

C-LEVEL'S
WACO RESURRECTION

Game Design Doc
VERSION 1.1 in MULTICOLOR!

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Sections:

- I. Game cycle/Win Conditions
- II. Game events
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- IV. Interaction with entities
- V. Stats + HUD
- VI. Game Flow/Character Development
- VII. Phenomenological game design/
Physical interface notes

Color key for all to-dos

- BLACK – programming (**Peter** (Eddo, Glen))
- BLUE – modeling/animation (**Brody** (Sky, Dan))
- RED – hardware (**Mark**)
- GREEN – sound (**Michael**)
- PINK – writing (**Jessica**, Michael)
- LIME – Game design/Waco knowledge base (**Eddo/Michael**)
- ORANGE – 2D/HUD (**Eddo** (Brody))
- GREY – Grey Area...Philosophical... (All)

I) Game cycle/Win Conditions:

Init pre-game check-in (3 minutes)

- . Spawn all Koresh (alive) at pre-determined spots
- . Koresh are identical except for some color indication - this could be just the aura color so there will always be a minimal aura particle visible to designate color of player even when aura is really gone, or a different color shirt or hairdo - colors should be red, blue, green, yellow (to correlate to the 4 computer cases (for now until get more cases/colors))
- . Begin 3 minute countdown - **display message that new game will start in 3 minutes** - **play voice message start counter on all screens** - BIG letters - **text**
- . Player check-in - request action from each player to verify that someone is there - **HUD** - **text** + **sound**- this can be a actual keypress or **a physical sensor movement or head movement** (key presses for now)
- . Acknowledge players that are present with **HUD** - **text** + **sound** + **slow-motion resurrection animation** (players have 3 minutes to get in the game - i.e. strapped in...)
- . When End of countdown -announce that game is starting display instructions on screen - **HUD** - **text** + **sound**
- . Drop absent players from game - leave Koresh corpses in place - deactivate inputs from absent players

Game inits (beginning of 10 min duration)

- . Spawn all Koresh (alive) at pre determined spots - replay **slow-motion resurrection animation** (that's reverse death animation)
- . Start 10-minute countdown - **HUD**
- . Spawn enemies - book fall routines - scripted events timer - random events

Game over (10 minutes run out)

- . Game is over when time runs out
- . All Koresh must die at the end of the game and their *convert dropoffs* tallied (see below) - if they do not die in the compound fire (see scripted events below) then a **HUGE** amount of FBI and ATF should converge around him and kill them
- . All screens at the end of the game should show a dead Koresh (waiting to be respawned when and if someone picks up the head or issues a keypress in the next 3 minute new game countdown)

could/should use the clichéd spinning camera trick hovering over the corpse rather than a still screen

. NOTE on Death - If Koresh is killed during the game - he loses all converts, items, aura but is respawned at spawn point at compound - he does not lose "dropped off converts score"

Win conditions

1. Koresh with the most converts "dropped off" at time of final death - i.e. end of game wins

3. Daily, Weekly and absolute convert high scores should be logged so players who find themselves alone playing the game still have a challenge - these high scores should be categorized into 12 sections

1 player daily high, weekly high, absolute high

2 player daily high, weekly high, absolute high

3 player daily high, weekly high, absolute high

4 player daily high weekly high, absolute high

3. For those who want to play collaborative multiplayer - the total converts "dropped off" by *all players* in the round could function as a group high score as well..

II) Game events:

1. Random events:

. Books Spawn (all about the books)-

. There are five types of books - all same 3D geometry but different colors/texture - each is associated with a particular text that is loaded in to voice recognition hardware and displayed in the hud as a graphic with a place holder for each book/phrase - ie that space is reserved in the HUD for all 5 books and left empty until that book has been acquired

. Once books are picked up that phrase is unlocked in the hardware or in software so that player can use them now to increase aura and use special effect

. Uttering a book phrase into the voice recognition hardware will replenish aura each time the phrase is uttered by the specified amount (all phrases replenish aura by 20) but advanced books need to be collected to raise the max aura (more about Aura down below in character stats section)

. The exact wording of each phrase needs to be decided on by a combination of a technical and aesthetic decision

. The five books have 5 increasing aura "values" - the values represent the increase in aura when the phrase of the book is correctly uttered

Book1
+20 AURA on phrase utterance,
Possession increases MAX aura by 100
Special effect - *heal*

Book2
+20 AURA on phrase utterance,
Possession increases MAX aura by 100
Special effect - *levitate*

Book3
+20 AURA on phrase utterance,
Possession increases MAX aura by 100
Special effect - *levitate*

Book4
+20 AURA on phrase utterance,
Possession increases MAX aura by 200
Special effect - *wrath of god*

Book5
+20 AURA on phrase utterance,
Possession increases MAX aura by 300
Special effect - *gun show*

. Each book has a "special effect" associated with it - the special effect is an ACTIVE action that is activated once per utterance of the book phrase (again, uttering the phrase that is in the book into the voice chip will cause an aura boost as well) Special Effects should use particle effects + sound effects for each + initiate a vibration in the physical mask + be reflected in the HUD if applicable.

