# Development-Features-Plan

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## 1 Violet Volts: Overview

## 1.1 Manifesto

The concept I'm running off of goes a bit like this

## 1.1.1 Axiom: Violence is filler in most games.

EG: Zelda is mostly about solving the puzzles, and while a few of them (shoot the boss in the eye) are couched themselves in terms of violence, the majority of the violence in the game world is filler. Killing Bokoblins to maybe get a Rupee can be kinda fun, sure, but it's not moving the plot forward or really providing much "puzzle" content, &c &c.

## 1.1.2 Hypothesis: Non-violence can be fun.

OTOH, non-violent games tend to be of a very few sorts;

- Some, like Pac-Man = Katamari Damacy, are basically aiming to "clear the board" in some way. Alchemy from Pop Cap is another of this sort.
- + Others, like Bejeweled or Tetris, are basically "endless." You just repeat the same task over and over, until you lose.

• The alternative are games in which the designers have spent a great deal of time creating a puzzle — which you can probably (a) solve faster than they can create new ones; (b) look up the solution on the 'Net in 45 seconds or less.

All of these put the idea of a non-violent MMO-RPG in a persistent, shared world at risk.

- We can't use violence as filler.
- + We can't let someone "clear the board," because the next person will have nothing to do.
  - We can, but shouldn't, make it an endless toil: that, eventually, isn't fun.
  - We can't afford the time effort to have more designers than players to create specific puzzles.

So, the sandbox world has these things going for it:

- User generated content: Building and decorating houses and landscaping your yard, designing and wearing clothes, and so forth.
- Crafting and similar rôte tasks; these are like Bejeweled, but you only do it when you want the results
- AI's who have their own wants/needs/likes. They provide Quest drivers, basically. The AI's can "intentionally" create situations which are puzzles to be solved.

EG: Some "naughty" AI character likes to build mazes and has the ability to create a certain type of item that is reasonably valuable. Solving the maze gives a reward; but the AI re-arranges the maze from time to time, so you can re-visit it later, and it'll be different. We started to build something like this in Tootsville 3, but the front-end choked on the number of "furniture" items to be placed on the screen.

## 1.1.3 About Animal Crossing

Animal Crossing is really more about:

• meeting and interacting with the characters, making friends

- creating User Generated Content: decorate your house, design your clothes, decorate signs, change the Town Song, ...
- discovering and collecting artefacts: shells, fruit, fossils, . . . ; sometimes these can be traded
- special events [The jazz playing dog on Saturday nights; the Turnip "stock exchange"; holiday events; special visiting characters]

In MMO context, you can

- meet and interact with AI and human controlled characters, make friends
- create User Generate Content of many of the same kinds
- explore new regions of the world as they are added
- collect different kinds of artefacts and trade them with other characters
- special events of similar kinds

#### 1.1.4 About World Rasslin Federation

Chris Brunner brought us the world of WWF Tootsville. AI characters get controlled by staff members to act out a story for the players to watch / join in. This takes it further: we give the AI's programs that inherently create "fun" situations when they interact.

## 1.1.5 About in-world minigames

In Tootsville 4, we had a (working) soccer park. [I think actually that Meixell had tried to make something like this in Tootsville 2, but it didn't work because the roomVariable system in SFS didn't work right.] The Referee (Stu) was a robot that kept score [and reset it after a while]. The players "kicked" the ball by walking into it. If it rolled into a goal, they got a point; if it rolled out of bounds, the Referee would walk over and put it at the bounds. The rules of the game were otherwise unenforced. The kids still played the game. We got more complaints about people "cheating" by buying things in the Mall than about the soccer game.

Putting open-ended things like this in the game world might be enough to amuse some people. Perhaps a "mission" or "greater purpose" is needed only to give you an excuse to explore and play in the world. How often have we ignored Navi so we could play some other game and ignore our Great Quest?

## 1.1.6 Miyamoto is my Hero

Miyamoto-san:

How do I want gamers to play Super Mario Sunshine? In each Mario game, players sometimes move around without any specific purpose, yet they may find some secret as a result. While wandering around, players get accustomed to the gameplay so that Mario moves just as they want him to. Then gamers feel some attachment to the game and don't want to sell it to used-software shops. So, the more you play, the more attachment you feel. This is an important element we want you to advertise.

(Will Wright on Miyamoto) Wright had said, "When you play his games, you feel like you're a kid and you're out in the back yard playing in the dirt."

#### 1.1.7 Caillois

Caillois divides play into four categories: agon [competition], alea [chance], mimicry [simulation], and ilinx [vertigo].

## 1.1.8 The Great Experiment

Altogether it's mostly an experiment: can we use AI characters to help the players create their own stories that aren't "a war?"

