PLEASE STAND BY

Fallout: A Postmortem

Timothy Cain
Obsidian Entertainment

Fallout overview

- Development began in early 1994
- Shipping
- Team size
- Total cost

Not your typical Interplay game

- No license
- No engine
- No budget
- No staff
- No plan

Fallout postmortem

- One take-away: AMAZING TEAM
- Influences
- Challenges
- Legacy

Influences

- Computer games
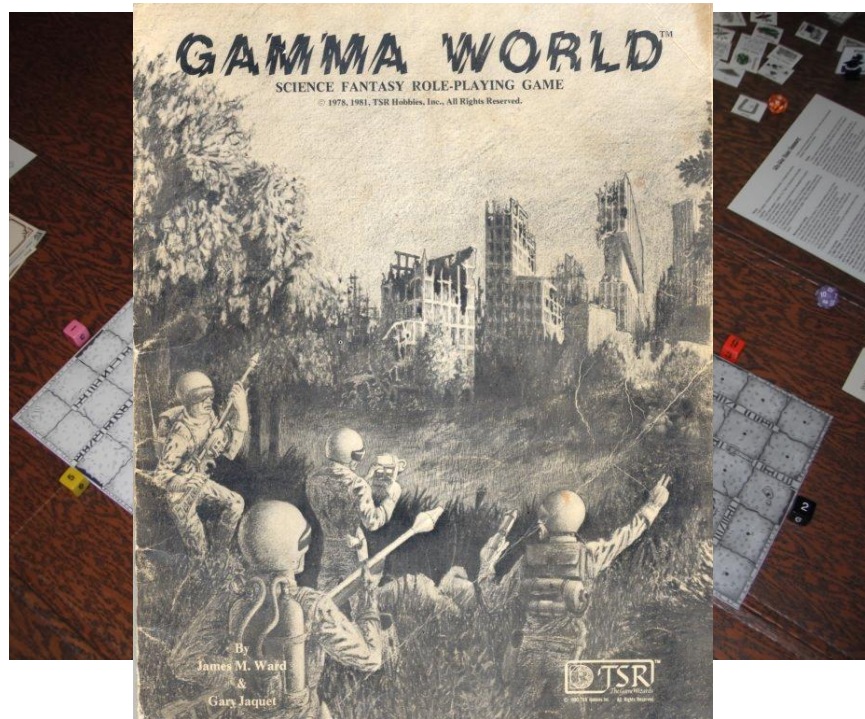- Paper & Pencil and board games
- Books
- Movies

Computer game influences

- XCOM
- Crusader
- Wasteland
- Ultima series
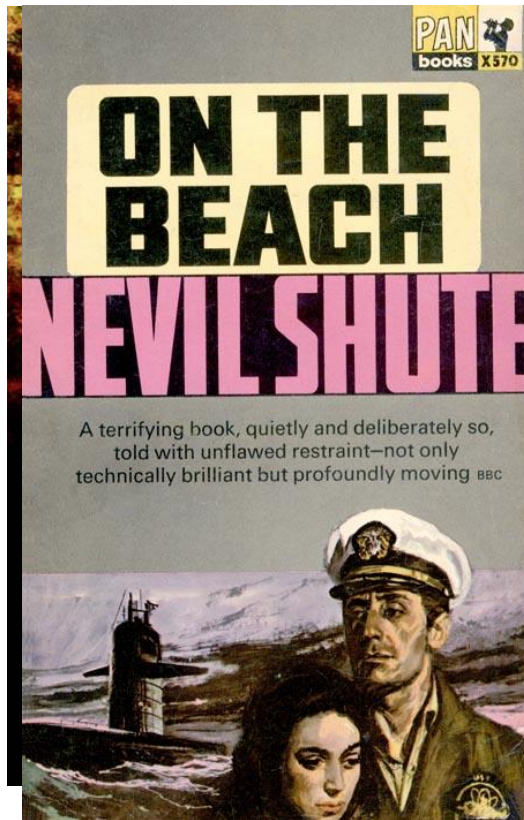
Paper and board game influences

- GURPS
- WizWar
- Gamma World

Book Influences

- *A Canticle for Leibowitz* by Walter M. Miller

- *I Am Legend* by Richard Matheson (and the movie Omega Man)

- *On The Beach* by Nevil Shute (and the film)

Movie Influences

- Road Warrior
- A Boy And His Dog
- The Day After
- Forbidden Planet
- City Of Lost Children
- La Jetée

Challenges

- Team
- Design
- Technical
- Legal

The game was almost canceled...twice!

