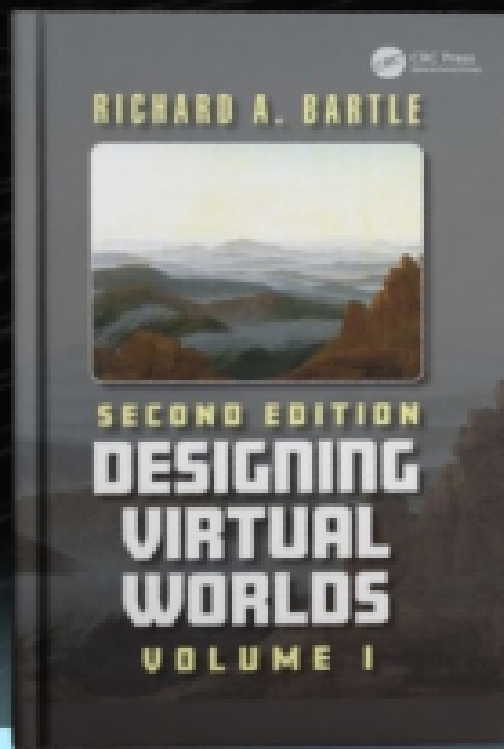
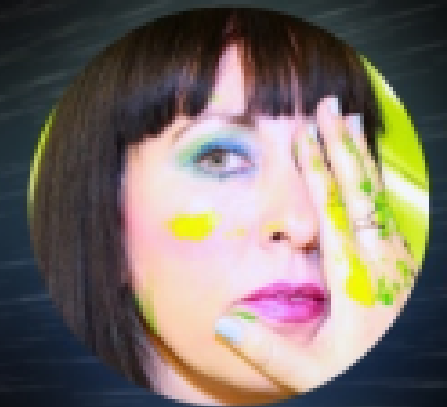
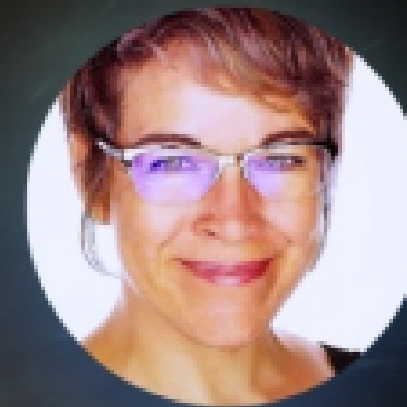




VIRTUAL WORLDS MUSEUM™ PRESENTS:

Evo Heyning, Richard Bartle, Paige Dansinger,
Andy Fidel, Julie Smithson, Karen Alexander
and the teleportal



Monday, Nov 10

10 am PST • 1pm ET • 7pm CET

hosted in

 **ENGAGE**

DESIGNING VIRTUAL WORLDS: PAST, PRESENT, FUTURE

Em. Prof. Richard A. Bartle, Co-Creator of MUD1

Further, web3 solutions cause new problems for a metaverse platform without adding any value. Richard Bartle, the game industry's most respected expert on virtual worlds, recently wrote an essay on my blog where he recounted his futile attempts to bring this to web3 advocates.

Virtual World Museum

10th November 2025

THE BEGINNING OF VIRTUAL WORLDS

MUD1, 1978 – THE FIRST VIRTUAL WORLD

In 1978, MUD1 wasn't just a game—it was a world. It offered persistent environments, player agency, social interaction, and emergent storytelling. MUD1 was not a prototype; it was the first fully realized virtual world.

```
Narrow road between lands.  
You are stood on a narrow road between The Land and whence you came.  
To the north and south are the small foothills of a pair of majestic  
mountains, with a large wall running round. To the west the road  
continues, where in the distance you can see a thatched cottage  
opposite an ancient cemetery. The way out is to the east, where a  
shroud of mist covers the secret pass by which you entered The  
Land. It is raining.  
*W  
Narrow road.  
You are on a narrow east-west road with a forest to the north and  
gorse scrub to the south. It is raining. A splendid necklace lies  
on the ground.  
*
```

Mud, Roy Trubshaw & Richard Bartle

This is a mock-up of what the screen looked like, because in 1978 we had no screens