Other than making the game more fun/complex, adding the special effects will offer a direct visceral reward to the voice recognition hardware by vibrating the head with a small cell phone buzzer + help to "justify" and emphasize the adventure into wearable hardware. Also the names of the abilities gained should show up in the HUD and be sounded out as audio as well when used

Special effects could be a feature set that can be added later or add one or two if time permits

"Special effects" ideas:

(Initial suggestions here are fairly simple to implement within the basic architecture --- more/other suggestions and better more diegetic names to come later if needed):

heal - heals 10 hp

levitate - allows Koresh to float over ground avoiding damage from the ground + accelerating movement speed

convert - doubles the conversion chance (aura strength and radius) for a 5 second duration

wrath of god - a hail of fireballs lands on Koresh doing area damage around him but not harming him

gunshow - some kind of machine gun fire spewing out in circles

. Spawn location should correlate to book power - following the logic that the farther it is from the compound (and Koresh spawn area) the more powerful it is) - getting more powerful books should function as a catalyst to venture farther out from the compound at increasing risk + reward

. Books spawn at several pre fixed locations - fall from sky with a trail

.ATF AI:

ATF AI should include some random events like patrols etc

SOUND - ATF should talk among themselves - maybe use real recordings here rather than voice acting

.FBI AI:

FBI AI should include some random events like patrols etc

SOUND - FBI should talk among themselves - maybe use real recordings here rather than voice acting

2. Scripted events

. Idle test (every 60 sec)

Every 60 seconds should Check for player idle status - so if no keypresses are entered for 60 seconds

- if idle 60 seconds then kill the Koresh - trigger **slow motion death animation** - (this means a player has left the game) leave corpse in place till next cycle

. Ambient Sound track

yes - should ebb and flow...maybe be timed for the assaults

. Aura Drain

Koresh Aura should drain constantly 1(or more) point(s) every 10 or 5 seconds

Uttering a phrase that's in a book that has been collected will replenish aura (see book spawn section above for details)

. Assault waves

Note on assaults: this is a rough draft when I have more time I will look more closely at the events timeline and watch the movies again and make these more specific and true to the order of things

. ATF assault wave 1 (T + 1min)

Send in **ATF search party** (maybe 3 types of agents look the same almost but with different weapons) into the compound thru front door AI should be scripted to throw in **teargas** targeting the compound architecture (tear gas should have an effect on the followers AI making them either run out or get knocked out - koresh could be stunned for 30seconds if hit by gas) - agents should leave when done - front door should be knocked out at this point allowing Koresh to leave compound if desired. one ATF guy has **loudspeaker** and should **say something thru loudspeaker**

. ATF assault wave 2 (T + 3min)

Send in bigger ATF search party into the compound thru front door and back entrances AI should be scripted to shoot at Koresh and **followers** in the compound vicinity (they need AI and animation) - agents should not leave till killed. **Helicopters fly by and shoot at follower on tower** + Koresh if he is seen (chopper AI, follower AI) one ATF guy has **loudspeaker** and should **say something thru loudspeaker**

. ATF assault wave 3 (T + 5min)

Send in bigger ATF search party into the compound thru front door and back entrances AI should be scripted to shoot Koresh and followers + take away weapons cache + begin **audio psyops** on compound by **advancing 4 psyops trucks** close to compound - agents should not leave till killed. one ATF guy has **loudspeaker** and should **say something thru loudspeaker**

. FBI + ATF final assault wave (T+7min)

Bring in the "flame tank"

Tank equipped with teargas launcher moves in close providing troop cover (AI...) and **sets compound on fire**. Fire continues to burn + delivers serious damage and **burns followers** if they are inside - rooms need to burn all over - pool can offer a safe haven - Koresh are not "on fire" after they are burned merely suffer damage. One ATF guy has **loudspeaker** and should **say something thru loudspeaker**

. Compound burns to ground Koresh dies (T+10min)

All Koresh must die at the end if they do not die in the compound fire then a HUGE amount of FBI and ATF should converge around him and kill them

III) Interaction with environment/objects:

. Koresh is free to move as long as geometry allows

. **Perimeter** -

there should be an outer perimeter fence that can not be breached (it could be lined with reporters, news trucks, bystanders and ambulances)

. **Fire** -

Fire should cause area damage based on proximity or collision but Koresh should be allowed to move through it - it should have a certain cycle so it gets bigger and then smaller when it goes out

. **Weapon room** -

Koresh should be able to get better weapons in room simply by walking over them - if they are better than what he has then his weapon is upgraded - weapon room could have AK47s modified for automatic fire - (if time allows could have a weapons inventory and allow switching between grenades and two types of AK47s + whatever else was in the arsenal - I have to look that up)

. **Ammunition** -

For now should allow for unlimited ammo

. **Tower** -

Koresh should be allowed to climb tower

. **Books** -

Picked up when walked over - if book is already in inventory do not allow to pick it up - see RANDOM EVENTS above book section for details on book and CHARACTER/HUD below for Aura details

. **Pool** -

Should protect from fire - make waves when walked thru

. **Other special compound rooms** -

Add later maybe

IV) Interaction with entities

. PSYOPS TRUCKS -

After assault wave 3 trucks should be positioned fairly far from the compound and should broadcast a 3D cone of **psyops sounds** (Michael knows these intimately).

After and during the trucks movement into position - (they should be behind the perimeter before wave 3) they should be **attackable - deformable** which would shut them down

psyops sounds - exposure to psyops sounds should have two effects on Koresh/player

1. A "real" psychological disturbance for the player - i.e. really loud sounds + (activate the buzzer in headset with a change to two way communication with hardware..) Loudness should increase with proximity (3D sound functions would be nice...)

2. An increased rapid drain on Aura - based on proximity

. HELICOPTERS -

Should be able to shoot them down - maybe only with **rocket launcher** in weapons room (**will check if they had one**)

. ATF -

ATF AI should attack Koresh on sire even when not on scripted assaults - they should have AFT vans that they huddle around as makeshift HQ farther back from the compound (**Vans and all vehicles should be deformable and destroyable - i.e. go on fire - burn to the ground**)

AFT should resupply their troops if depleted beyond a certain number lets say 50 for now (**find exact number**) - resupply could be another van drives in or just spawn troops near the van and respawn the van if it is destroyed

ATF should have 70 HP each and carry **the correct weapons + teargas** they will need **a death animation (of several)** - leave corpses behind after they die

ATF can be converted and then AI should switch to convert AI - more below on Converts

. FBI -

similar to ATF for now - **need to do more research** to get this straight - since I am confused by their overlap + since waves are merging the two major confrontations into one scene

FBI can be converted and then AI should switch to convert AI - more below on Converts

. ATF/FBI van

See above

. Dividians -

nothing for now - except the idea that they need to be protected
 - need to think about them a bit more - should be repercussions
 to Dividians lost (see *game flow* section)

Koresh weapons will not hurt Dividians

. **Converts** -

Converted ATF and FBI - should still look the same as before they
 were converted - retain HP and weapons they had but should glow
 with a subtle aura or some marker that shows which Koresh they
 "belong" to - i.e. red, blue, green, or yellow

Converts can be "dropped off" in the compound - in the simplest
 form this would work by going to a specific gathering room or
 drop off point - this issue is a bit complex and **one concern I
 have is that it may be overkill for the casual gamer.** A
 simplification would be that all converts are automatically
 dropped off when Koresh enters the perimeter of the compound -
 the catch then is that agents converted in the compound would
 immediately be dropped off and can't be used in combat. Dropped
 off converts count towards the player's conversion score

Converts AI is very important and should allow them to follow and
 flock to their Koresh - the amount of converts allowed at any
 time should be derived from Koresh's Current Aura value
 w/formula:

MAX followers = CURRENT Aura/50 (if rounded up this will allow
 0-16 followers at any point)

IMPORTANT NOTE: THE CONVERT LIMIT SHOULD BE TESTED FOR LAG and
 may need to be lowered to 8 or even 4 - in addition **should keep
 the polygon count down for converts (ATF/FBI models)**

I like the idea that converts don't run around on their own but
 pretty much mirror and amplify what Koresh does so they could
 form a protective ring around him - always orient in his
 orientation and always fire when he fires
 (Arranging themselves so for example if there is one follower he
 runs in front of Koresh but can not be shot by Koresh, if two
 they are side by side if three arranged at 120 degrees apart so
 they fan around to create a circle maxing out with 16 followers
 all around 22.5 degrees apart...)