Team challenges

No resources

- Just me for first six months
- 1 artist and 1 scripter
- 15 people in year 2
- 30 people in year 3

Early development

- Rough
- First prototype (circa 1994)

Conveying the idea

- Hiring new people
- Explaining to marketing
- Convincing the administration

Chris Taylor made a wonderful vision statement.

Fallout vision statement

FALLOUT

A GURPS Post Nuclear Adventure

Vision Statement
(or why this game is damn cool)

1. Mega levels of violence (you had better give us that Mature rating right now)
You can shoot everything in this game: people, animals, buildings and walls.
You can make "called shots" on people, so you can aim for their eyes or their
groin. Called shots can do more damage, knock the target unconscious or have
other effects. When people die, they don't just die – they get cut in half, they
melt into a pile of goo, explode like a blood sausage, or several different ways –
depending on the weapon you use. When I use my rocket launcher on some
poor defenseless townsperson, he'll know (and his neighbors will be cleaning up
the blood for weeks!)

This is the wasteland. Life is cheap and violence is all that there is. We are going
to grab the player's guts and remind him of this.

Final team challenge: long hours

- Team was very small
- Most worked nights and Saturdays
- Crunch meant working 12-14 hour days
- QA volunteered to work weekends for free

Design challenges

Setting

- Considered fantasy
- Then time travel: dinosaurs to space
- Invading aliens
- Finally…post-apocalyptic

D&D license

- Interplay acquired Forgotten Realms and Planescape in late 1994
- Fallout considered for cancellation
  - Treated as a B product
  - Too competitive with other products
- In the end…I begged

View

- 3rd person
- Isometric (cavalier oblique)
- Hexes
  - Good for rotation
  - Good for distance calculation
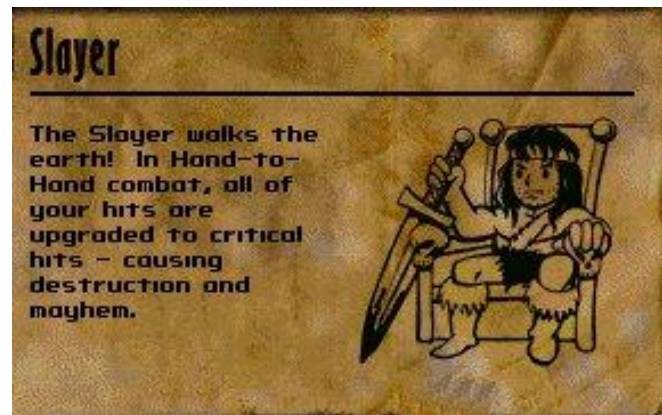 - Bad for up-down movement

Game timer

- Player had to finish first quest in set time
- Added for a sense of urgency
- Controversial, even among the team
- Removed in first patch

Cultural references

- A lot: TV, movies, games
- Worried about losing players,feeling dated
- Rule for jokes and references:
  - If the player doesn't get them, they shouldn't even notice them.

Slayer

The Slayer walks the earth! In Hand-to-Hand combat, all of your hits are upgraded to critical hits – causing destruction and mayhem.

Example: Gizmo

- Good name by itself
- Gremlins reference?
- Nope. Inside joke.

Naming the game

- Vault13
- Alternates: Aftermath, Survivor, Postnuclear Adventure
- Fallout

Naming the system

- New system of seven stats: Agility, Charisma, Endurance, Luck, Intelligence, Perception, Strength
- ACELIPS
- Jason Suinn suggested SPECIAL

The coming of Diablo

- Released late 1996
- Real-time, multiplayer, isometric RPG
- Comparisons, doubts, meetings

Technical challenges

Flat memory

- We chose a linear memory model
- Upsides
  - No expanded or extended memory
  - No near and far pointers
- Downside
 - Old code was rewritten or tossed

Super VGA

- 640x480 with 256 colors!
- Art made with 16-bit color
- Color cycling reduced palette
- Until VESA in 1994, each video card chipset was separately coded

Sprites

- Gave high detail
- Led to large memory footprint
- Polygons just beginning to be popular