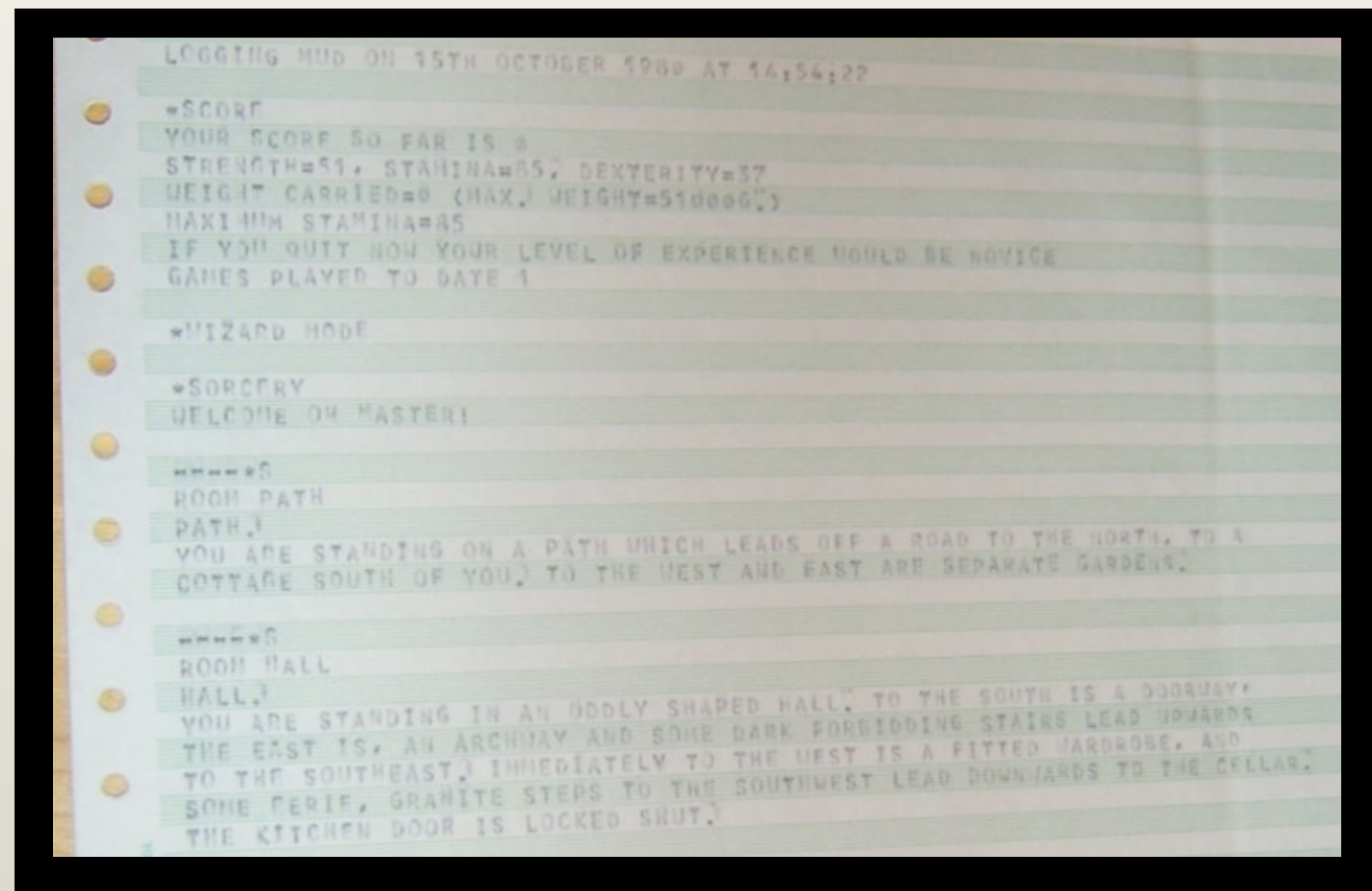
WHAT IS A VIRTUAL WORLD?

A VIRTUAL WORLD = SHARED, PERSISTENT, INTERACTIVE REALITY

A virtual world isn't defined by its graphics or platform. Whether text or VR, it requires:

- *Shared space (multiple participants)*
- *Persistence (it continues when you're gone)*
- *Interaction (with others and the environment)*
- *Has Physics*
- *Real-Time*
- *Is Not Real*

This definition applies to all worlds that followed.



Printout of a 1980 mud log

THE GENESIS

THE STORY OF VIRTUAL WORLDS

The Story of Virtual Worlds Begins

The story of virtual worlds formally begins in October 1978—probably on a Friday—at the University of Essex, UK.

At that time, a second-year computer science undergraduate named Roy Trubshaw wrote a short program he called MUD, which stood for Multi-User Dungeon.

I became involved early on, contributing to what we would now call content design—though no one used that term back then.

In Easter 1980, when Roy began preparing for his final exams, I took over code ownership of MUD.