Converts' bullets should not be allowed to hurt their Koresh, and
 Dividians)

If and When Aura drops to a level below what is necessary to keep
 a convert the last convert added to the Koresh is unconverted
 Back to ATF or FBI

A Koresh's Converts can be stolen (reconverted) by another Koresh
 if they fall under his Aura and fail their conversion "saving
 throw"

. **Other Koresh (Player Characters)-**

Koresh' weapons should not damage other Koresh physically but
 harm can be done to other Koresh' Converts, and Aura -

Shooting another Koresh' converts can kill them

When Koresh fall under another Koresh' Aura they experience an Aura drain - it is possible then for two Koresh standing next to each other to drain each other's Auras

. Reporters, Bystanders, Ambulances -

Seen but not interacted with - ie bullets wont hurt them

. Barriers -

Trees, low Fences, walls, terrain - can not be destroyed

V) Stats + HUD

. All these stats should be reflected in the HUD - *graphical solutions should be figured out for dynamic display of all HUD stats!!*

. *Life* - (0-100)

Character health - Starts at 100 goes down to 0 then Koresh dies and is respawned with 100 life

. *MAX Aura* - (0-800)

Starts at 0 increases as books are collected (see book section above to see increases)

MAX Aura value has several effects - it determines the chance of conversion - to use D&D terms - the higher the MAX aura the higher the saving throw target number is that a potential convert must roll against - note all convertible (no roof) enemy entities need to have a saving throw vs. conversion modifier to see how easy it is to convert them - since now only two types of convertible enemies exist - ATF and FBI , need to decide who it is harder to convert and give them a modifier - I would suggest a d1000 roll with any roll(+ modifier) above the MAX Aura considered a resist and any roll below or equal to the MAX Aura a failed resist resulting in a conversion - the modifiers then should be on the order of +100 or so for FBI if decided that they are harder to convert

Attempts to convert other Koresh' converts should include a modifier based on their "owner's" *MAX Aura* (or maybe less obviously *Current Aura*) that makes it more difficult to convert them

. *Current Aura* - (0-800)

Starts at 0 is increased when proper phrases are uttered correctly

Aura id drained with time needs to be replenished through utterances

Current Aura value has several effects - it determines the number of *MAX converts* and the range at which the aura operates and the physical depiction of the *Aura effect around the character*

. *MAX converts* - (0-16, 0-8 or 0-4 depending on framerate)
Number of converts that can follow Koresh at any given time

. *Current Converts* - (0-16 or 0-8 or 0-4 depending on lag)
Number of converts currently following Koresh - if *MAX converts* drops below *Current Converts* convert reverts to original state

. *Convert Score* or *Total Converts* - (0-infinity)
Number of converts dropped off at compound
This is basically the player's "score"

. *Time remaining* - (10:00 - 00:00)
Display the time remaining in the round

- . *Koresh Color* - (red, blue, green, yellow)

Show in the HUD to identify which Koresh player is

- . *Books collected* - (any combination of the 5 books)

The HUD should display which books the player has collected - a suggestion for HUD here is to reserve graphical place holders for each + maybe even leaving room for the phrase that is associated with each book - this could become the book's name in the HUD

If *special effects* are added to books then they should be represented in the HUD

- . *Current Weapon(s)* - (an image of the current weapon)

I would suggest adding multiple weapons as a later feature - but if its in the plan should allow the HUD to cycle thru them

- . *Ammo* (0-clip size*clips)

I would suggest unlimited ammo for now - add as a later feature

VI) Game Flow/Character Development

. Player should be enticed to explore and "collect" ATF agents bringing them back to the compound for conversion (dropped off converts should disappear so as not to clog up compound)

. More powerful books will fall in farther more dangerous locations - serve as catalyst to explore game arena and improve character aura

. Once psyops begin there is an incentive to venture out and destroy the towers (**maybe add an individual- rather than collective reward for this**)

. Character development should not be too complex for a 10-minute game - **something to think about....**

. Maybe more attention should be played to more specific rooms in the compound to entice compound exploration and navigation

So far player has a special reason to visit only - drop off room, weapons room (if extra weapons are used or ammo), pool, tower

Maybe being in the vicinity of Dividians can also prevent aura drain or even increase it? a good idea maybe

. Player vs. Player competition has a natural incentive to "steal" converts as they are being delivered to compound

. **BIG question** to figure out - why defend the compound?

One assumption: is that players must return to compound anyhow to drop off converts and will defend it by default so no reason to add to this (weak))

Two Solution: is to add a life bar to the compound (ala PS2 gme "the two towers", and also add more book powers later to quell fires and command dividians to repair and rebuild - very rts aspect

Another suggestion is to have personal (per Koresh) repercussions to Compound attacks and Dividians dying - i.e. loss of aura or loss of "deposited converts" as Dividians die...

