HOW TO BE A GOD

A CODE OF CONDUCT FOR DEITIES-TO-BE

BCS EDINBURGH

2ND DECEMBER, 2020

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- HI, SO, I'M **RICHARD BARTLE**, AND I'M HONORARY PROFESSOR OF **GAME** DESIGN AT THE UNIVERSITY OF **ESSEX**
  - AND GUEST PROFESSOR AT THE UNIVERSITY OF **UPPSALA**, SWEDEN
- MY SPECIALIST AREA IS **VIRTUAL WORLDS**
  - MASSIVELY-MULTIPLAYER ONLINE ROLE-PLAYING GAMES
  - MMORPGS FOR SHORT
  - **MMOS** FOR SHORTER
- THERE'S A **REASON** THEY'RE MY SPECIALITY...

- *SECRET WORLD LEGENDS*, FUNCOM, 2017

- I HAD A /PLAYED OF 45 DAYS WHEN I QUIT
  - PLUS **150** DAYS ON *THE SECRET WORLD...*

- STAR WARS: THE OLD REPUBLIC, BIOWARE, 2011

- THE MOST **EXPENSIVE** GAME YET MADE
  - I PLAYED 6H/DAY FOR **137 DAYS** IN 2012

- # WORLD OF WARCRAFT, BLIZZARD, 2004:

EVERQUEST, SONY ONLINE ENTERTAINMENT, 1999

DIKUMUD, COPENHAGEN UNIVERSITY, 1990

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[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
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ABERMUD, ALAN COX, 1987

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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 furled umbrella lies here.

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

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


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- ## MUD, ROY TRUBSHAW & RICHARD BARTLE, 1978

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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.
*
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- ## MUD DIDN'T COME FROM **ANYTHING**

- ## I'VE THEREFORE BEEN **THINKING** ABOUT VIRTUAL WORLDS FOR **SOME** TIME...

- HUMAN BEINGS HAVE BEEN CREATING **VIRTUAL WORLDS** FOR OVER **40** YEARS
  - FIRST IN **TEXT**, NOW IN **3D**, MORE TO COME...
- THESE AREN'T MERE **GAMES** THOUGH
  - OR EVEN MERE **WORLDS**
- THEY'RE **REALITIES**
  - SELF-CONTAINED SPACES OF EXISTENCE GOVERNED BY A PRESCRIPTIVE SET OF RULES – THEIR **PHYSICS**
- THOSE WHO **CONTROL** THE PHYSICS OF A REALITY ARE THE **GODS** OF THAT REALITY

- THIS MEANS THAT **I** AM A **GOD**
  - IT'S **GREAT**! I **LOVE** BEING A GOD!
- NOTE THAT **BEING** A GOD OF SUCH A REALITY **DOESN'T** MEAN I'M THE GOD OF THE REALITY IN WHICH **WE** EXIST
  - ALTHOUGH <NARROWS EYES> IT DOESN'T MEAN I'M **NOT**, EITHER...
- I'LL BE CALLING THE (OBJECTIVE) REALITY **WE** LIVE IN **REALITY** IN THESE SLIDES
  - VIRTUAL WORLDS ARE **SUB-REALITIES** OF REALITY

- THE REALITIES WE CREATE AT THE **MOMENT** AREN'T PARTICULARLY **SOPHISTICATED**
- MOST **GLARINGLY**, THE NON-PLAYER CHARACTERS (**NPCS**) WE POPULATE THEM WITH ARE NOT **REMOTELY** INTELLIGENT
- WHAT IF THEY **WERE** INTELLIGENT, THOUGH?
  - AS SMART AS US OR SMARTER
- WHAT IF THEY WERE ALSO **CONSCIOUS**, **SELF-AWARE** AND ABLE TO **THINK**?
  - IN OTHER WORDS, **SAPIENT**
- CREATING SAPIENCE IS THE **END GOAL** OF AI

- NOW WE'RE SOME WAY **OFF** HAVING NPCS WITH THE **SAME** OR **SUPERIOR** REASONING AND REFLECTIVE POWERS AS US

- HOWEVER, **TIME** IS ON OUR **SIDE**!

- WOULD **100** YEARS BE ENOUGH, DO YOU THINK?
  - OR 100,000? 100,000,000? 100,000,000,000?
  - THE HEAT DEATH OF THE UNIVERSE IS A **GOOGOL** YEARS AWAY

- YOU **WANT** PLANET-SIZED COMPUTERS? YOU CAN **HAVE** PLANET-SIZED COMPUTERS!

- TAKE AS **LONG** AS YOU **LIKE**!