Roy Trubshaw, Multi-user dungeon

I can tell it's not from 1978 because he's sitting at monitor rather than at a teletype or a card punch

THE EARLY DAYS

THE FIRST, SECOND, AND THIRD AGES

- First Age: Birth of text worlds (MUDs, early roleplay systems)
- Second Age: Commercialization—pay-to-play MUDs, early community governance
- Third Age: Great Schism between social and game worlds.

- *Sceptre of Goth* (originally *e*m*p*i*r*e*), Alan Kietz, University of Minnesota, 1978
- *Avatar*, Bruce Maggs, Andrew Shapira & David Sides, 1979
- *Island of Kesmai*, Kelton Flinn & John Taylor, 1981
- *Habitat*, Randy Farmer & Chip Morningstar, 1985
- *Monster*, Rich Skrenta, Northwestern university, 1989

THE EARLY DAYS

SCEPTER OF GOTH



CIRCA 1984 PHOTO OF Alan Klietz, who wrote
Scepter of Goth

I'm Showing IT TO GIVE YOU SOME CULTURAL
Context – ALSO TO MOCK HIS HAIRSTYLE

```
The Scepter of Goth Fantasy Role-Playing Game Version 3.12 (Run 1087)
Notice: That which was once ours is ours again and will never be taken from us!

Enter your name (or 'quit'): Richard
Please select your character's class:
Fighter, Thief, Cleric, Paladin, Ranger, Magic-User or Lady.
Class? Paladin
Choose your character's attributes for strength, intelligence, dexterity, piety and constitution
Each must be between 5 and 18 and the average must be 11 or less (EG: 15,7,9,10,9)
Stats? 15,5,10,15,10
Which weapon is your most skillful?
Choose from: sharp, thrusting, blunt, or pole weapons
Skill? sharp
Finally, is your character a male or female? m
Character file updated.

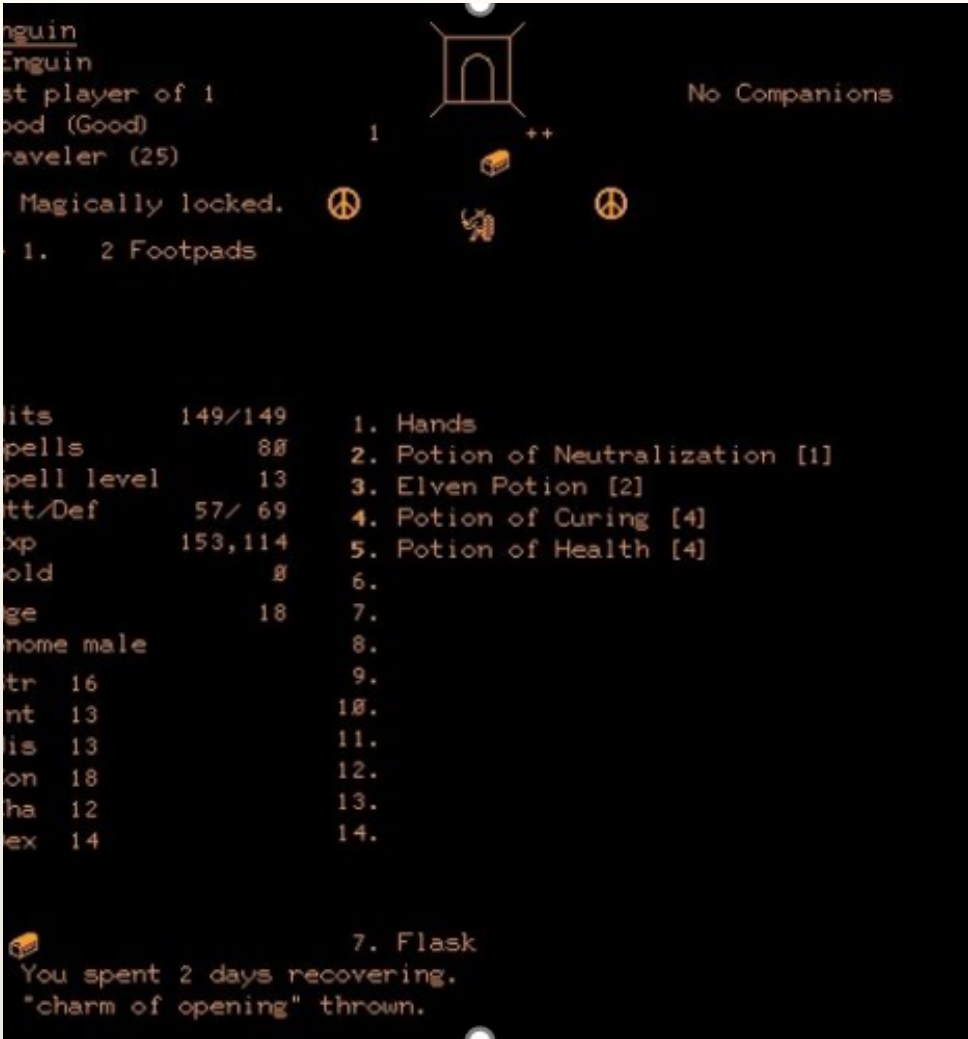
Now entering the lands - type 'HELP' for help or 'QUIT' to quit.

### Please welcome Richard the Paladin.
You're standing in the busy marketplace of Town Square.
Obvious exits are south, east and west.
You see a charity chest, a welcome sign, a sparkling fountain and Town Hall.
Do? -
```