Talking Heads

- Leonard Boyarsky's idea

- Scott Rodenhizer made most of them

- Took 8 weeks / head

- Then came phoneme matching!
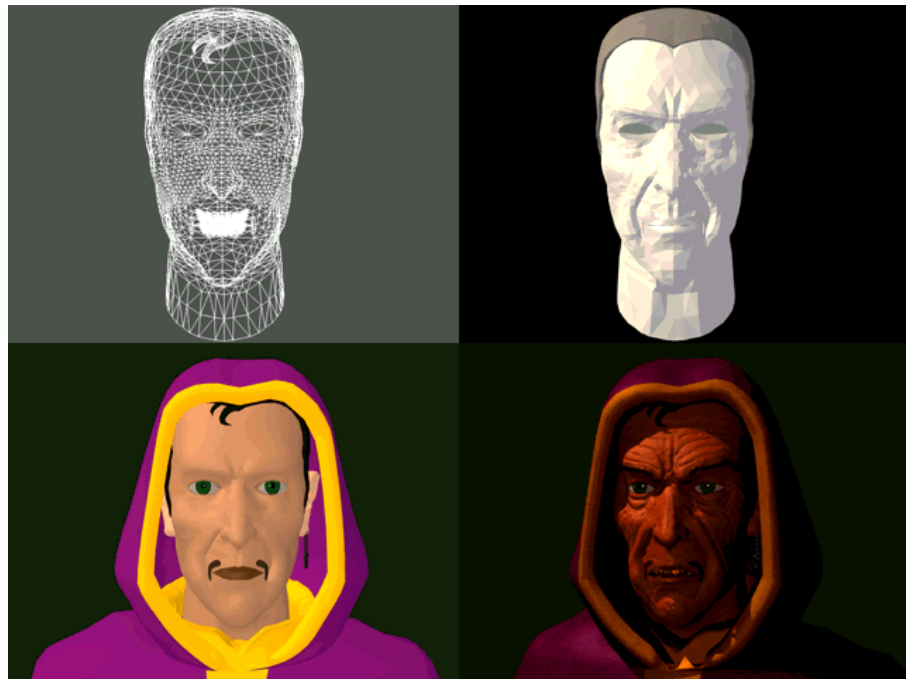
Followers

- Not in original spec
- No time to code
- Added thru script
- Well-received
- Major source of bugs

Win95 certification

- Interplay wanted the Win95 logo
- Failed cert because we worked on WinNT
- Recoded installer to fail
- (hand installation still worked)

Simultaneous Mac development

- Assisted by an OS abstraction library
- 1 Mac person on team of 30 (Tim Hume)
- Interchangeable save games

Legal challenges

GURPS

- Fallout was based on this license
- Disagreement over design and art
- Too late to change these
- Fallout almost canceled again
- GURPS torn out, skills and combat redesigned and recoded in 2 weeks

Music

- Chose Inkspots
- Wanted "I don't want to set the world on fire"
- Negotiations were slow, too expensive
- Picked a new song: "Maybe"
- Fit the beginning and ending movie better

Rating

- Originally went for T for Teen
- Violence, drugs, sexual references
- Got an M rating!

The child-killing controversy

- We allowed it, huge ramifications in game
- Contributed to the M rating
- Had to be removed in European SKU

Legacy

- Shipped in October 1997
- Risk paid off
- Many features and development processes still seen in games today
- Let's look at what worked…

Open world

- Sandbox before the term
- No area restricted
- Only limits were creature difficulty

Non-linear story

- Player free to go where he chose
- Story unfolded naturally over time
- Multiple solutions to quests and story

Multiple endings

- Game tracked your behavior
- Quest and story endings based on what you did
- Game's end slides reinforced this