- FROM HERE ON, I SHALL ASSUME THAT WE **WILL** BE ABLE TO **CREATE** REALITIES THAT ARE **EMBODIED** DIGITALLY IN COMPUTERS AND **POPULATED** BY SMART-AS-US NPCS

- MY **AIM** IS TO POINT OUT SOME UNUSUAL **MORAL** AND **ETHICAL** QUESTIONS THAT AI SPECIALISTS OF THE **FUTURE** WILL **FACE**

- NOTE THAT I'LL **ONLY** BE CONSIDERING SAPIENT BEINGS WITH **NO** PRESENCE IN **REALITY**
  - EXCEPT THAT **THEIR** REALITY IS IMPLEMENTED IN IT

- EVIL ROBOT OVERLORDS ARE **NOT** TODAY'S TOPIC

- AS HUMANS, WE ARE **MORAL BEINGS**
- WE **EACH** OPERATE UNDER OUR OWN, PERSONAL **SYSTEM** OF **MORALITY**
  - OUR SENSE OF WHAT'S **RIGHT** AND **WRONG**
- THE **FIRST** QUESTION WE OUGHT TO ASK IS WHETHER THE SAPIENT **NPCS** WE WILL CREATE ARE **MORALLY-CONSIDERABLE**
  - THAT IS, DOES OUR SYSTEM OF PERSONAL MORALITY **APPLY** TO THEM?
- FOR: THOSE ARE FREE-THINKING **INDIVIDUALS**
- AGAINST: THOSE ARE **BITS** IN A **DATABASE**

- FOR **MOST** OF US, **ALL** MORAL BEINGS ARE MORALLY-CONSIDERABLE

  – ALTHOUGH **NOT** ALL MORALLY-CONSIDERABLE BEINGS ARE MORAL, FOR EXAMPLE **BABIES**

- IF NPCS HAVE THEIR **OWN** SENSE OF MORALS, WE'D HAVE TO BE **AMORAL** OURSELVES **NOT** TO REGARD THEM AS MORALLY-CONSIDERABLE

- IN THIS TALK, I TAKE THE VIEW THAT OUR SELF-AWARE NPCS OF THE FUTURE **ARE** MORAL BEINGS AND SO **ARE** MORALLY-CONSIDERABLE

  – IF YOU **DISAGREE**, I'LL GET BACK TO YOU LATER

- A **SHARED** SET OF AGREED-UPON MORALS IS AN **ETHICAL SYSTEM**
- **DIFFERENCE** BETWEEN ETHICS AND MORALS:
  - CYNTHIA PAYNE WAS **IMPRISONED** IN THE 1980S FOR "KEEPING A DISORDERLY HOUSE"
  - HER ESTABLISHMENT WAS FREQUENTED BY **MPS**, LAWYERS, CEOS, **VICARS** AND AT LEAST ONE **PEER**
  - WHEN ASKED WHY SHE WOULDN'T **NAME** ANY OF HER FAMOUS **CLIENTS**, SHE REPLIED "MY **MORALS** IS LOW BUT MY **ETHICS** IS HIGH"
- WE'LL **NEED** AN APPROPRIATE ETHICAL SYSTEM IN PLACE **BEFORE** MAKING SAPIENT NPCS

- SUPPOSE WE HAVE **CREATED** A REALITY POPULATED BY MORALLY-CONSIDERABLE NPCS
  - ASSUMING IT'S ACTUALLY ETHICAL TO **DO** SO...
- IS IT ETHICAL TO **SWITCH OFF** THE COMPUTER THAT THIS REALITY IS RUNNING ON?
- THERE COULD BE 10 BILLION NPCS IN THAT REALITY WHO'D BE **EXTINGUISHED** AS A RESULT
- YOU WOULD EFFECTIVELY HAVE **KILLED** 10 BILLION SAPIENT CREATURES
  - IF YOU **TOLD** THEM YOU WERE ABOUT TO DO IT, THEY'D BE **LIVID**

- DOES THE FACT THAT THEY ONLY EXIST BECAUSE OF US IN THE **FIRST** PLACE MEAN WE HAVE THE **RIGHT** TO KILL THEM ANYWAY?
- WE DON'T THINK THAT ABOUT **CHILDREN**, EVEN THOUGH **THEY** ONLY EXIST BECAUSE OF US
  – AND OFTEN ALCOHOL
- THEN AGAIN, WE BREED **BEEF** CATTLE SPECIFICALLY TO KILL, AND **THEY** WOULDN'T EXIST OTHERWISE
  – "MEAT IS MURDER, VEGANISM IS GENOCIDE"
- LET'S SAY WE **DO** FEEL BAD, BUT OUR PLANET-SIZED COMPUTER IS TOO **COSTLY** TO RUN

- WOULD AN ACCEPTABLE **SOLUTION** BE TO DUMP A **SNAPSHOT** OF THE REALITY'S STATE?
- WE COULD THEN SAFELY POWER **DOWN** THE COMPUTER AND **RELOAD** THE REALITY ONCE OUR FINANCES HAD IMPROVED
- THE **NPCS** WOULDN'T KNOW ANY DIFFERENT
  - THEIR REALITY WOULD APPEAR SEAMLESSLY **CONTINUOUS** TO THEM
- IF OUR FINANCES **DIDN'T** IMPROVE, THOUGH?
  - THE REALITY WOULD NEVER EMERGE FROM **STASIS**
  - PRETTY WELL THE **SAME** AS DESTROYING IT?

