

= Ultima Underworld : The Stygian Abyss =

Ultima Underworld : The Stygian Abyss is a first @-@ person role @-@ playing video game (RPG) developed by Blue Sky Productions (later Looking Glass Studios) and published by Origin Systems . Released in March 1992 , the game is set in the fantasy world of the Ultima series . It takes place inside the Great Stygian Abyss : a large , underground cave system that contains the remnants of a failed utopian civilization . The player assumes the role of the Avatar ? the Ultima series ' protagonist ? and attempts to find and rescue a baron 's kidnapped daughter .

Ultima Underworld has been cited as the first role @-@ playing game to feature first @-@ person action in a 3D environment , and it introduced technological innovations such as allowing the player to look up and down . Its design combines simulation elements with concepts from earlier CRPGs , including Wizardry and Dungeon Master , which led the game 's designers to call it a " dungeon simulation " . As such , the game is non @-@ linear and allows for emergent gameplay .

Ultima Underworld received widespread critical acclaim and sold nearly 500 @, @ 000 units . The game was later placed on numerous hall of fame lists . It influenced game developers such as Bethesda Softworks and Valve Corporation , and it was an inspiration behind the games Deus Ex and BioShock . The game had a sequel , Ultima Underworld II : Labyrinth of Worlds (1993) , and a new game in the series , Underworld Ascendant , is forthcoming .

= = Gameplay = =

Ultima Underworld is a role @-@ playing video game (RPG) that takes place from a first @-@ person perspective in a three @-@ dimensional environment . The player 's goal is to adventure through a large , multi @-@ level dungeon , in which the entire game is set . The player uses a freely movable mouse cursor to interact with the game 's world , and with the icon @-@ based interface on the heads @-@ up display (HUD) . Each icon has a specific effect ; for example , the Look icon allows the player to examine objects closely , while the Fight icon causes the player character to ready its weapon . The player 's progression through the game is non @-@ linear : areas may be explored , and puzzles and quests finished , in any order . An automatically filling map , to which the player may add notes , records what the player has seen above a minimum level of brightness . The player character may carry light sources to extend the line of sight in varying amounts . Exploratory actions include looking up and down , jumping , and swimming .

The player begins the game by creating a character , for whom traits such as gender , class and skills may be selected . Skills range from fighting with an axe , to bartering , to picking locks . By participating in combat , quests and exploration , the character gains experience points . When certain amounts of experience points are accumulated , the character levels up , gaining additional hit points and mana . Experience also allows the player to recite mantras at shrines in the game . Each mantra is a statement ? such as " Om Cah " ? that increases proficiency in a specific skill when typed . Simple mantras are provided in the game 's manual , while more complex ones are hidden throughout the game . An inventory on the HUD lists the items and weapons currently carried by the player character ; capacity is limited by weight . Players equip items via a paper doll system , wherein items are clicked @-@ and @-@ dragged onto a representation of the player character .

Combat occurs in real @-@ time , and the player character may use both melee and ranged weapons . The player attacks by holding the cursor over the game screen and clicking , depressing the button longer to inflict greater damage . Some weapons allow for different types of attacks depending on where the cursor is held ; for example , clicking near the bottom of the screen may result in a jab , while clicking in the middle produces a slash . Simulated dice rolls occur behind the scenes to determine weapon accuracy . Enemies sometimes try to escape when near death , and the game 's stealth mechanics may occasionally be used to avoid combat altogether . The player may cast spells by selecting an appropriate combination of runestones . Like mantras , runestones must be found in the game world before use . There are over forty spells , some undocumented ; their effects range from causing earthquakes to allowing the player character to fly .

The developers intended Ultima Underworld to be a realistic and interactive " dungeon simulation " ,

rather than a straightforward role @-@ playing game . For example , many objects in the game have no actual use , while a lit torch may be used on corn to create popcorn . Weapons deteriorate with use , and the player character must eat and rest ; light sources burn out unless extinguished before sleeping . A physics system allows , among other things , for items to bounce when thrown against surfaces . The game contains non @-@ player characters (NPCs) with whom the player may interact by selecting dialogue choices from a menu . Most NPCs have possessions , and are willing to trade them . The game was designed to give players " a palette of strategies " with which to approach situations , and its simulation systems allow for emergent gameplay .

= = Plot = =

= = = Setting = = =

Ultima Underworld is set in Britannia , the fantasy world of the Ultima series . Specifically , the game takes place inside a large , underground dungeon called the Great Stygian Abyss . The dungeon 's entrance lies on the Isle of the Avatar , an island ruled by Baron Almríc . The Abyss first appeared in Ultima IV : Quest of the Avatar , in which it contains the player 's final goal , the Codex of Ultimate Wisdom .

