

MY BIG IDEA

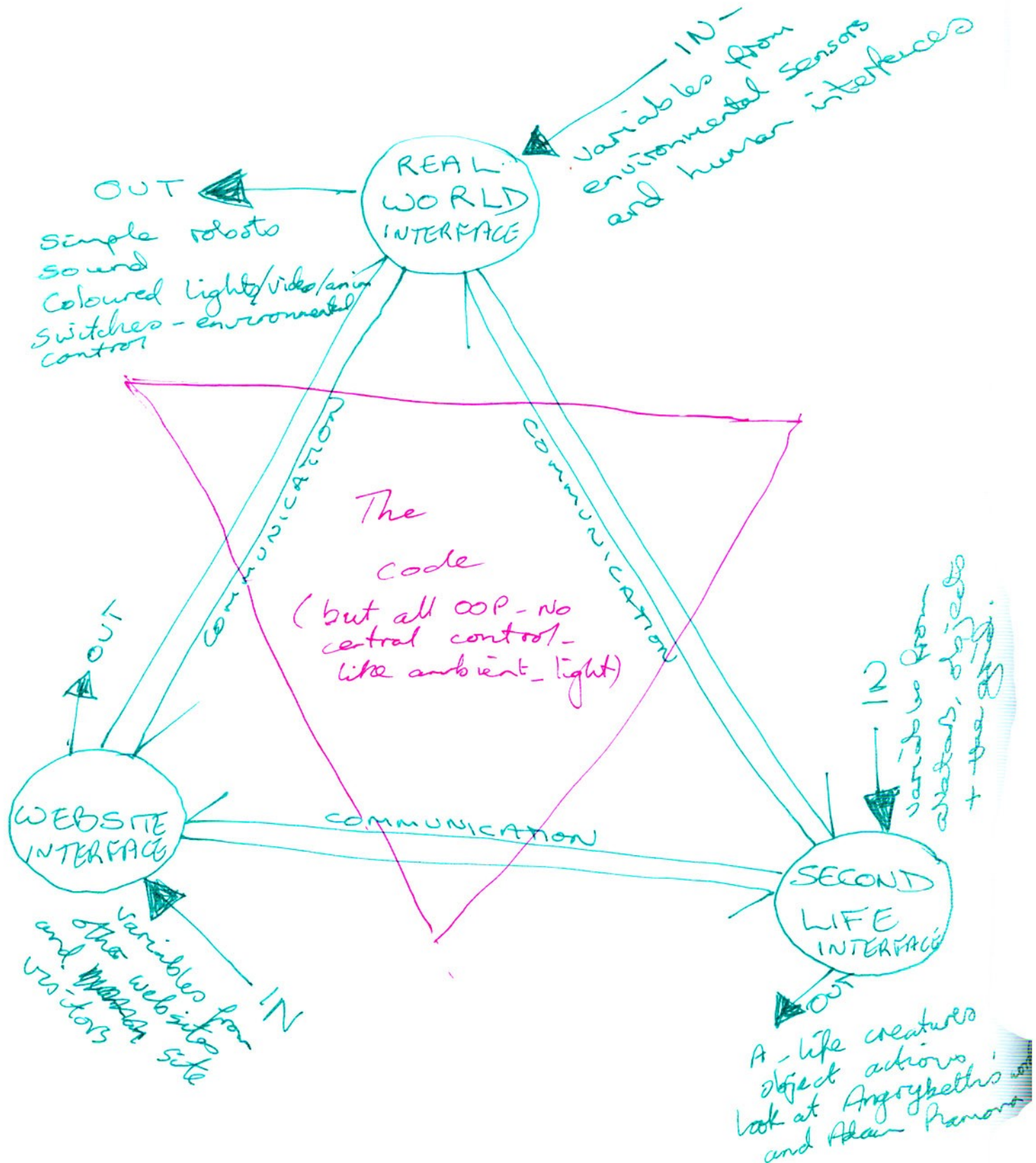
- Create a robotic species that will 'slot' into an existing ecosystem - **WOODLAND**
(alternatives: sky, pond?, or a single tree, indoors)
- They must draw energy from their environment
 - solar, biofuelled (flies/slugs)
 - how heavy can they be? how light can I make them?
- They must 'do' something to the environment
 - pick up litter? rot and be eaten? build nesting boxes
- They could busk - sensors detect nearby sound, they move towards it, when 2 or more are in range they start playing - simple beeps, beats and tones. Interact with each other to form rhythms and 'jams'.
 - what is their reward for busking?
 - sell 'robot food' to people & GPS safaris
- Need a web element.

THINGS TO THINK ABOUT

- sensory organs
- transmitting organs
- locomotion
- fuel
- excretion + death
(environmental issues too)

would a wind-powered helicopter be possible

- To build an intricate MACHINE
- Part virtual, part physical, part code
- Second Life + Website + Real world.



- Reproduction with fidelity - Geno and Pheno
- Random mutation - Genotype
- Non-Random selection - Phenotype

! CODE

// declare an array/string of chars to hold the
 // genotype:

? strings of proper names of primitive properties do I need 2 arrays? can I use phenotype to hold gene info?

```

Array genotype = [gene1, gene2, gene3 ... gene n];
Array phenotype = [phenotype1, phenotype2, ... phenotype n];
// set object properties using the genes in the array:
void SetObjectProperties () {
  for (i=0; i < genotype.length; i++) {
    // This is where to get fancy with gene interactions
  }
}

```

- If creatures are physical bots, how will they reproduce? how will they die? how will they eat each other?
- Creatures could be sounds, images, animated lights within a physical environment
LEDs, screen projection, sound

computer monitor or projection



'Scattered' bits of display made from LED displays and projections, on trees, buildings, ground etc.

THE DISTINCTION BETWEEN 'DISPLAY' AND 'HARDWARE' BREAKS DOWN.

ecosystem would be a lot more amorphous. harder to pick out individual creatures - all you'd see would be emergent properties of ecosystem as a whole

- Screen/projection-based creatures, info in and out via arduino/wiring bluetooth devices with environmental sensors

- Use processing / SL / openSim for visuals

research ways around looping problem

LAG
IN SL



MY
PROJECT

THE
BRITISH
WEATHER



THE
ECONOMY