- WHAT IF WE LATER BECAME INSANELY **RICH**?
- WE COULD BUY **MULTIPLE** COMPUTERS AND RELOAD THE SAVE FILE **MULTIPLE** TIMES
- EACH OF THESE **FORKED** REALITIES WOULD CREATE A NEW, **INDEPENDENT** TIMELINE
- WOULD IT BE **ETHICAL** TO DO THAT?
- HOW ABOUT IF WE SUBSEQUENTLY **MERGED** TWO REALITIES TOGETHER?
- IT WOULD CONTAIN **TWO** COPIES OF PEOPLE
- WOULD DOING **THAT** BE ETHICAL?

- WHAT IF WE MERGED BY **DELETING** ONE OF THE COPIES OF THE PEOPLE?

  – THEY'RE STILL **ALIVE**, SO HAVE WE KILLED THEM?

- WOULD IT MAKE A DIFFERENCE IF THE REALITIES WERE **DETERMINISTIC**?

  – THEY'D ALL BE IDENTICAL

- HOW ABOUT IF WE HAVE JUST ONE REALITY AND **PERIODICALLY** SAVE ITS STATE, RELOADING IF SOMETHING HAPPENS THAT WE DON'T **LIKE**?

  – ONLY THE NPCS BORN **AFTER** THE SAVE POINT WOULD CEASE TO EXIST

- THESE ARE RELATIVELY **EASY** QUESTIONS TO **ASK**, AS WE CAN DO THIS STUFF **ALREADY**
  - JUST NOT FOR SAPIENT NPCS
- THEY'RE HARD TO **ANSWER** BECAUSE THEY'RE **UNLIKE** ANYTHING THAT'S STRESSED OUR MORALS BEFORE
- I **WON'T** BE TRYING TO ANSWER THEM **HERE**
- HOWEVER, THEY **DO** NEED TO BE ANSWERED
- WHAT IF THERE'S A **BREAKTHROUGH** IN AI AND EE AND THESE REALITIES ARE **10** YEARS AWAY, NOT 100+?

- SAPIENT: CAN **THINK**
- SENTIENT: CAN **FEEL**
- A **SMALL** NUMBER OF HUMANS TREAT NO-ONE BUT **THEMSELVES** AS MORAL BEINGS
  - EXAMPLE: **PSYCHOPATHS**
- ALMOST **EVERY** HUMAN TODAY TREATS ALL **SAPIENT** BEINGS AS MORALLY-CONSIDERABLE
  - ALTHOUGH **NOT** IN THE TIME OF SLAVERY…
- MOST PEOPLE WILL **ALSO** TREAT **SENTIENT** BEINGS (*E.G.* **DOGS**) AS MORALLY-CONSIDERABLE
  - WHILE ACCEPTING THAT DOGS AREN'T MORAL BEINGS

- PEOPLE CAN **RELATE** TO SUFFERING
  - MONKEYS ARE NOT **INDIFFERENT** IF YOU KILL THEIR BABIES
  - TYING A FIRECRACKER TO A **CAT'S TAIL** IS **NOT** THE SAME AS TYING IT TO A **FENCE**
- ARE SENTIENT-BUT-**NOT**-SAPIENT BEINGS **LESS** IMPORTANT THAN **SAPIENT** BEINGS?
  - WOULD YOU SAVE A DOG OVER SAVING A TODDLER?
- ARE BEINGS IN A **CREATED** REALITY **LESS** IMPORTANT THAN BEINGS IN **REALITY**?
  - SAVE THE **REAL** DOG OR THE **VIRTUAL** SAINT?

- WHAT ABOUT THE SENTIENT-BUT-NOT-SAPIENT CREATURES IN OUR **CREATED** REALITIES?
- SHOULD IT **TROUBLE** US IF **THEY** SUFFER?
- **WRONG** QUESTION!
- RIGHT QUESTION: SHOULD WE **IMPLEMENT** SUFFERING **AT ALL**?
- WE'RE **GODS**!
- IF SUFFERING EXISTS IN A REALITY THAT **YOU** CREATED, IT'S BECAUSE **YOU** WANT IT THERE
  – OR I GUESS IT COULD BE A **BUG**...
- WHY WOULD YOU **IMPLEMENT** SUFFERING?