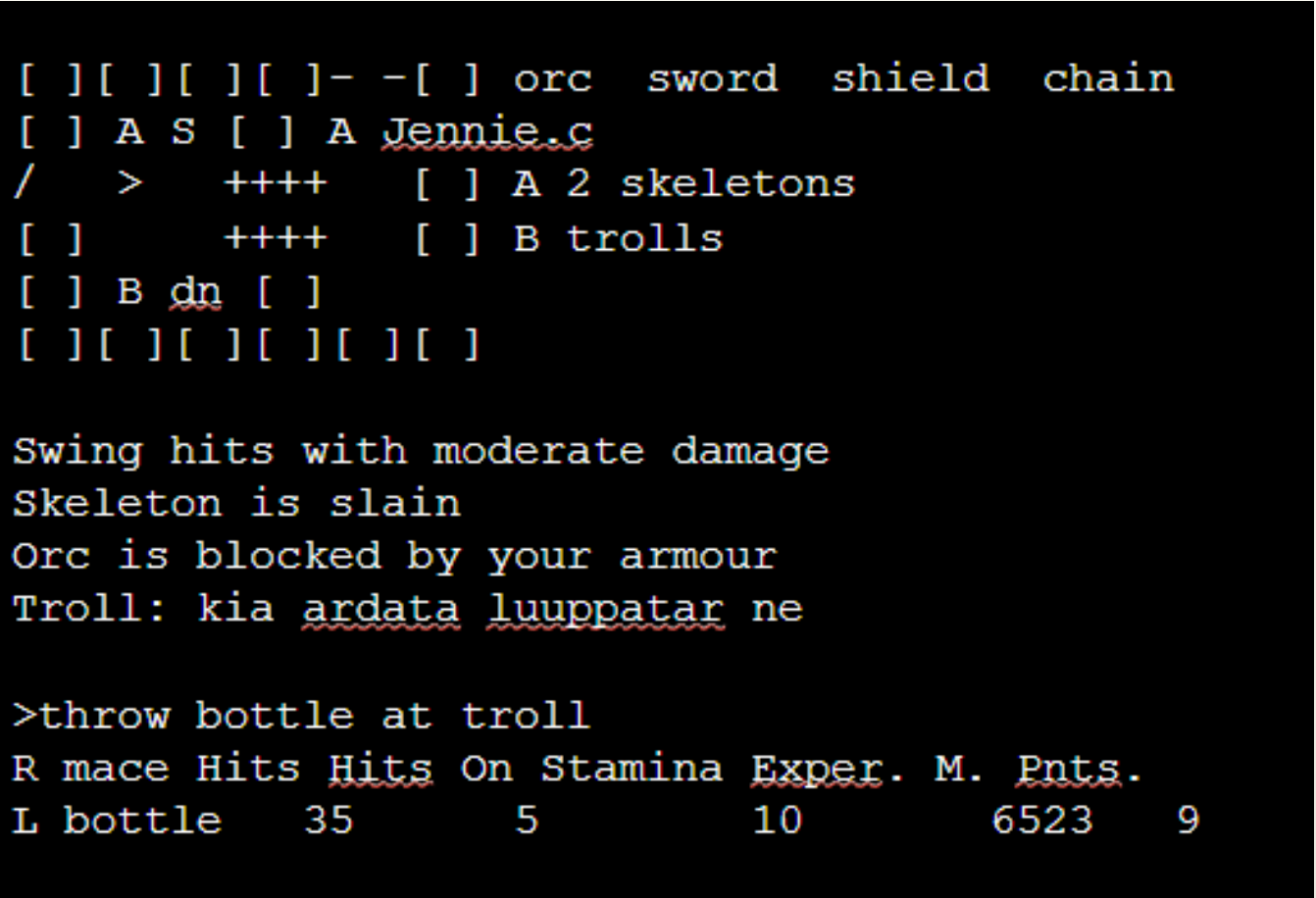
THE EARLY DAYS

AVATAR

FIRST GRAPHICAL
VIRTUAL WORLD?