Ultima Underworld is set after the events of Ultima VI : The False Prophet ; in the time between the two games , a man named Cabirus attempted to create a utopian colony inside the Abyss . The eight settlements of the Ultima series each embody one of eight virtues , and Cabirus wished to create a ninth that embodied all virtues . To achieve this , he united diverse cultures and races in peaceful co @-@ existence and planned to promote harmony by giving each group one of eight virtue @-@ imbued magical artifacts . However , he died before distributing the artifacts , and left no instructions for doing so . As a result , the colony collapsed into anarchy and war , and the artifacts were lost . At the time of Ultima Underworld , the Abyss contains the remnants of Cabirus 's colony , inhabited by fractious groups of humans , goblins , trolls and others .

= = = Story = = =

Before the beginning of the game , the Abyss @-@ dwelling wizard brothers Garamon and Tyball accidentally summon a demon , the Slasher of Veils , while experimenting with inter @-@ dimensional travel . Garamon is used as bait to lure the demon into a room imbued with virtue . However , the demon offers Tyball great power if he betrays Garamon . Tyball agrees , but the betrayal fails ; Garamon is killed , but seals the demon inside the room . Because he lacks virtue , Tyball cannot re @-@ enter by himself , and plans to sacrifice Baron Almríc 's daughter at the doorway to gain entrance .

In the game 's introduction , the ghost of Garamon haunts the Avatar 's dreams with warnings of a great danger in Britannia . The Avatar allows Garamon to take him there , where he watches Tyball kidnap Baron Almríc 's daughter . Tyball escapes , leaving the Avatar to be caught by the Baron 's guards . The guards take him to the Baron , who banishes him to the Great Stygian Abyss to rescue his daughter . After the introduction , the Avatar explores the dungeon and finds remnants of Cabirus 's colony . A few possible scenarios include deciding the fate of two warring goblin tribes , learning a language , and playing an instrument to complete a quest . The Avatar eventually defeats Tyball and frees the Baron 's daughter .

However , as he dies , Tyball reveals that he had decided to contain the Slasher of Veils , whose prison he had been weakening , within the Baron 's daughter as a way to prevent it from destroying the world . The Baron 's daughter asks the Avatar to prevent the Slasher of Veils from being unleashed , and magically teleports back to the surface to evacuate its inhabitants . With help from Garamon 's ghost , the Avatar gathers the eight talismans of Cabirus and throws them in the volcano at the base of the Abyss ; the energy they release allows Garamon to open a portal that will send the Slasher of Veils into another dimension . The Avatar is sucked through the portal into a

chaotic alternate dimension , but escapes back to the Isle of the Avatar and makes it on board the Baron 's ship as the volcano erupts . As the game ends , Garamon 's spirit reveals that he teleported the inhabitants of the Abyss to another cave .

= = Development = =

Ultima Underworld was conceived in 1989 by Origin Systems employee Paul Neurath . He had just completed work on Space Rogue , a hybrid title that features sequences both of 2D tile @-@ based role @-@ playing and of 3D space flight simulation . According to Neurath , Space Rogue " took the first , tentative steps in exploring a blend of RPG and simulation elements , and this seemed to me a promising direction . " He felt that the way it combined the elements was jarring , however , and believed that he could create a more immersive experience .

Neurath had enjoyed role @-@ playing video games like Wizardry , but found that their simple , abstract visuals were an obstacle to the suspension of disbelief . He believed that Dungeon Master 's detailed first @-@ person presentation was a " glimpse into the future " , and he sought to create a fantasy role @-@ playing game that built on its example . In early 1990 , Neurath wrote a design document for a game titled Underworld , which described such elements as " goblins on the prows of rowboats tossed in the waves , shooting arrows at the player above on a rope bridge swinging in the wind . " He contracted former Origin employee Doug Wike to create concept art . Wike created a brief , hand @-@ drawn animation with Deluxe Paint Animation , which depicted the game 's interface and a creature moving toward the player . The animation defined the game 's direction , and it was used as a reference point for the game 's tone and features throughout development . That spring , Neurath founded the company Blue Sky Productions in Salem , New Hampshire , with the intention to create Underworld . Among the company 's first employees was Doug Church , who was studying at the Massachusetts Institute of Technology (MIT) . The team was thus composed of Doug Church as programmer , Doug Wike as lead artist and Paul Neurath as lead designer . Development began in May 1990 .