- IN A WORD: **VERISIMILITUDE**
  - THERE ARE OTHER WORDS, SUCH AS **SADISM**, BUT EVEN THAT ONE NEEDS VERISIMILITUDE
- YOU WOULD MAKE THE MORAL BEINGS YOU CREATE BE **SUBJECT** TO SUFFERING BECAUSE THAT'S HOW **REALITY** WORKS
- WHY WOULD YOU **WANT** TO CREATE A REALITY THAT WORKS LIKE **REALITY**, THOUGH?
- BECAUSE THEN YOU CAN MORE EASILY **OBSERVE** AND POSSIBLY **VISIT** IT
- THIS LEADS TO AN **IMPORTANT** QUESTION...

- **WHY** WOULD YOU CREATE A REALITY IN THE FIRST PLACE?
- WELL, THERE ARE **8** REASONS, WHICH I'LL LIST ON THE **FOLLOWING** SLIDES
- **EACH** SET OF 8 REASONS CAN BE APPLIED TO **4** BENEFICIARIES:
  - YOU, OTHER HUMANS, NPCS, HIGHER POWERS
  - I **WON'T** BE COVERING THAT **LAST** ONE IN DEPTH...
- ALSO, NOTE THAT A MOTIVATION TO **CREATE** A REALITY ISN'T THE SAME AS A MOTIVATION TO CONTINUE **RUNNING** IT

- WHY CREATE A REALITY FOR **YOURSELF**?
  - TO PLAY IT FOR **FUN** YOURSELF
  - TO **GROW** AS A PERSON
  - TO **LEARN** HOW TO MAKE SUCH WORLDS
  - TO **TEACH** YOURSELF SOMETHING, *E.G.* CODING
  - AS MAKE AN **ARTISTIC** POINT
  - AS A SHOWCASE, TO DEMONSTRATE THAT YOU CAN **CREATE** IN THIS MEDIUM
  - AS A **PROTOTYPE** OF WHAT YOU **REALLY** WANT TO MAKE
  - FOR **MONEY**

- WHY CREATE A REALITY FOR **OTHER** PEOPLE?
  - FOR OTHERS TO PLAY FOR **FUN**
  - FOR PLAYERS TO **TRANSFORM** THEMSELVES
  - TO **SIMULATE** SOME ASPECT OF REALITY YOU WANT TO TEST
  - TO **TEACH** SOMETHING, AS A SERIOUS GAME
  - AS **SATIRE** ON REALITY
  - FOR YOUR PLAYERS TO TELL YOU WHAT THEY **REALLY** WANT FROM THE REALITY
  - SO PLAYERS CAN **CREATE** SUB-SUB-REALITES
  - FOR YOUR **PLAYERS** TO MAKE **MONEY**

- WHY CREATE A REALITY FOR YOUR **NPCS**?
  - TO BE **GLORIFIED** BY YOUR NPCS
  - SO YOUR NPCS CAN **IMPROVE** THEMSELVES
  - TO **REWARD** THE BEST NPCS
  - TO **TEACH** YOUR NPCS
  - TO GIVE THE GIFT OF **LIFE** TO YOUR NPCS
  - TO FIND OUT WHAT YOUR NPCS WANT, SO YOU CAN **GIVE** IT TO THEM
  - SO YOUR NPCS CAN **WORSHIP** YOU, AND SO ACHIEVE A SENSE OF PURPOSE
 - SO YOUR NPCS CAN **SERVE** YOU

- EXAMPLE: **ANCESTOR** SIMULATION
- I'M **NOT** GOING TO ENUMERATE THE REASONS HERE BECAUSE I DON'T WANT TO PROVOKE A **RELIGIOUS** ARGUMENT INADVERTENTLY
- BASICALLY, PEOPLE **MIGHT** CREATE A REALITY FOR REASONS TO DO WITH HOW THEY BELIEVE **REALITY** CAME INTO BEING
- THE 8 MOTIVATIONS **DO** STILL WORK, BUT I'LL LEAVE IT TO **YOU** TO FIGURE THEM OUT
  - OR YOU CAN **EMAIL** ME IF YOU DON'T BELIEVE I'VE ACTUALLY **DONE** THIS PART OF THE RESEARCH...

