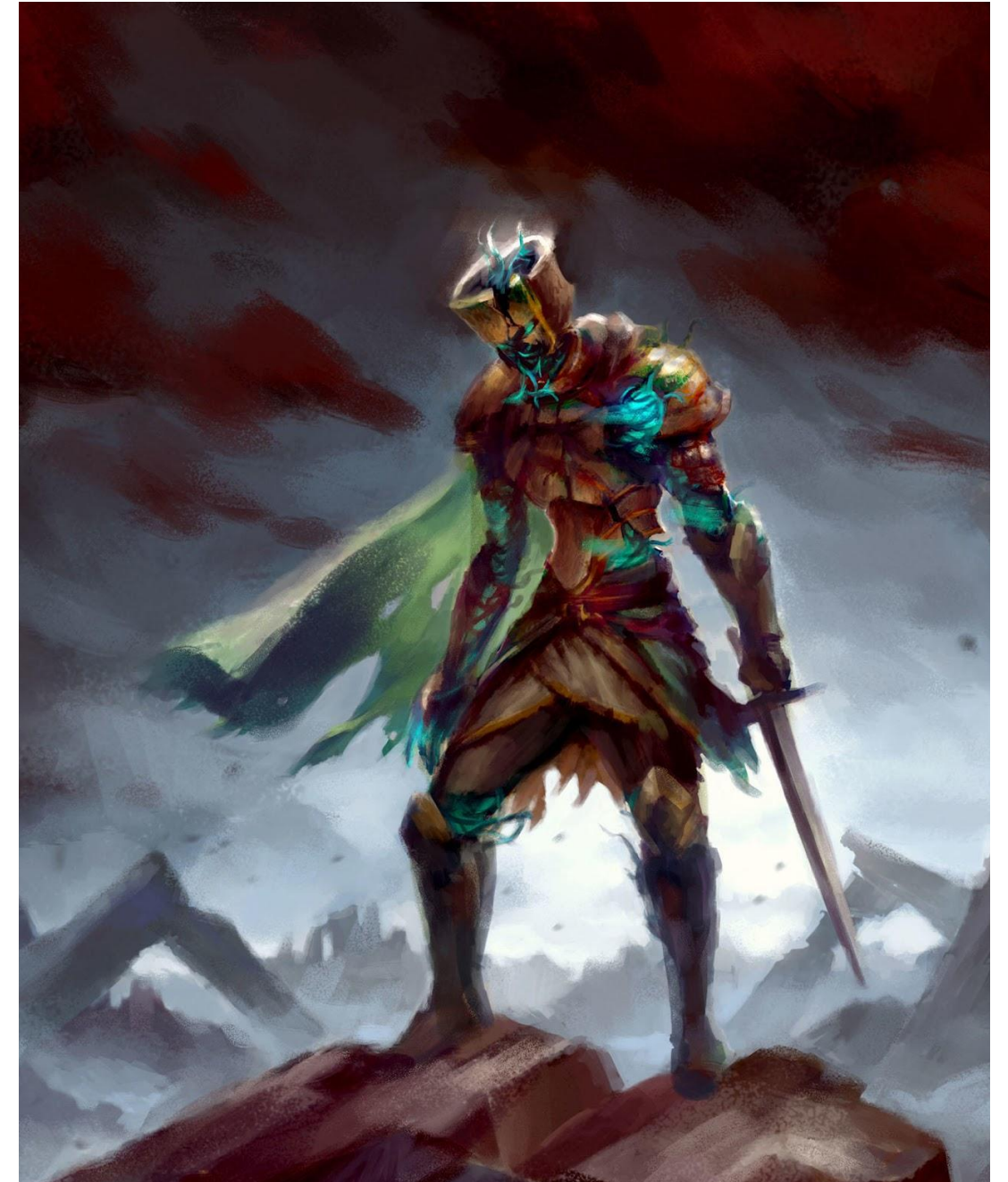


Takeaway #4: Set the Rules of Your Virtual Reality

What is your game's Fidelity of Interaction?