ISLAND OF HESMAI ASCII GRAPHICS



HABITAT

MORNINGSTAR & FARMER

Aric Wilmunder (artist,
client programmer), Chip
Morningstar (designer,
project lead), Janet Hunter
(back end programmer),
Randy Farmer (designer,
server programmer)



THE SECOND ERA | BREAKING FREE | THE GREAT SCHISM

MUD1

THE SECOND AGE (1985-1989) BEGAN WHEN PEOPLE WERE INSPIRED BY FIRST-AGE VIRTUAL WORLDS TO WRITE THEIR OWN

THIS MAINLY HAPPENED IN THE UK, WITH *MUD* BECAUSE IT WAS NON-COMMERCIAL

BY 1985, 20+ VIRTUAL WORLDS HAD BEEN WRITTEN BY PLAYERS OF *MUD1*

MUD1 AS “MUD” WAS NOW USED FOR THE GENRE

THE BIG 3 WERE *MUD1*, *SHADES* AND *GODS*

THEN THE BIG 4 WITH *MIRRORWORLD*
THEN THE BIG 5 WITH *FEDERATION II*

ABERMUD, ALAN COX, 1987

```
Your wimpy value is set to 15. See 'help change' to see what that means.

The Temple Of Paradise
  You stand in the Temple of Paradise, a huge sandstone structure whose
  walls are decorated with ancient carvings and runes, some so old that even
  the priests no longer know their meanings.
  A single set of steps lead south, descending the huge mound upon which the
  temple is built and ending in the forests below.
  A roaring fire burns here. Its flames make the temple sparkle and glitter.
  At your feet a huge sacrificial pit allows you to give valuables to the gods
  in the hope of being rewarded.
  A furred umbrella lies here.

Obvious exits are:
North : Welcome Center
South : Forest Track
Down  : Forest Track

Last login: Wed Sep  7 17:43:26 2005

>
```

TINYMUD

- *TINYMUD* DROPPED ALL GAME ELEMENTS AND CONCENTRATED ON BUILDING
- IT BURNT OUT QUICKLY, BUT NOT BEFORE INSPIRING STEPHEN WHITE TO WRITE *TINYMUCK*
- HE THEN USED *TINYMUCK* AS A TEMPLATE FOR *MOO*
- IT ALSO INSPIRED LARRY FOARD TO WRITE *TINYMUSH*
- THUS, THERE WERE EVENTUALLY THREE SOCIAL-WORLD BRANCHES COMING FROM *TINYMUD*: THE MUCKS, MUSHES AND MOOS
- MOST FAMOUS OF THESE WAS *LAMBDAMOO* – THE *SECOND LIFE* OF ITS DAY

DIKUMUD, COPENHAGEN UNIVERSITY, 1990

DIKUMUD

- FREED FROM HAVING TO SATISFY NON-GAMERS, THE GAMERS WENT HARD CORE
- *DIKUMUD* WAS ALL GAME
- IT WAS VERY EASY TO SET UP, AND WE GOT OVER TWO THOUSAND DIKUS AS A RESULT
- LARS PENSJO'S *LPMUD* WAS A MIDDLE WAY
- IT KEPT GAME MECHANICS BUT WAS PROGRAMMABLE
- DIKUMUDS BRUSHED LPMUDS ASIDE
- IN 1993, JUST BEFORE THE WWW, 11% OF ALL INTERNET TRAFFIC WAS FROM MUDS

```
[x2] A barrel has been left here.
An angry-looking statue of Hoturi is standing here.
An angry-looking statue of Priapus is standing here.
A statue of Odin is standing behind the altar.
A Sign for Newbies is here.
You are a guest here until you save yourself.

If you need
to get to your guild, use the guild medallion in your inventory. If you lose
it, pray to the statue of Odin for another.

105m/202e/38hlook
Temple of Udgaard
    You are inside the small and humble village temple in Udgaard. A simple
stone altar, with strange stone carvings, is placed against the north wall. A
small humble donation room is to the east. The temple exit is south to the
Village Square.
[x2] A barrel has been left here.
An angry-looking statue of Hoturi is standing here.
An angry-looking statue of Priapus is standing here.
A statue of Odin is standing behind the altar.
A Sign for Newbies is here.

105m/202e/38h
```

