Context

For the past few weeks, I've been circling around the idea of Machine language and what gets lost in machine translation for my Major Studio final project. Originally, I was looking to build on a project I did for another class, in which I created a website with the web speech API that returned back Ebonics rather than what was originally spoken. I was hoping to showcase my concern for the code created that becomes the framework of machine language, but have since decided to go in another direction, as it was turning out to be nothing more than a poorly built Eliza construct.

However, I was still interested in the loss of communication that persists online and in the digital tools we use to communicate with. This breakdown of language is concerning for a variety of reasons. In his book **Speaking Code**, Geoff Cox stresses that language is often a marker of intelligence, and it requires social interaction. So I'm concerned by the type of language situated within these digital platforms. Not only for the political and social issues that result from neglecting to encode variations of Standard American English, but also for the loss of value being passed from one person to the next as a result of the the artificial communication and empty babbling that is generated and situated within the illusion of genuine communication in our digital social network.

Recently, I stumbled onto something that Matt Pearson wrote while describing his project DedBullets, a software identity generator that he created with his friend Shardcore.

"Twitter is the land of the dead. In this social networking microcosm the living, real human content generators; and the dead, automated bots/marketeers/spammers; share a peaceful coexistence. Twitter is the perfect petri-dish for AI experiments, because it is essentially a Turing Test on a global scale. All manner of humanity and inhumanity share a stage. There is no way of ever knowing, for sure, what is behind the door from which each of those messages originated. Be they a robot trying to sound like a human, or human sounding like robot."

So there are spammers and chatterbots that simulate real people. And real people acting like spammers and chatterbots. Some real people are communicating as part of a company's branding campaign, and some are just retweeting and forwarding Facebook content, regenerating the empty communication without regard or knowledge of an artificial (aka non-human) source. And even if there was a human body attached to the original content, sometimes what is regenerated is just empty babbling. This, in turn, sparked the inspiration for my final project (for both my Major Studio class, as well as Building Worlds).

The Project

I'm building a game that takes place in an abandoned landscape. Within that world are friend bots and real friends, with the ratio of bots to real is 10:1 approximately. The player moves through the landscape and must interact with these friends and befriend them in order to move around the space, (open doors for instance) as well as correspond to a Progress bar that is decreasing with time. In addition, the player will also gain arbitrary items like money or real estate or (TBD) and have a corresponding counter. They will be arbitrary because you will not be able to use them for anything. I'm attempting to make it almost impossible to do anything without befriending more and more friend bots. The Progress level bar will end the game if allowed to run out. The only way to increase the Progress bar is to stumble across real friends, and accept them, but they will be harder to find.

In addition to setting up a reward system for accepting friend bots, I also want to set up the ability to type in responses to the bot, and reward the player if a typed response is nonsensical, and to restrict the player's movement if the typed response is grammatically correct.

I will have a second level bar that is labeled Health. This second level will also decrease but in response to how many friend bots vs real friends the player accepts rather than in response to time. My aim is to motivate the player to accept more and more friend bots by the pressure of the decreasing Progress bar level, and also because almost all actions will be restricted to whether or not the player accepts them. Only later does the player realize the long term risk of continuing to add the player bots.

I'm not entirely sure that the specific reward vs punishment logic is the best it could be, but this is where it stands now. The game is won by realizing friend bots are evil, the items counters are arbitrary, and by committing virtual social suicide and destroying all the friend bots.

What I still need to do

Finish the 3D models and landscape.
Finish simple prefabs of friend bots.
Create the Progress and Health level bar HUD.
Create the items collected counters
Create random AI coroutines for babbling friend bots.
Create coroutines for real friends.
Friend generating script. When player accepts a friend bot add to "Progress" level, and generate babbling friend bot.

Babble script. Attach low confidence levels to grammatically correct typed input, and high levels to nonsensical typed input. Reward with actions (open doors, etc).
Text as trigger scripts. (I can do this in Unity, correct? Outside of just a single keypress?)

By next week I hope to have it all pseudo-coded, and could really use some feedback on whether or not the logic is sound. I've done a lot of research on my own, and I think I have a good grasp on what is possible and what is not.

Research

Hofstadter's **"Coffeehouse Conversation"**
10 Print by Nick Montfort, Patsy Baudoin, John Bell, Ian Bogost Jeremy Douglass, Mark C. Marino, Michael Mateas Casey Reas, Mark Sample, and Noah Vawter
How to Do Things With Video Games by Ian Bogost
Gamer Theory by McKenzie Wark
Speaking Code by Geoff Cox
My Mother Was A Computer by Katherine Hayles
The Language Instinct by Steven Pinker
The Glass Cage by Nicolas Caar

Obviously, only .005% of this research will end up explicitly in my game due to my high level of programming skills and vast amount of time to finish. There is so much more I could add within the reward and punishment logic that incorporates more of the commentary discussed in the above research. But that this will have to stand in as my first attempt at a future version. The. End.