An early difficulty was the implementation of texture mapping . Neurath had experimented unsuccessfully with the concept on an Apple II computer in the late 1980s , but he believed that the more powerful IBM PCs of the time might be able to process it . He contacted Lerner Research programmer Chris Green ? an acquaintance from his past work with Ned Lerner ? who created a working algorithm . Using the Space Rogue engine , Green 's algorithm , assembly code from Lerner Research 's Car and Driver and original programming , the Blue Sky team completed a prototype of Underworld after roughly a month of work . Neurath described the prototype as " fast , smooth , and [featuring] true texture mapped walls , though the ceiling and floor were flat shaded and the corridors and rooms were all 10 ' [3 @. @ 0 m] high ? it looked a lot like Wolfenstein @-@ 3D in fact . " The team demonstrated it at the June 1990 Consumer Electronics Show (CES) and impressed Origin Systems . Origin producer Warren Spector later said , " I remember Paul showing me that demo [...] at CES and being totally floored by it . None of us had ever seen anything like it . " The two companies reached a publishing agreement that summer , and Origin suggested that the game be reworked to fit into the Ultima universe . The team agreed , and the game was renamed Ultima Underworld . While Spector had hoped to produce the game , he was not assigned to the role ; and he later said that he " sort of watched [the other producer] jealously from the sidelines . "

After the game was renamed , Doug Church recruited Dan Schmidt , a college friend who had just graduated from MIT , as a programmer . The team abandoned the Space Rogue engine and created a new one that could display a believable 3D world ? one with varying heights and texture @-@ mapped floors and ceilings . Church estimated that the first year of production was dedicated to creating the game 's technological base . However , Neurath stated that the team spent " comparatively little " time on the game 's technology , and that " most was spent working on game features , mechanics , and world building " . Their ultimate goal was to create the " finest dungeon game , a game that was tangibly better than any of the long line of dungeon games that came before it . " Each member of the small team assumed multiple roles ; for example , the game 's first two levels were designed by Paul Neurath , while the rest were built by artists , designers and

programmers . According to Schmidt , Neurath contracted a writer to create the game 's story and dialogue , but the relationship was a " mismatch " ; and so the team decided to write the plot themselves . Alongside his programming work , Church co @-@ wrote the game 's story with Dan Schmidt , and he gradually took on project leader responsibilities . Writing duties for each level were given to the person who created that level ; Schmidt 's role was to edit the dialogue of each level to fit with that of the others . Schmidt also created the game 's sound effects , which were synthesized ? no recorded sounds were used ? in a graphical sound editor . Neurath , who Church said was " very day to day at the beginning of the project " , became more involved with the company 's business and finances .

Church explained that the core of the project was its " dynamic creation " . He noted that the team had " no set of rules [...] or pre @-@ written plan " , but rather worked organically toward the general idea of creating a " dungeon simulation " . Church believed that the game 's Ultima series heritage was extremely helpful , as it gave the team an anchor for their experiments . According to Church , because the team was young and inexperienced , they were " improvising almost the whole time " . He said that they would " just write something " that seemed interesting , but would then " get it half done , and we 'd say , ' Eh ? That 's not working . ' " He believed that this iterative method was useful overall , but that it entailed an abnormally large workload : it resulted in the creation of " four movement systems before we were done , several combat systems , and so forth " . Certain failed experiments meant that the team created " [AI] code for many ideas which turned out to be largely irrelevant to the actual gameplay " .

During the first year of the game 's development , Church believed that Origin had little faith in the team 's ability to complete the game . He later said , " They didn 't pay any attention at all , frankly . " While Origin CEO Richard Garriott helped the team in fitting the game into the Ultima franchise , Warren Spector later said that the company seemed " blasé " about Ultima Underworld " for the first several months after ORIGIN and Blue Sky signed the deal " , despite his own belief that it was a " change @-@ the @-@ world project " . Neurath opined that this was due to the team 's status as outsiders , whose company was " some 1 @,@ 500 miles distant " from their publisher . The team was advanced \$ 30 @,@ 000 to create the game , but its final cost was \$ 400 @,@ 000 . The game was funded partly by Ned Lerner , and by Neurath 's royalties from Space Rogue . Throughout the game 's production , the studio was run on a tight budget .