THE THIRD | THE FOURTH | AND THE COLLAPSE

THE THIRD ERA

- THIS SCHISM BEGAN THE THIRD AGE, 1989-1995
- IN THIS ERA, THINGS SETTLED DOWN:
- 1989 *TINYMUD* SOCIAL
- 1989 *LPMUD* BALANCED
- 1990 *DIKUMUD* GAME
- 1990 *TINYMUCK* SOCIAL
- 1990 *TINYMUSH* SOCIAL [ROLE-PLAYING]
- 1990 *MOO* SOCIAL [EDUCATION]
- 1991-PRESENT ONE OF THE ABOVE...
- NOTE THAT THE CAPACITY FOR INNOVATION FELL ONCE GAME ENGINES BECAME A VIABLE OPTION
- ARE WE SEEING THE SAME THING WITH UNITY AND UNREAL ENGINE GAMES?

THE FOURTH ERA

- THE FOURTH AGE OF VIRTUAL WORLDS (1995-1997) WAS THE SHORTEST BUT MOST EXCITING
- A 1993 PRICE WAR MADE THE INTERNET ACCESSIBLE TO ORDINARY US COMPUTER-USERS
- HORDES OF AMERICANS SIGNED UP, LOOKING FOR SOMETHING TO DO
- AOL SIGNED UP THE BEST COMMERCIAL GAMES IT COULD AND PAID A GOOD ROYALTY
- AT THEIR HEIGHT, THESE GAMES WERE RAKING IN \$1,000,000 A MONTH EACH!
- THE REASON: PER-HOUR CHARGING
- THE LONGER YOU PLAYED, THE MORE YOU PAID

THE COLLAPSE

- HOWEVER, SMALL BULLETIN-BOARD COMPANIES SET THEMSELVES UP AS LOCAL INTERNET PROVIDERS AT A FLAT RATE
- AOL HAD TO GO FLAT RATE TO COMPETE
- BY 1997, THE MONEY FLOW HAD DRIED UP
- THE FOURTH AGE WOULD HAVE REVERTED TO THE THIRD AGE HERE EXCEPT FOR ONE THING
- AT ITS PEAK, *GEMSTONE III* WAS ATTRACTING 2,000-2,500 SIMULTANEOUS PLAYERS
- WHAT IF YOU COULD GET 10 TIMES THAT?
- YOU COULD MAKE MONEY CHARGING A FLAT RATE!