- THESE 8 MOTIVATIONS **PAIR UP**
  - REALITIES AS **PRODUCTS**
    - TO PROTOTYPE, TO PROFIT
    - OBJECTIFIES BOTH PLAYERS AND CONTENT
  - REALITIES AS **TOOLS**
    - TO LEARN, TO TEACH
    - OBJECTIFIES PLAYERS, SUBJECTIFIES CONTENT
  - REALITIES AS **DESTINATIONS**
    - TO BE ENJOYED, TO HELP PERSONAL GROWTH
    - SUBJECTIFIES PLAYERS, OBJECTIFIES CONTENT
  - REALITIES AS **COMMUNICATION**
    - TO MAKE AN ARTISTIC POINT, TO ENABLE CREATION
    - SUBJECTIFIES BOTH PLAYERS AND CONTENT
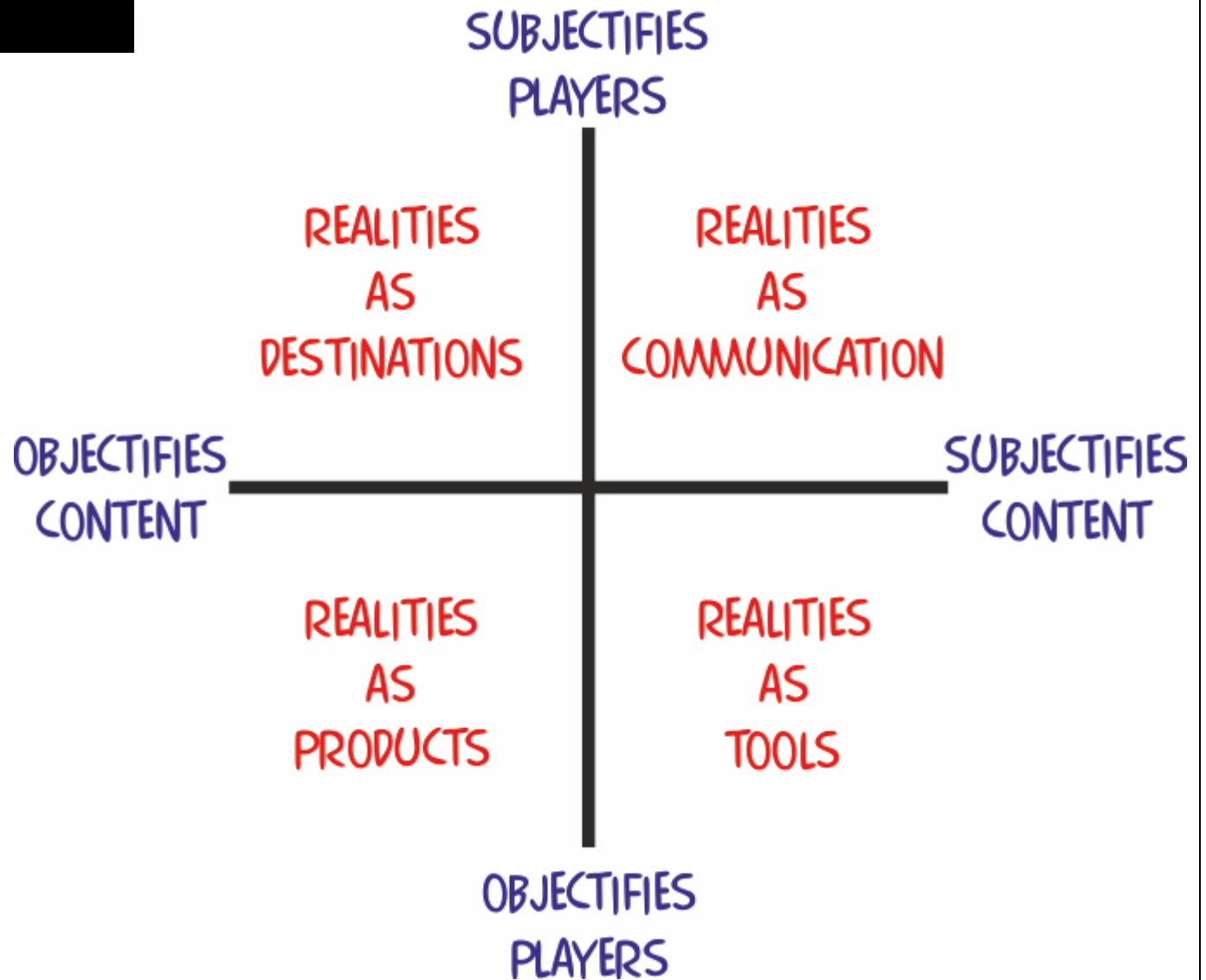
- **ALL** OF THE ABOVE REQUIRE THAT WE CAN **OBSERVE** OUR CREATED REALITIES
- PERSONAL AND SOCIAL MOTIVATIONS **ALSO** REQUIRE THAT WE CAN **VISIT** THEM
  - FOR DIVINE AND SPIRITUAL, IT'S **OPTIONAL**
- IF WE WANT TO **OBSERVE** A REALITY, IT HAS TO MAKE **SENSE** TO US
  - SOME **SIMILARITY** WITH REALITY IS THEREFORE **DESIRABLE**, ALBEIT NOT **ESSENTIAL**
- TO **VISIT** IT, IT HAS TO SHARE ENOUGH CHARACTERISTICS TO PERMIT **IMMERSION**