Roughly a year into development , the team discovered that their second producer ? the first having quit Origin near the beginning of development ? had left the project . Neurath later said that " neither [producer] had much involvement " in the game , and that , following the second 's departure , the team spent time without any producer at all . Rumors circulated that Origin planned to cancel the project . Following a proposal by the team around this time , Spector , who had previously worked with Neurath on Space Rogue , assumed the role of producer . Church later described this event as " a big win for everyone " . Spector began to interact regularly with the team by phone and to visit the studio in person . Neurath later said , " Warren understood immediately what we were trying to accomplish with the game , and became our biggest champion within Origin . Had not Warren stepped in this role at that stage , I 'm not sure Ultima Underworld would have ever seen the light of day . " Church said that Spector helped the team polish the game and " make it real " , and that Spector 's past experience in the industry enabled him to keep the team focused on completing the game . He explained that Spector " had that ability to help me and the rest of the guys reset , from the big @-@ picture view of someone who has done it before . "

The final four months of the game 's development constituted " crunch time " . During this period , Neurath rented an extremely small basement office space in a Somerville , Massachusetts social services building : he sought to circumvent the long commute that several team members had been making from Massachusetts . Furniture consisted of inexpensive folding tables and " uncomfortable red deck chairs " . Development took place during the winter , but the room was drafty and poorly heated . The team hired college friends such as Marc LeBlanc to bug test the game , and Spector stayed at the studio for roughly a month and a half , according to Church . Spector later said that " in that little office , that team created some serious magic . I mean , the sense of doing something incredible was palpable " . Neurath summarized , " Despite the austere working environment , the

game came together amazingly well in the final stretch , and we delivered the Gold Master just about two years after we had started . " The game was released in March 1992 .

= = = Technology = = =

Ultima Underworld 's game engine was written by a small team . Chris Green provided the game 's texture mapping algorithm , which was applied to walls , floors and ceilings . The engine allowed for transparencies , walls at 45 degree angles , multiple tile heights and inclined surfaces , and other aspects . Ultima Underworld was the first video game to implement many of these effects . The game was also the first indoor , real @-@ time , 3D first @-@ person game to allow the player to look up and down , and to jump .

Ultima Underworld uses two @-@ dimensional sprites for characters , but also features 3D objects , as the team believed that it " had to do 3D objects in order to have reasonable visuals " . The game uses physics to calculate the motion of thrown objects . During the game 's alpha testing phase , part of the programming team worked to create a smooth lighting model . The game 's advanced technology caused the engine to run slowly , and its system requirements were extremely high . Doug Church later downplayed the importance of the game 's technology , stating that technological advancement " is somewhat inevitable in our field ... [and] sadly , as an industry we seem to know much less about design , and how to continue to extend and grow design capabilities " . Instead , he claimed that Ultima Underworld 's most important achievement was its incorporation of simulation elements into a role @-@ playing game .

= = Reception = =

Ultima Underworld was not an immediate commercial success , which caused Origin to decrease its marketing support . However , its popularity increased via word of mouth during the years after its release , and sales eventually reached nearly 500 @,@ 000 copies . The game received critical acclaim , with praise directed toward its 3D presentation and automapping feature . In 1993 the game won the Origins Award for Best Fantasy or Science Fiction Computer Game of 1992 , and was nominated for an award at the Game Developers Conference .

ACE called Ultima Underworld " the next true evolutionary step in the RPG genre " , and noted that its simulation @-@ style dungeon was " frighteningly realistic " . The magazine thought that the game 's sprite character models " detract from the dense atmosphere a bit " , but ended the review by stating , " If you 've got a PC , then you 've got to have Ultima Underworld . " Dragon Magazine opined that " to say this is the best dungeon game we 've ever played is quite an understatement , " and it " will leave you wondering how other game entertainments can ever stack up against the new standards Abyss sets . "

Computer Gaming World 's Allen Greenberg in 1992 described it as " an ambitious project " but " not without its share of problems . " He praised the game 's " enjoyable story and well @-@ crafted puzzles " , but disliked its " robotic " controls and " confusing " perspectives , and stated that " far more impressive sounds and pictures have been produced for other dungeon games " . He summarized the game as " an enjoyable challenge with a unique game @-@ playing engine to back it up . " Scorpia was also positive , stating that despite flaws " Ultima Underworld is an impressive first product . The meticulous construction of a real @-@ world dungeon environment is outstanding . [It] may be a dungeon trek , but it is certainly the dungeon trek of the future " . In 1993 she praised the " superb graphics " of " a definite must for game players " . The magazine later awarded the game " Role @-@ Playing Game of the Year " . Computer Shopper enjoyed its storyline and characters , and believed that the game " makes you feel as if you 've entered a virtual reality " . Despite describing its interface as " not truly intuitive " , the reviewer finished by calling the game " addictive " and " a fine value " . The Chicago Tribune awarded it Best Game of the Year , and called it " an amazing triumph of the imagination " and " the creme de la creme of dungeon epics " .