No morality

- Grey-area quests
- Player can be good or evil
- Must live with consequences

Perks

- Brian Fargo wanted more than skill raises
- Invented by Chris Taylor in a day
- Characters can grow and differentiate
- Easy to implement
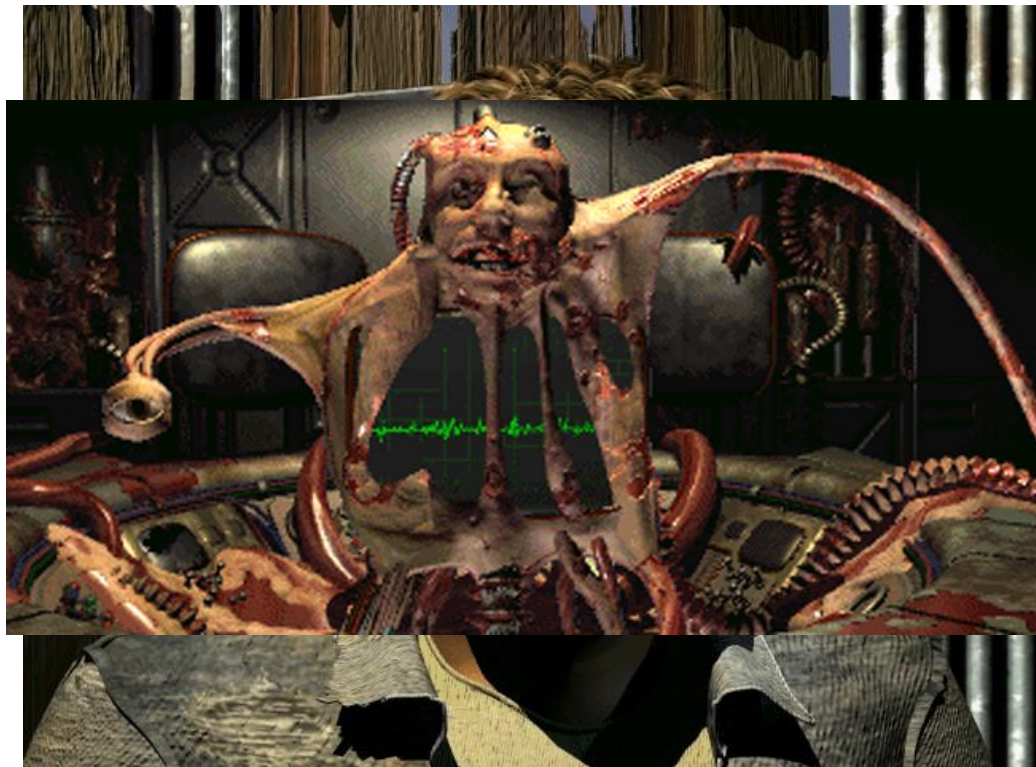- Influenced D&D 3, WoW, Oblivion, Skyrim

Called shots

● Added variety to combat

● Allowed multiple reactions to the same combat attack

● Supported our dark humor motif
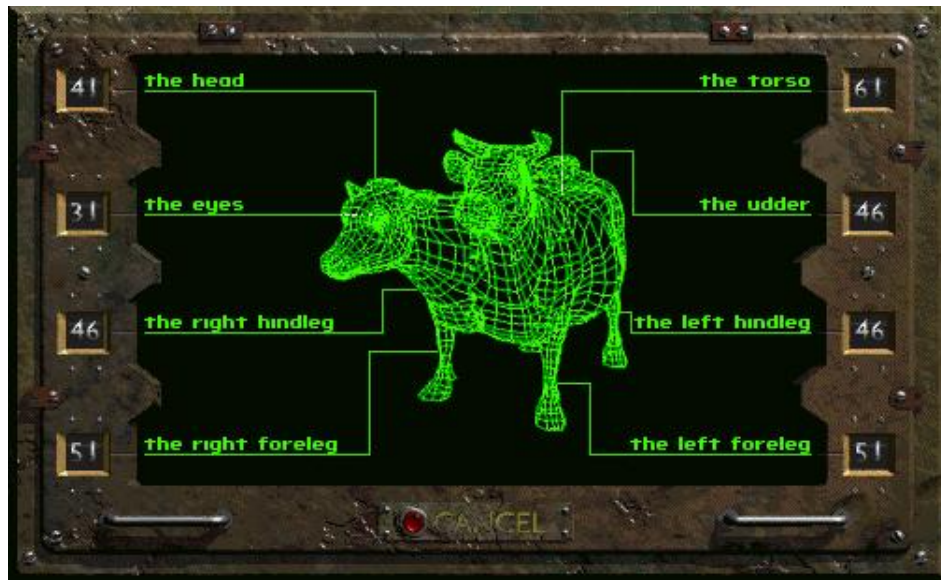
Faces and VO

- Detailed faces, famous actors
- Connected to people
- Expensive

Ambient music

- Made as a score
- Wanted the player to listen
- Underscored desolation of the setting

Development processes, part 1

- Vision statement
  - Coordinated the team
  - Communicated to the company
  - Assisted marketing

Development processes, part 2

- Reusable software
  - OS abstraction
  - Movie player
  - Script engine

The game as an experience

- Box

- Manual

- Logo

- Interface

- Splash screens

- Web page

Amazing team

- Talented
- Hard-working
- Ego-less
- Focused on the same goals

Thank you!