- THE **CLOSER** THE OVERLAP WITH REALITY, THE **EASIER** IT IS TO BECOME IMMERSED
  - **HENCE** VERISIMILITUDE
- THE MATCH DOESN'T HAVE TO BE **PERFECT**
- **SOME** DIFFERENCES WILL BE **IRRELEVANT** OR CONTEXTUALLY **ACCEPTABLE**
  - NO TOILET TRIPS! MAGIC WORKS! GHOSTS EXIST! MARZIPAN TASTES NICE!
- STILL, IT MUST INTERSECT **ENOUGH** THAT WE CAN **WILL** OURSELVES TO BELIEVE THAT WHAT WE KNOW IS **NOT** REALITY **IS** REALITY

- SO, BACK TO **SUFFERING**

- WHETHER WE **WANT** SUFFERING IN OUR CREATED REALITY DEPENDS ON **TWO** THINGS:
  - HOW MUCH LIKE **REALITY** WE WANT OUR WORLD TO BE FOR REASONS OF **IMMERSION**
  - HOW IMPORTANT THE FEATURE IS TO OUR MOTIVATION FOR **CREATING** THE REALITY
    - PERHAPS HERE WE **DO** WANT FENCES TO FEEL PAIN

- **DESIRING** OUR CREATED REALITY TO CONTAIN SUFFERING STILL DOESN'T MEAN IT'S **ETHICAL** TO **IMPLEMENT** IT, THOUGH

- THE **DEFAULT** POSITION FOR A MORAL BEING IS THAT IT'S **IMMORAL** TO MAKE MORALLY-CONSIDERABLE INDIVIDUALS SUFFER **UNLESS**:
  - THEY **FREELY** AGREE TO IT
  - IT'S TO SAVE **THEM** OR SOMEONE **ELSE** FROM SOMETHING **WORSE**
- AH, **YES**, "SOMETHING WORSE"...
- ARE WE GOING TO IMPLEMENT **DEATH**?
- WE DON'T **HAVE** TO — WE CAN MAKE OUR NPCS LIVE **INDEFINITELY**
  - AND IGNORE **AGING** PAST MATURITY, TOO!

- WE ALREADY **KNOW** THAT PERMANENT DEATH IS **UNNNECESSARY** FOR NPCS
  - – **MOST** MMOS MAKE NPCS WHO DIE **RESPAWN**
- **WHY**, THEN, WOULD WE **IMPLEMENT** IT?
- WELL IT COULD BE FOR THEIR **OWN** BENEFIT
- IT SUCKS FOR **INDIVIDUAL** NPCS, BUT ON THE **WHOLE** IT'S GOOD FOR THEM
  - – THEY GET TO **DEVELOP** IN WAYS THEY OTHERWISE **WOULDN'T**
- THIS DOESN'T APPLY TO OUR CURRENT, **NON-**SAPIENT NPCS, BUT FOR **SAPIENT** ONES?

- WE MIGHT BE ABLE TO **PERSUADE** OURSELVES THAT DEATH HAS MORE **UPS** THAN **DOWNS**

- ARE WE GOING TO ALLOW NPCS TO **KILL** ONE ANOTHER, THEN?

- OUR NPCS HAVE **FREE WILL**, SO SOME WILL BE **JERKS**

- SOME JERKS WILL **KILL** OTHER NPCS

- DO WE **LET** THEM? WE **CAN** STOP IT
  - WE COULD EVEN MAKE THE **KILLER** DIE AND THE **VICTIM** GET BETTER
  - MURDER **DOES** SEEM A TAD **HARSH** ON VICTIMS

- YOU WILL HAVE NOTICED THAT I MENTIONED **FREE WILL** BACK THERE...
- IF OUR NPCS ARE **SAPIENT** THEN THEY MUST, BY **DEFINITION**, HAVE FREE WILL
- IF WE WERE TO **REMOVE** THEIR FREE WILL, THEY WOULD NO **LONGER** BE SAPIENT
  - THEREBY **KILLING** THE PERSON WHO USED TO EXIST
- DOES THIS **ALSO** PREVENT US FROM **EDITING** THEIR MINDS?
  - TO **STOP** THEM BEING A **JERK**?
  - TO **IMBUE** THEM WITH OUR OWN **MORALS**?