Neverwinter Nights, 1991



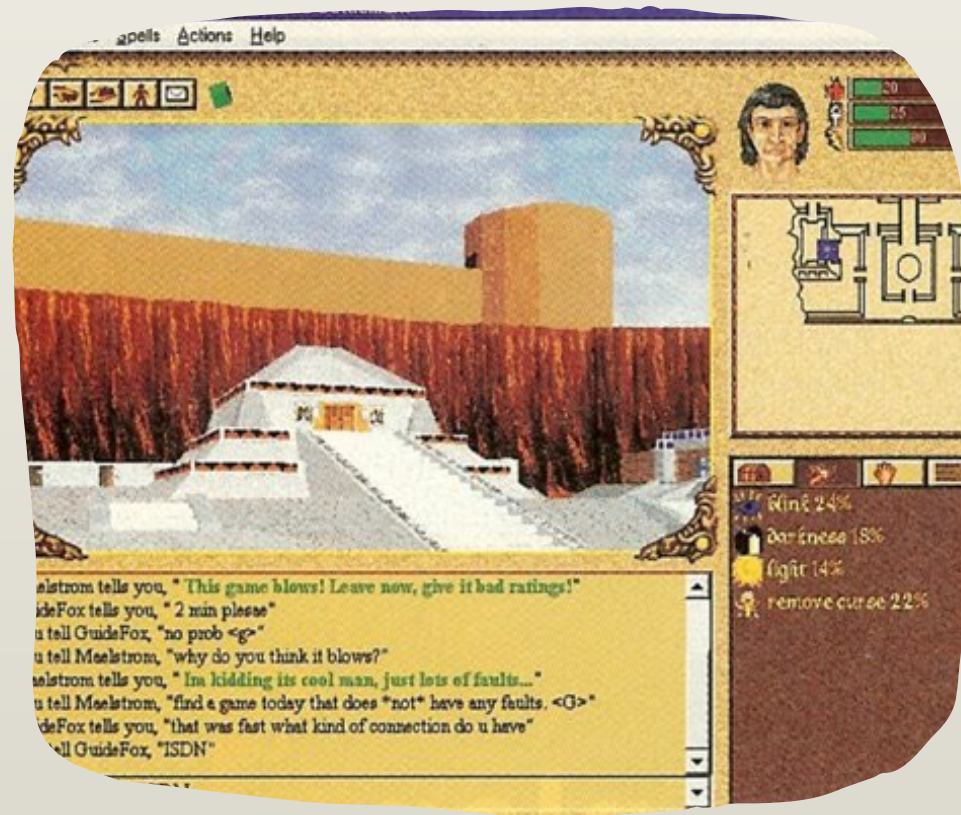
Kingdom of Drakkar, 1992



The Realm. 1997



Shadow of Yserbius, 1997



Meridian 59, 1996



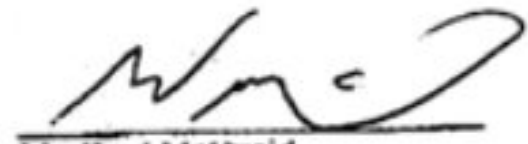
Ultima Online, 1997

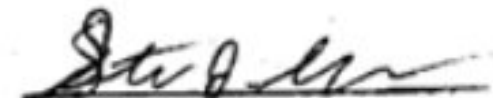
SWORN STATEMENT

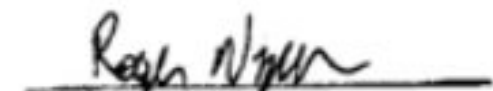
As programmer on the server side of EverQuest on we hereby declare, that:

EverQuest was not based on DIKU MUD Source code, nor is there any DIKU MUD Source Code in EverQuest. EverQuest is not a derivative of DIKU MUD. The EverQuest Source Code was built from the ground up. EverQuest has not, in whole or in part infringed on any copyrighted DIKU MUD material.

I hereby declare that the above is the full truth.