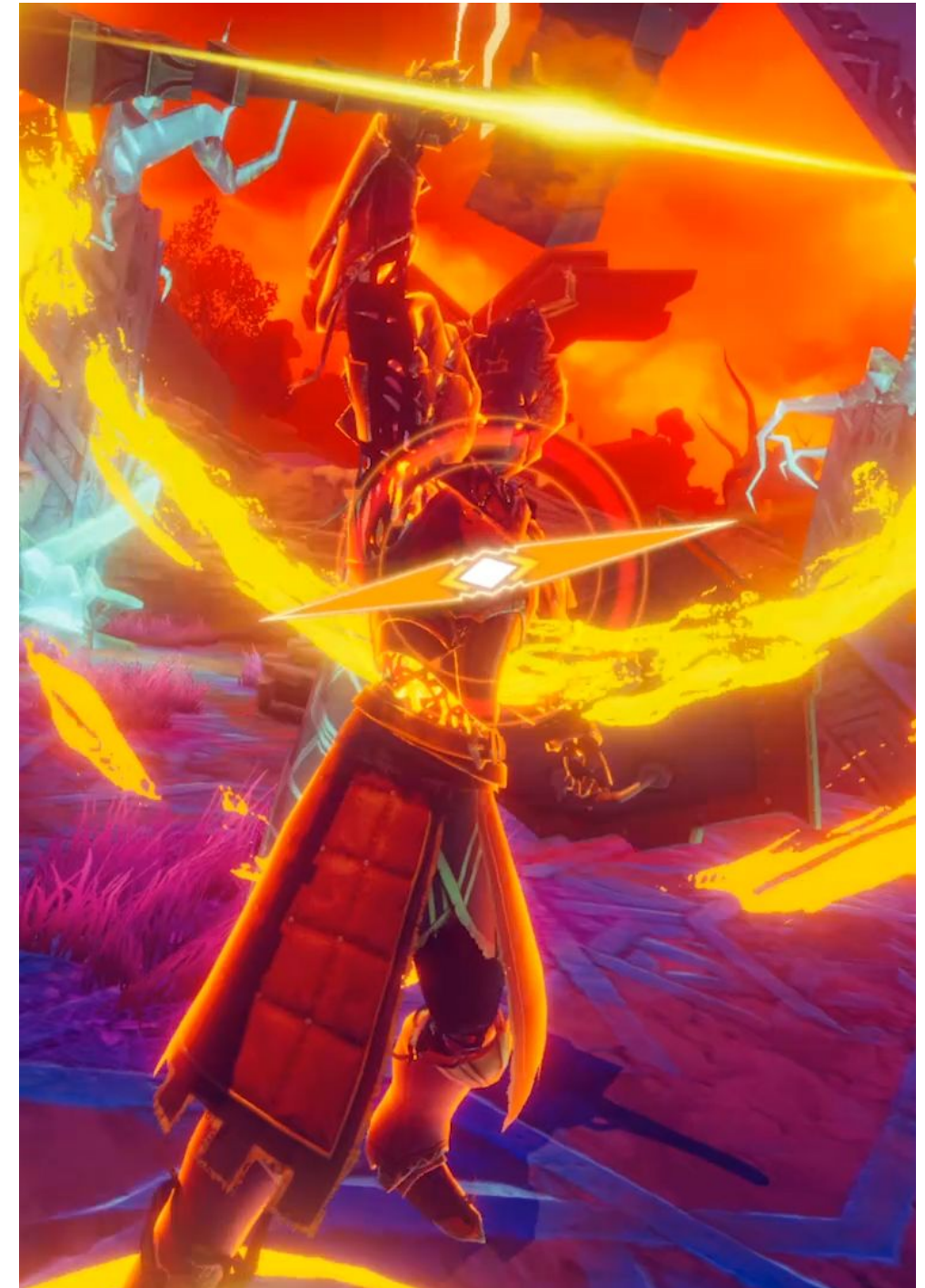
Contention of Immersion in VR

- ❖ Immersiveness and wide player action space of VR creates big expectations for fidelity and functionality
 - “I can put my hand on this...why can't I pick it up?”
- ❖ Almost impossible to meet every request for fidelity of interaction in VR
- ❖ During development, we started getting playtest requests for features we'd walked away from
- ❖ How can we preserve that sense of VR immersion without blowing our scope?