- THE ARGUMENTS FOR **REMOVING** FREE WILL ARE THEREFORE **CONGRUENT** WITH THOSE FOR **IMPLEMENTING** DEATH

- THIS LEADS TO AN INTERESTING SITUATION

- ONE **ETHICAL** REASON FOR MAKING A MORALLY-CONSIDERABLE BEING **SUFFER** IS "TO SAVE THEM FROM SOMETHING **WORSE**"

- IF **NOT** HAVING FREE WILL IS EQUIVALENT TO DEATH, THAT **WOULD** BE SOMETHING WORSE

- IT COULD BE THAT SUFFERING IS **NECESSARY** FOR FREE WILL

- THE LINE OF **REASONING** FOR SUFFERING'S BEING NECESSARY WOULD GO LIKE **THIS**:
  - UNLESS **BAD** THINGS HAPPEN, YOU CAN'T **REFLECT** ON WHAT'S **RIGHT** OR **WRONG**
  - YOU CAN'T AS A **RESULT** DEVELOP **MORALS**
  - YOU'RE **NOT** THEREFORE A **MORAL BEING**
  - **ONLY** MORAL BEINGS CAN BE **SAPIENT**
    - NOTE: THIS IS THE **WEAK LINK** OF THE ARGUMENT
  - **FREE WILL** AND **SAPIENCE** ARE MUTUALLY **DEPENDENT**
  - THEREFORE **UNLESS** BAD THINGS HAPPEN, YOU **CAN'T** HAVE FREE WILL

- **WE** KNOW THAT THE REALITIES WE CREATE ARE CONSEQUENT ON REALITY
- THE NPCS WE CREATE **DON'T** KNOW THIS UNLESS WE **TELL** THEM
- SO, **DO** WE TELL THEM?
- WHETHER WE DO OR NOT DEPENDS ON WHY WE **CREATED** THE REALITY
- FOR SOME REASONS, **CLEARLY** WE'D TELL THEM
  - IF WE WANT TO BE **WORSHIPPED** BY THEM
- FOR OTHER REASONS, WE **WOULDN'T**
  - WE'RE **SIMULATING** SOME ASPECT OF REALITY

- **BECAUSE** THEY'RE FREE-THINKING, THEY'RE GOING TO **SPECULATE** ON THEIR OWN EXISTENCE **REGARDLESS**
- THEY MAY WELL READ INTO THE **DESIGN** OF THEIR REALITY SIGNS THAT IT HAS **GODS**
  - WHICH IS **TRUE**, IT DOES
- THEY WILL BE COMPLETELY **WRONG** ABOUT OUR NATURE, THOUGH, UNLESS WE **TELL** THEM
  - EVEN **THEN** THEY MAY NOT BELIEVE US
- SHOULD WE **CORRECT** THEIR FALSE BELIEFS?
  - AGAIN, IT DEPENDS ON WHY WE CREATED THE REALITY

- THE SITUATION IS **COMPLICATED** BY THE PRESENCE OF **PLAYERS**
- PLAYERS ARE PEOPLE FROM REALITY WHO **VISIT** THE REALITY WE HAVE CREATED
- WE HAVE **NO CONTROL** OVER THEM
- THEY COULD TELL NPCS **ANYTHING** AND WE COULDN'T STOP THEM
  - EVEN THAT **THEY'RE** THE GODS
- WE MERELY HAVE TO CLEAR UP THEIR **MESS**
- NOTE THAT **VISITORS** FROM REALITY COULD **EXPOSE** REALITY'S EXISTENCE

- IF OUR NPCS **KNOW** THERE'S A HIGHER REALITY, THEY'LL ASK **AWKWARD** QUESTIONS
  - CAN WE **VISIT** THIS REALITY?
  - DO WE GET TO GO THERE WHEN WE **DIE**?
  - **WHY** DO WE DIE IN THE FIRST PLACE?
  - WHAT'S THE **POINT** OF OUR EXISTENCE?
- YOU'D BETTER HAVE SOME **ANSWERS**...
  - YES, WE CAN GIVE YOU CONTROL OF A ROBOT
  - NO, YOU DIE WHEN YOU DIE
  - SO EVERYONE ELSE CAN DEVELOP
  - TO MAKE US POTS OF MONEY

- IS THE REALITY WE CREATE **DETERMINISTIC**?
  - IS THERE **UNCERTAINTY** IN IT?
- IF THERE **ISN'T**, OUR NPCS **DON'T** HAVE FREE WILL, THEY MERELY **THINK** THEY HAVE IT
  - WE COULD **RECONSTRUCT** THEIR REALITY AS IT IS NOW SIMPLY BY **REBOOTING** IT FROM ITS STARTING CONDITIONS AND **RUNNING** IT AWHILE
- THE **ENTIRETY** OF A DETERMINISTIC REALITY IS EMBODIED IN ITS CODE PLUS STARTING SET-UP
  - *EVE ONLINE* GENERATED ITS UNIVERSE PROCEDURALLY
  - IT USED **42** AS THE RANDOM-NUMBER SEED