Mr. Brad McQuaid


Mr. Steve Clover


Mr. Roger Uzun



***Everquest resembled Dikumud,
except for the graphics***

***M59's Damion Schubert, AC's Jeremy
Gaffney, UO's Raph Koster***



Lineage, NCSoft, 1997



Everquest, Sony Online Entertainment, 1999



World of Warcraft, 2004



Habbo Hotel, 2000



Second Life, 2003



Roblox, 2006



Minecraft, 2009

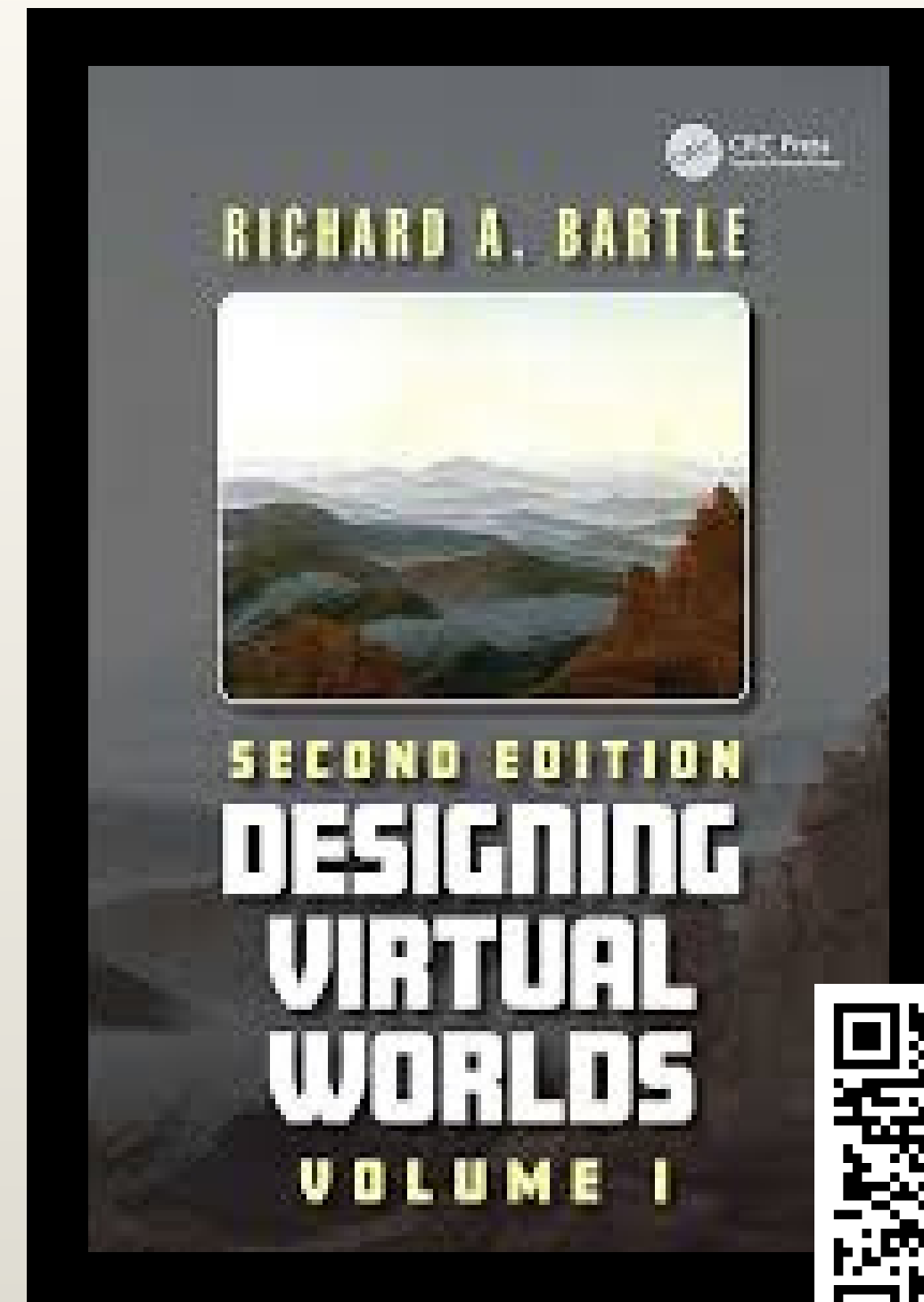
THE SIXTH ERA

- The switch in revenue model from subscription to free-to-play caused a sea change in virtual world design
- 2012 was the tipping point
- We're now in what can be called the sixth age of virtual worlds
- This could end in their death or in their rebirth, but it's going to be traumatic either way
- Watch this space...

THE SEVENTH ERA?

As for what's next, all the following have been suggested in recent years:

- Cloud streaming – no need for client software
- Virtual reality – always 5 years away
- Metaverse – vr/ar in one internet-like world
- Blockchains – move stuff between worlds
- Assets/engines – anyone can make their own world!
- Ai – coding, asset-creation, intelligent npcs, ...
- New revenue models – free games, but rent servers
- Fragmentation – design goes in different directions
- Dilution – design weakened so they're no longer fun

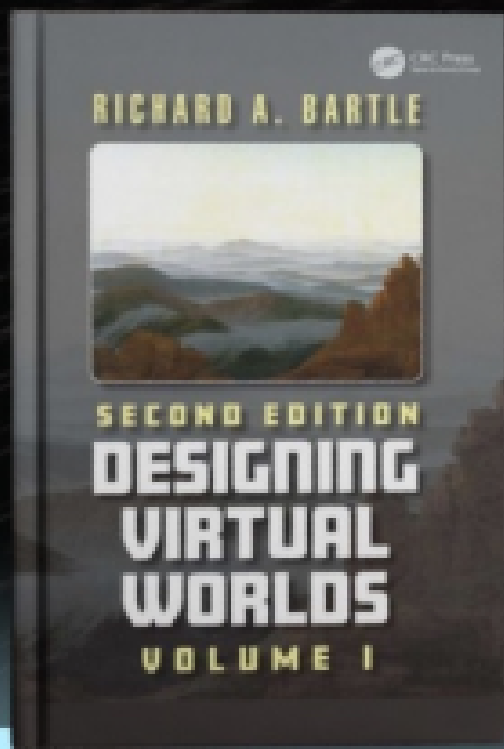
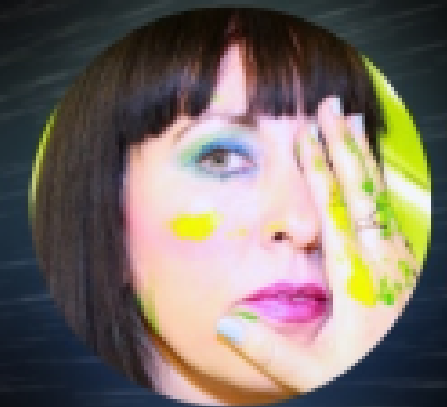
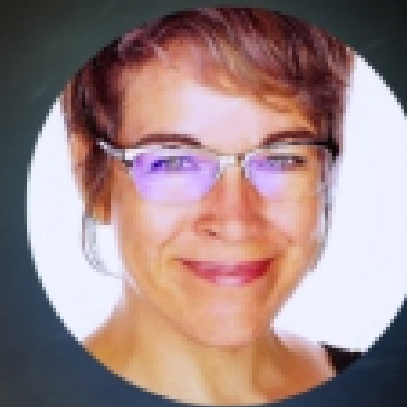


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