The game was also well received by non @-@ English publications . The Swedish Datormagazin considered the game to be " in a class by itself " . In Germany , Power Play praised its " technical

perfection " and " excellent " story , while Play Time lauded its graphical and aural presentation , and awarded it Game of the Month . Finland 's Pelit stated , " Ultima Underworld is something totally new in the CRPG field . The Virtual Fantasy of the Abyss left reviewers speechless . "

Ultima Underworld was inducted into many hall of fame lists , including those compiled by GameSpy , IGN and Computer Gaming World . PC Gamer US ranked the game and its sequel 20th on their 1997 The 50 Best Games Ever list , citing " strong character interaction , thoughtful puzzles , unprecedented control , and genuine roleplaying in ways that have yet to be duplicated " . In 2004 , readers of Retro Gamer voted Ultima Underworld as the 62nd top retro game : the staff called it " easily one of the best entries in the long @-@ running Ultima series . "

= = Legacy = =

Ultima Underworld has been cited as the first RPG to feature first @-@ person action in a 3D environment . Rival 3D games appeared ; Legends of Valour advertised " Ultima Underworld , move over ! " Gamasutra posited that " all 3D RPG titles from Morrowind to World of Warcraft share Ultima Underworld as a common ancestor , both graphically and spiritually ... [and] for better or for worse , Underworld moved the text @-@ based RPG out of the realm of imagination and into the third dimension " . Its soundtrack , composed by George " The Fat Man " Sanger and Dave Govett , was the first in a major first @-@ person game to use a dynamic music system ; the player 's actions alter the game 's music .

The game 's influence has been found in BioShock (2007) , and that game 's designer , Ken Levine , has stated that " all the things that I wanted to do and all the games that I ended up working on came out of the inspiration I took from [Ultima Underworld] . " Gears of War designer Cliff Bleszinski also cited it as an early influence , stating that it had " far more impact on me than Doom " . Other games influenced by Ultima Underworld include The Elder Scrolls : Arena , Deus Ex , Deus Ex : Invisible War , Vampire : The Masquerade ? Bloodlines , and Half @-@ Life 2 . Toby Gard stated that , when designing Tomb Raider , he " was a big fan of ... Ultima Underworld and I wanted to mix that type of game with the sort of polygon characters that were just being showcased in Virtua Fighter . " Ultima Underworld was also the basis for Looking Glass Technologies ' later System Shock .

Id Software 's use of texture mapping in Catacomb 3 @-@ D , a precursor to Wolfenstein 3D , was influenced by Ultima Underworld . Conflicting accounts exist regarding the extent of this influence , however . In the book Masters of Doom , author David Kushner asserts that the concept was discussed only briefly during a 1991 telephone conversation between Paul Neurath and John Romero . However , Doug Church has said that John Carmack saw the game 's summer 1990 software convention demo , and recalled a comment from Carmack that he could write a faster texture mapper . Paul Neurath has recounted the incident similarly , with both Carmack and Romero were present .

Despite the technology developed for Ultima Underworld , Origin opted to continue using traditional top @-@ down , 2D graphics for future mainline Ultima games . The engine was re @-@ used and enhanced for Ultima Underworld 's 1993 sequel , Ultima Underworld II : Labyrinth of Worlds . Looking Glass Studios planned to create a third Ultima Underworld , but Origin rejected their pitches . After Electronic Arts (EA) rejected Arkane Studios ' pitch for Ultima Underworld III , the studio instead created a spiritual successor : Arx Fatalis .

In the early 2000s , Paul Neurath approached EA to discuss a port of Ultima Underworld to the Pocket PC . EA rejected the suggestion , but allowed him to look for possible developers ; Neurath found that ZIO Interactive enthusiastically supported the idea , and EA eventually licensed the rights to the company . Doug Church and Floodgate Entertainment assisted with portions of its Pocket PC development , and the port was released in 2002 .

In 2015 , Otherside Entertainment , a new developer founded by Paul Neurath and other Looking Glass and Irrational veterans , announced a new entry in the series , entitled Underworld Ascendant . The new title is an officially licensed part of the series set in the Stygian Abyss , but this licensing agreement does not extend to the Ultima name or greater IP , effectively orphaning Underworld from

the Ultima series .