VII) Phenomenological game design/ Physical interface notes

. Having a physical interface is an important part of the game and actions that use it should be central to gameplay - can do allot with some simple devices that can radically alter the game experience -

. using phenomenological effects - or effects diegetic to the Player's reality should be something to keep in mind -

Examples:

1. Using the psyops to thwart the Player's concentration
2. Using the mask as a confining/immersion device
3. Using the head vibration to channel special effects
4. Allowing players to hear their own and other Koresh's voices while playing
5. Players being able to see the other players in real life
6. Using real recorded audio - figure ways to integrate **Koresh's singing** in the compound + psyops + other documentary materials
7. Audience hanging around
8. Split screen projection screens + miked sound
9. Using the Faces and Names of the real FBI, ATF and Dividians as in game texture maps
10. Addressing the NPC by their real names - changes the way you interact with them emotionally

lists:**3d models:****Chracters:**

Koresh (4 versions red,yellow, green,blue)
 Dividian male (3 versions)
 Dividian female (2 versions)
 Dividian male child (2 versions)
 Dividian female child (2 versions)
 Dividian Spawn
 ATF (2 ver)
 ATF boss
 FBI (2 ver)
 FBI boss
 Converted ATF (4 colors)
 Converted FBI (4 colors)
 Bystander male (3)
 Bystander female (3)
 Reporter (2)

Structures:

Mt Carmel compound
 pool w/water
 Tower w/ladder
 Fence
 Other buildings background?

Vehicles:

Special APC w flame arm
 Special Truck with speaker in bed
 Dividians' cars (5 ver)
 ATF/FBI truck ?
 pickup truck (3 ver)
 Bus
 Ambulance
 Fire engine
 Helicopter

Items:

American flag - Wave
 Texas flag - Wave
 Books (5 colors)
 AK47
 AK??
 Special Gun ring (for gun show spell)
 M16

Guitar
Musical instruments
Computer
misc indoor

Misc:
trees
shrubs
grass

3d Animations/poses:

koresh move
koresh mount weapon (later book, guitar)
Koresh convert anim
Koresh Cast anim
ATF/FBI converting anim
everybody move
koresh die
everybody die
koresh spawn (quicken)
ambient anims for bystanders
vehicles anim
Special APC anim
Vehicle deform textures or anims
Mt Carmel deform Anim
American flag - Wave
Texas flag - Wave

HUD Graphics:

png format - with transparency alpha chaneels

lifebar

Current Aura/ Total Aura representation

Book icons 1-5

weapon icons (Ak 47, M16)

followers icon

Decals and Particle Graphics:

png format - power of 2 dimensions ie 4x4,32x32,25x256 pix etc)

bullethole decals (5 var)

burn decals (5 var)

fire particle (5 var)

cross

gun

heal

koresh (convert)

Sounds

Format: MONO, 22khz, 8bit .WAV

ATF talk (3)
 FBI talk (3)
 ATF yell (3)
 FBI yell (3)
 FBI on phone
 Reporter talk(5)
 Bystanders talk (5)
 Koresh sing
 Koresh talk
 Koresh on phone
 FBI negotiator talk
 news report
 Psyops stream (4 types)
 Ambient soundtrack
 bullets
 Fire burning
 Crashing
 explosion (5 types)
 Pickup Truck driving
 Tank driving
 chopper
 coyote
 owls
 birds
 chirps
 footsteps
 crashing
 magic sounds (5)
 "convert" phrase voice over
 "gunshow" phrase voice over
 "heal" phrase voice over
 "levitate/fireproof" phrase voice over
 "fire and brimstone" phrase voice over
 baby cry
 instructions voice over + text

CODE Snippets

player control - keybinding

ATF/FBi AI

follower AI

Dividian AI

Aura convert code

Aura visual code

Voice recognition code

Hardware feedback code

Doors code

"Spell" code

Sound code

book/meteor visual code

book/meteor functionality code

Multitplayer testing

Daynight code

Radiosity code

Particle effect visuals code

Particle effect damage code

Vehicle/structure deform code

Animation control code

HUD code

 visuals

 functionality(time, score, aura, items...)

Timer/events code

Game cycle code

mission cleanup code

Climb tower code

item mount code

weapon damage code

water code

...

Physical/Hardware

router

4 PCs (keyboards, mice, net cards, 3d cards, sound cards..)

video splitter

audio mixer (8 port)

headphones (4)

Koresh Heads (4)

Head hardware

Carrying cases

microphones

cbales to heads

backup data storage