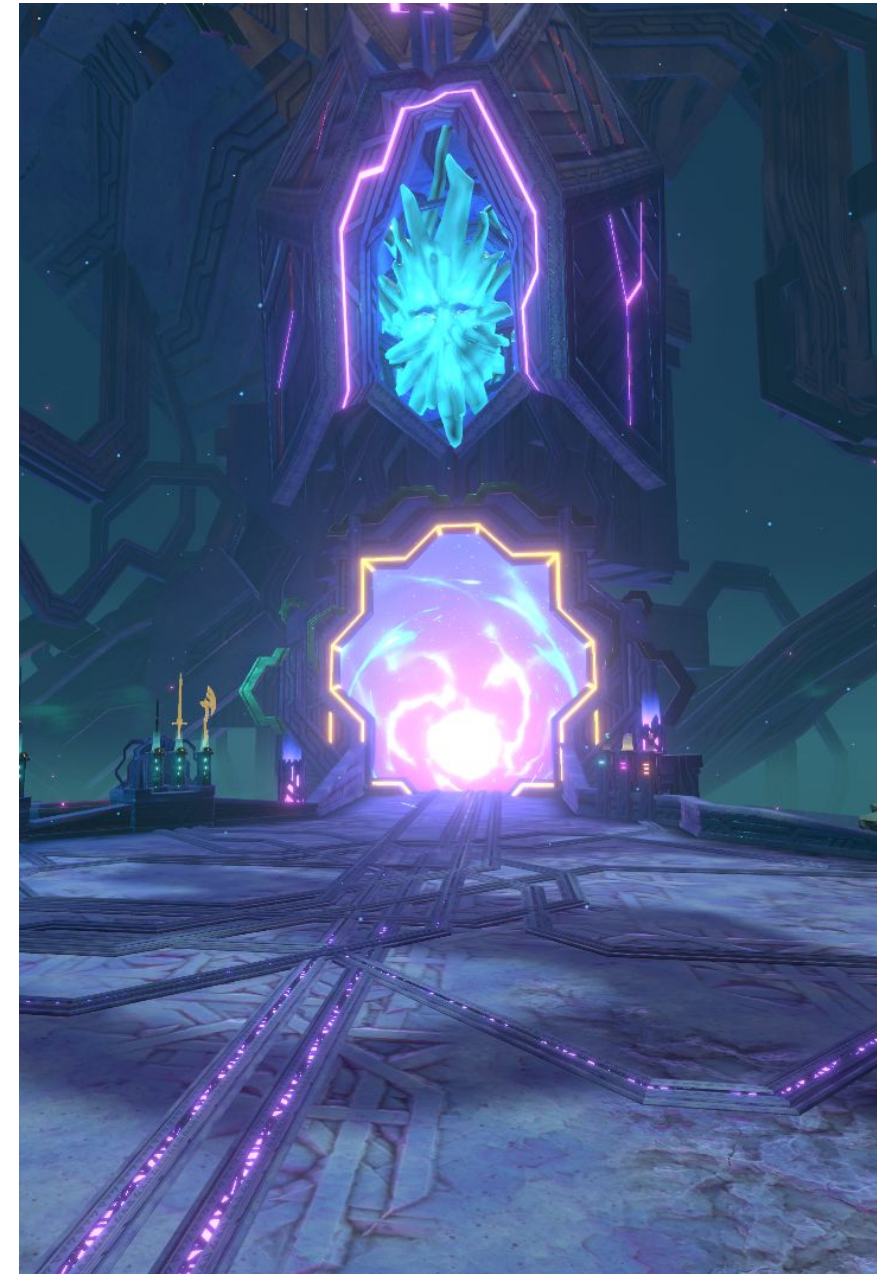
Rewriting Reality

- ❖ *You Can't Drop the Sword* was our first stake in the ground
 - Players were no longer asking for holsters
- ❖ Based off of that, we established fundamental laws of our game world to reframe problematic requests
 - *Looting / Fighting are always separate*
 - *Combat Arenas are small, exit is clear*
 - *Weapons have "Super Abilities"*
- ❖ Added up, this changes the players' expectation
 - "I want to Throw Weapons" ⇒ "I want a Super that lets me throw my weapon"