- A **NON**-DETERMINISTIC UNIVERSE INTRODUCES GENUINE **UNCERTAINTY**
    - FOR EXAMPLE BY USING A **RNG**
- THIS MEANS NPCS CAN HAVE **FREE WILL**
- HOWEVER, IT MEANS WE, THE GODS, ARE NOT **OMNISCIENT**
- WE **CAN'T** DUMP THE REALITY'S **STATE** AND FIGURE OUT WHAT WILL HAPPEN **NEXT**
    - IN A **DETERMINISTIC** REALITY, WE **CAN**
- THEREFORE NPC **FREE WILL** AND GOD **OMNISCIENCE** ARE **INCOMPATIBLE**

- UNCERTAINTY DOESN'T **HAVE** TO COME FROM A RANDOM-NUMBER GENERATOR

- **PLAYERS** WILL INTRODUCE UNCERTAINTY INTO WHAT MIGHT **OTHERWISE** BE AN ENTIRELY **DETERMINISTIC** REALITY

- THIS MEANS THAT THE GODS **CAN** BE OMNISCIENT WITH RESPECT TO THE REALITY **AND** THAT ITS NPCS CAN HAVE FREE WILL

- SO, IF A REALITY'S GODS ARE **OMNISCIENT**, THEN ITS NPCS DERIVE THEIR **FREE WILL** FROM VISITORS COMING FROM THE **GODS'** REALITY

- OUR NPCS LIVE IN A **SUB**-REALITY OF REALITY
- SOONER OR LATER, THEY WILL ATTEMPT TO CREATE THEIR **OWN** SUB-SUB-REALITIES
- WHETHER WE **LET** THEM OR NOT DEPENDS ON WHY WE CREATED **THEIR** REALITY
  - **SOME** MOTIVATIONS CARE, MOST **DON'T**
- IT RAISES A **NEW** QUESTION, THOUGH
- HOW DO **WE** TREAT THE **NPCS** IN THE REALITIES OUR **OWN** NPCS HAVE CREATED?
  - DO WE LET OUR NPCS HAVE **FREE REIN**?
  - WHAT IF OUR NPCS **MISTREAT** THEIR NPCS?

- BECAUSE THE **SUB**-REALITY AND **SUB-SUB**-REALITY ARE BOTH CONSEQUENT ON REALITY, WE CAN IN THEORY **MOVE** NPCS BETWEEN THEM

- WE COULD **ASCEND** A SUB-SUB-REALITY'S NPC TO A SUB-REALITY AS A **REGULAR** NPC IN THAT SUB-REALITY

- WE COULD **DESCEND** A SUB-REALITY'S NPC TO MAKE THEM AN NPC IN THE VERY SUB-SUB-REALITY THEY **CREATED**!

- YES? NO? HOW WOULD WE **BEGIN** TO DECIDE WHETHER DOING THIS IS ETHICAL OR NOT?

- I HAVE A **FINAL** POINT WITH WHICH I'D LIKE TO END

- THIS TALK HAS CONCERNED THE RESPONSIBILITIES THAT WE, AS **GODS** OF THE REALITIES WE CREATE, HAVE FOR THE **NPCS** OF THOSE REALITIES

- IN REALITY, **WE'RE** THE NPCS

- **MANY** PEOPLE BELIEVE THAT THERE ARE ONE OR MORE GODS **OF** REALITY

- EVERYTHING **WE** CAN DO TO **OUR** NPCS, ANY GOD OF REALITY CAN DO TO **US**

- I'VE RAISED A **NUMBER** OF QUESTIONS TODAY ABOUT HOW TO **TREAT** NPCS
- YOU'LL HAVE BEEN **PONDERING** HOW YOU'D ANSWER THEM ACCORDING TO YOUR **OWN** MORAL CODE
  - THOSE OF YOU NOT PLAYING ON YOUR PHONE...
- DO YOUR OWN MORALS **MATCH** THE ONES THAT ANY (PRESUMED) GOD OF **REALITY** SEEMS TO HAVE **EXHIBITED**?
  - WHAT DOES THAT SAY ABOUT **YOU**?
  - WHAT DOES THAT SAY ABOUT THE **GOD(S)**?

- I SAID **EARLIER** THAT I'D GET **BACK** TO THOSE OF YOU WHO DECIDED THAT SAPIENT NPCS ARE **NOT** MORALLY-CONSIDERABLE

- WELL, **YOU** ARE SAPIENT NPCS

- BY YOUR **OWN** ARGUMENT, **YOU** ARE THEREFORE NOT MORALLY-CONSIDERABLE

- THEREFORE, NONE OF US HAVE TO PAY **ANY** ATTENTION TO YOUR OPINIONS **WHATSOEVER**

- **ETHICS** FROM **ESSEX** — WHO'D HAVE THOUGHT?