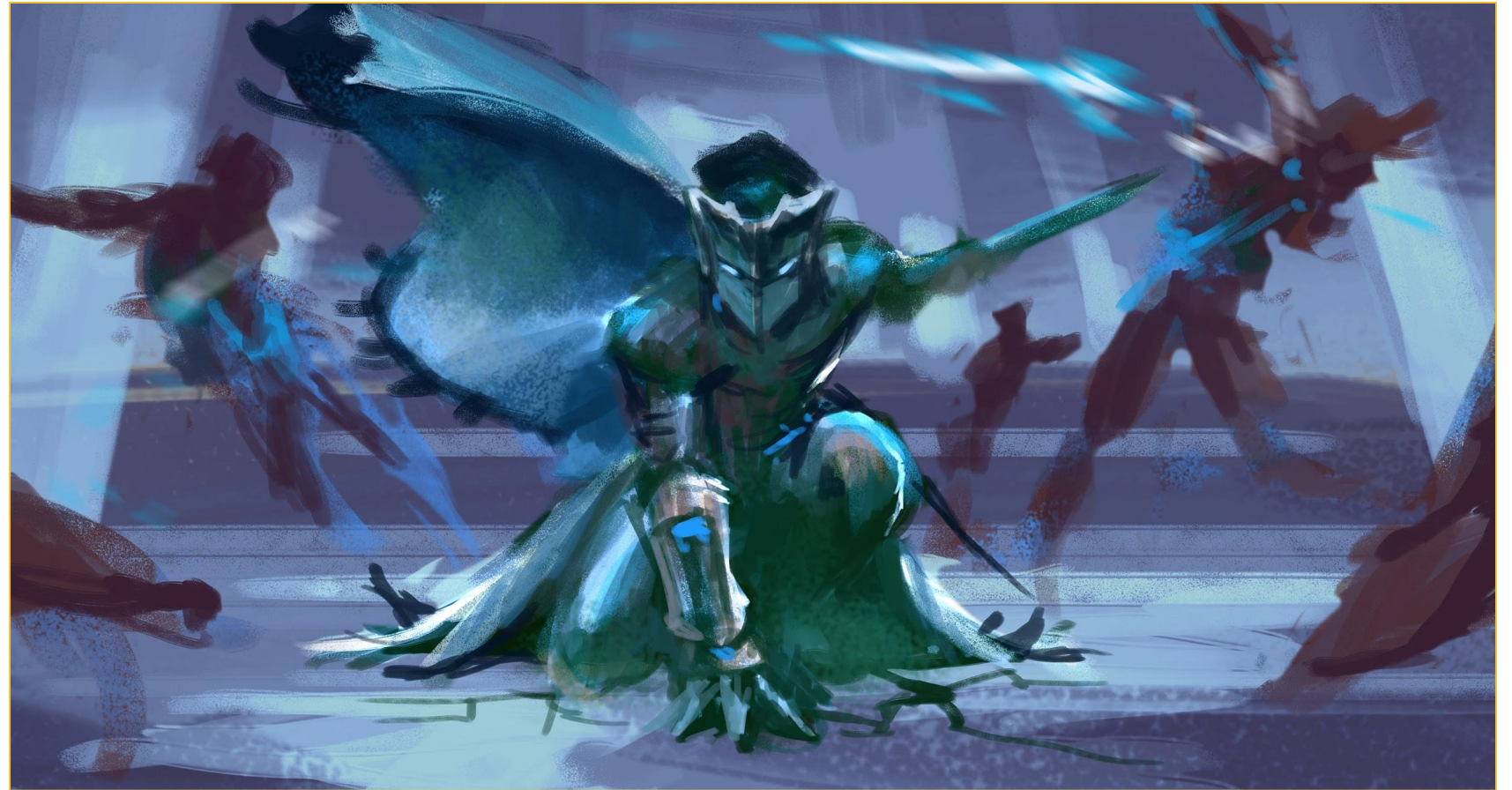
Establishing your (Virtual) Reality

- ❖ Decide on a 'Fidelity' of your world
 - Decide the smallest interaction that matters or is vital for your game
 - Consider cutting interactions that fall below that line in terms of gameplay importance
- ❖ Find ways to remove "wants" that you can't support from your playtesting
 - Eg: If players want to pick up enemy weapons, make them dissolve
- ❖ CAUTION
 - Until You Fall still gets critiqued for being a VR game with a "narrow" featureset



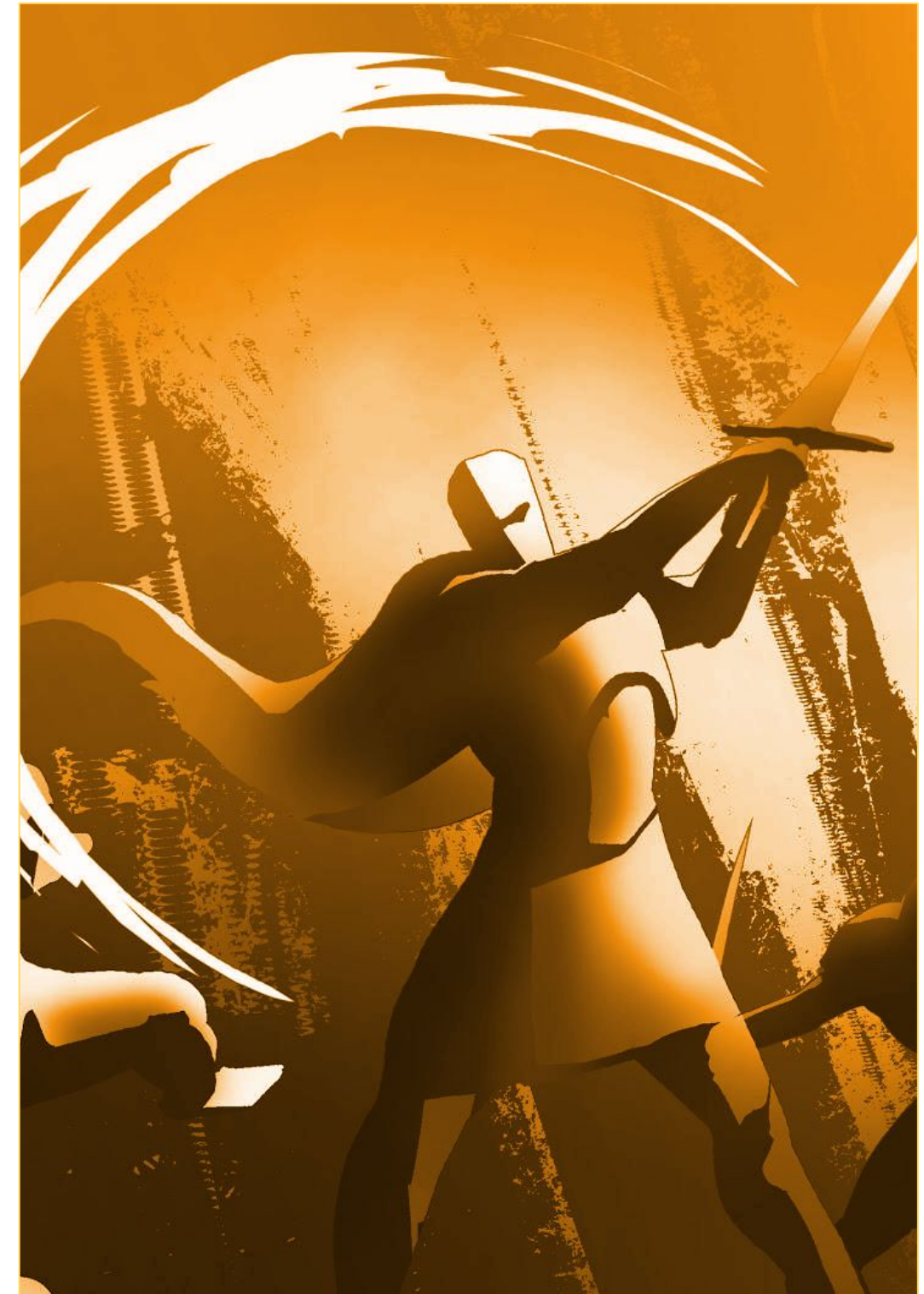
Takeaway #5: Incentivize the Fantasy

Make the fun way to play the best way to play



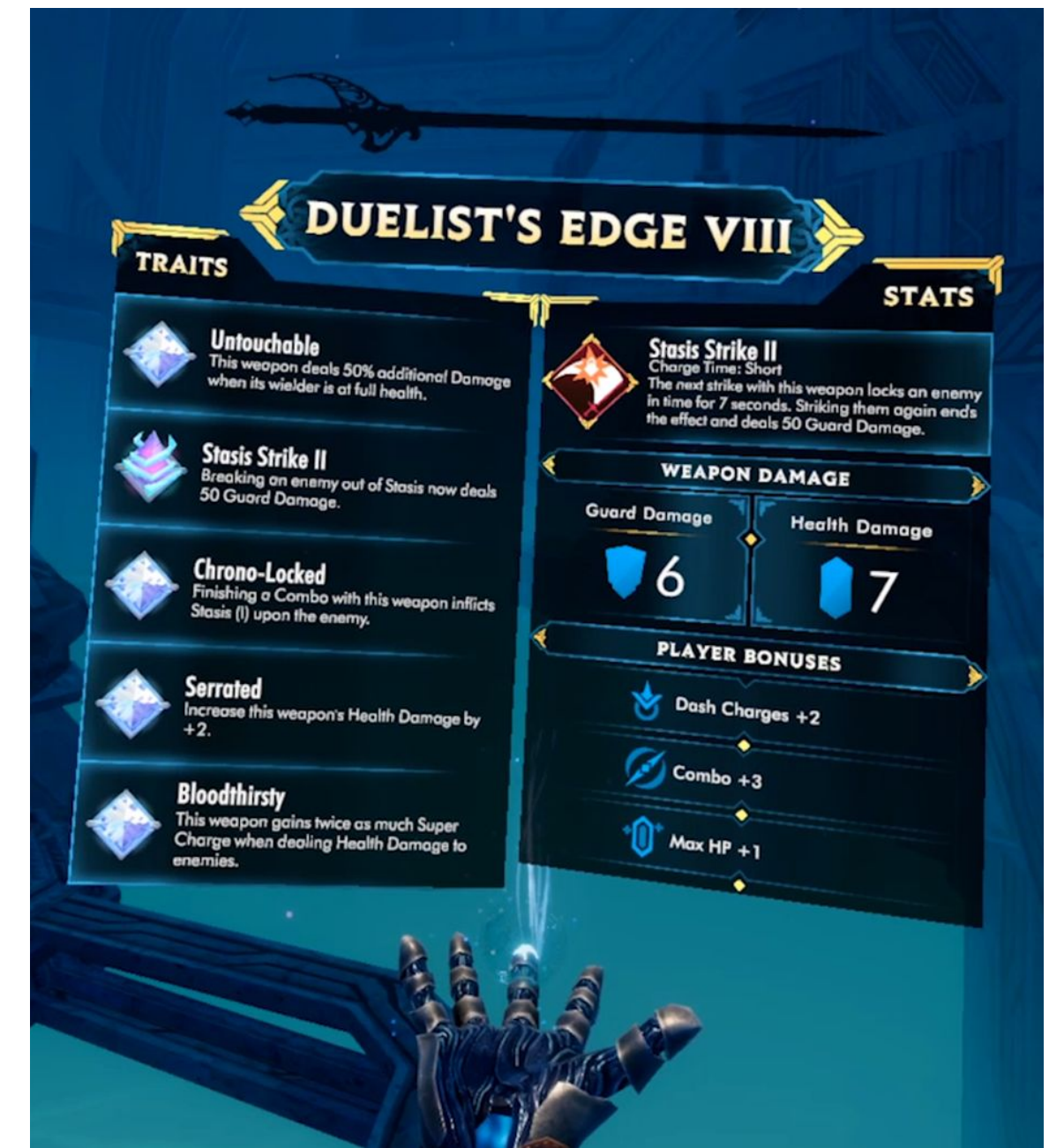
It's Not Dumb if it Works

- ❖ Players (Adults, Teenagers) can feel silly play acting in VR
- ❖ Fatigue and Focus will naturally push players towards the smallest, **effective** action
 - The 'Wii Waggle' effect
- ❖ Built a lot of detection to (mostly) shut down waggle strategies
 - We changed the smallest **effective** action
- ❖ **Playtesters loved this**
 - Actually called it out specifically that they loved that they couldn't "cheese" the game
 - Players were much more likely to play-act with the game
 - Because if it's effective, it's not silly, it's ***optimal***



Stats as Mechanical Incentives

- ❖ Designed Target Playstyles (Archetypes)
 - Bruiser - Hit Big
 - Spellsword - Mage-like
 - Tactician - Crowd Control
 - Rogue - Mobile, Twitchy
- ❖ All playstyles needed to have multiple effective 'builds'
- ❖ Used Stats/Traits to make sure weapon use aligned with the fantasy of the weapon
- ❖ **This will benefit all skill levels of play, not just the hardcore**
 - Again: This is about giving players permission to play-act with the game



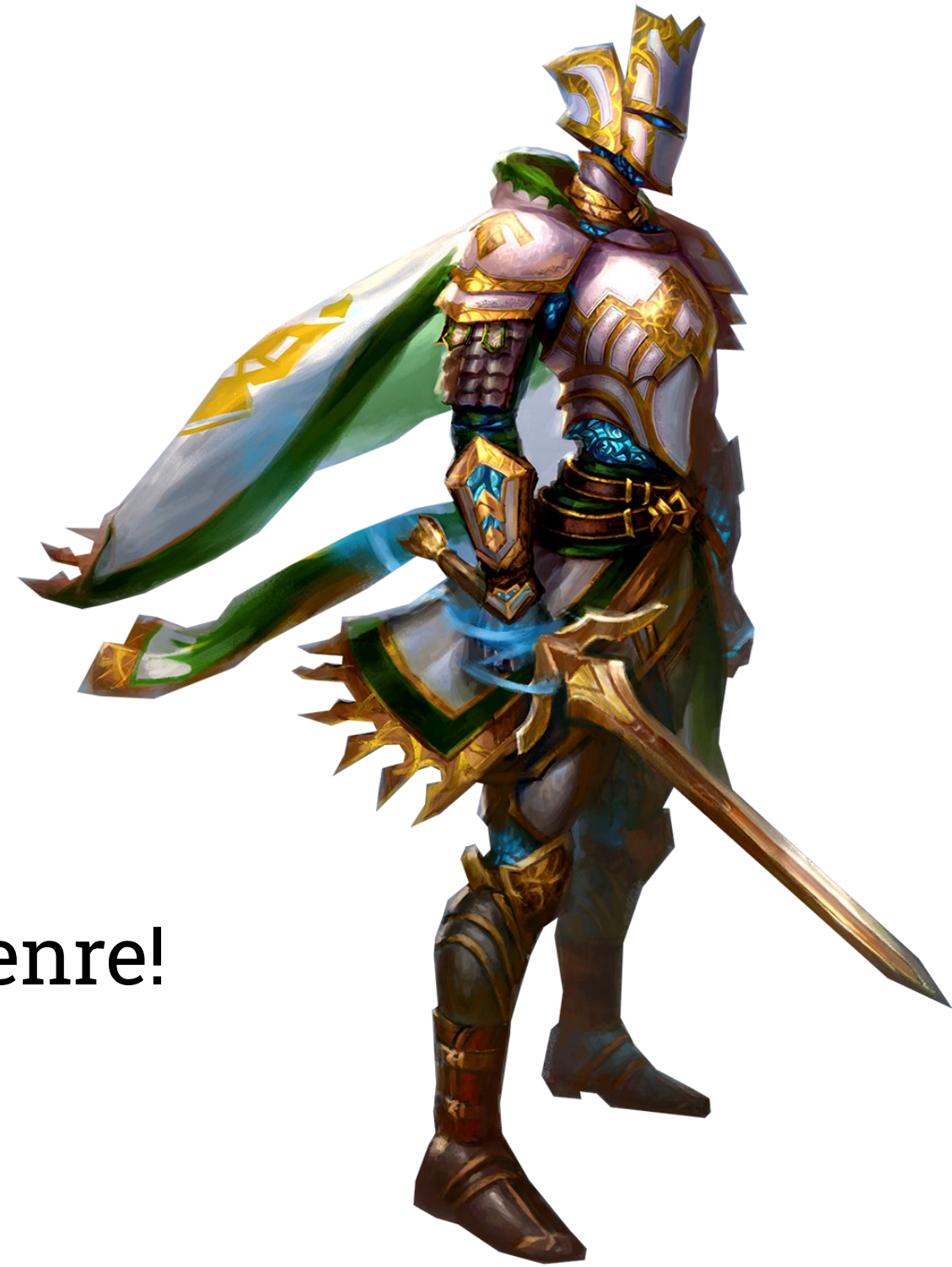
Wrapping Up

It's almost over



Our Five Big Takeaways

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- ❖ Be Wary of Secondary VR Interactions
- ❖ Know your Player Fantasy
- ❖ Set the Rules of Your Virtual Reality
- ❖ Incentivize the Fantasy
- ❖ BONUS: Consult with Others in the Space/Genre!
 - *Thanks Jason VandenBerghe!*



Thanks for Listening!



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