- Eve has shown that players can organize themselves to create a story built around war; but we can enforce a Shapir-Whorff hypothesis in a game world. You lack the vocabulary in the language of actions presented to you as a player to conduct literal violence. There are no swords. So, will players devolve into bullies in some other way, and end up creating their own war? Or will they find a way to tell more interesting stories with their play?
- So many stories we do tell are simple and non-violent. Romantic comedies. Sitcoms. Even horror classics are not "about" the violence; even in action films, the violence is often a filler. Given a vocabulary of activities that tends to push toward creativity and forbids violence, will players use that creativity and keep coming back? or will they feel like "what this game really needs is to let me kill the ogres?"

## 1.1.9 The danger

Nonetheless, there is a certain amount of "danger" necessary.

Having someone trash your garden because you didn't stop him from coming into your neighbourhood, or ogres steal your furniture, or something making you unable to do things in the world are forms of "hurting" you that mean you have consequences of your actions, but you can't just "shoot him with a BFG-2000," you need to find a way to "trick" him or convince him to somehow be beneficial.

## 1.1.10 Major Point: Sidekicks

The Sidekick model (bring along a player who hasn't registered themself; they share your inventory) might help lure more players in, particularly with the low barrier to start playing (Click this link in Firefox, and you're in the game now)

With some luck, that means we could grow the player base better as people use their existing social networks [literal or digital] to expose the game to more people, particularly kids. Tootsville 4's registration took about 4 minutes. This brings it down to almost zero effort to join in, if you know an existing player. It also makes me hope that most new players will see the benefits of having a guide with them, so we won't have to worry so much about tutorial needs.

Bonus: marketing: "play the game with your kids" and so forth.

Analogy: "girlfriend mode" was the nickname for options like http://zeldawiki.org/Tingle\_Tuner which allowed a second player to "help" without having to "commit" to playing an 80-hour-long RPG.

#### 1.1.11 Major Point: Persistent World

No instanced areas. Very little Adamantium construction.

#### 1.1.12 Major Failure: Monetization

I have no solid idea how we could hope to make any money doing this.

- Selling items? But then, can't people cheat by buying things for USD\$ rather than earning them in game?
  - Paying to clone an item that you have earned, e.g. if you have multiple characters? to give to a friend?

- Cosmetic items only? Charge them 50¢ to dye their clothing?
- Subscription? :-P I doubt that could be a good idea.
  - Hibernation charge? Protect your character from entropy. Pay us \$1 to freeze time when you're not logged in. No need to mow your lawn. But: it breaks the shared, persistent world model. Need an in-game excuse for this to work.

## • Merchandising

There's no profit model

OTOH, the hosting costs should be pretty light and it's a fun hobby, so I'm willing to dump a certain amount towards it for my own amusement & my friends'; and, maybe we can sell enough manuals and coffee mugs on Cafe Press to pay the hosting bill.

There's not much of a marketing model, which is why Tootsville 1-4 ultimately failed. "Word of mouth" takes longer than "pay your hosting bill" will accept. The ideas of the Manifesto might be unique enough that we could luck out and get Slashdotted by someone like Upworthy, but I wouldn't want to count on it.

Without solving these two, I wouldn't want to accept any investment, meagre or otherwise, because it's being built, realistically, as a money pit.

Perhaps getting someone to pay me (us) to do this over again for them is the real profit model.

Louis wants to build these things http://resinteractive.com/portfolio.html but who would give him the money with that track record?

Maybe we get a better royalty split and a better revenue model (more adult players or more affluent players) and create something that's more marketable/profitable.

## 1.2 The Team

#### 1.2.1 Me! Bruce-Robert Fenn Pocock

designer and programmer and stuff. whatever is needed Res co-owner

## 1.2.2 Gene Cronk

has volunteered to help with some sysop tasks (at least)

## 1.2.3 Erick Feiling

may be interested in some hacking

## 1.2.4 Joseph Williamson

may be interested in some hacking

## 1.2.5 Mark Mc Corkle

may be interested in some hacking & has good industry advice on Res co-owner

#### 1.2.6 Chris Brunner

moral support also a Res co-owner

#### 1.2.7 Testers

Kittie, Sage, Jess, James, Carly + kids, Meredith + kids, Megan Griffith,

## 1.3 Rough plans

Violet Volts, of course, is an anagram for Tootsville V; so that name has got to go, because Louis decided to piss himself. Not shocking, but sad.

## 1.3.1 No Tootsville?

No Tootsville.

#### 1. Plan B: Tortoises

Conversation with Carly Robb:

BRFP but, like I said, this is my hobby project, so I might as well resurrect the thing. and if not, maybe we'll use owls. anybody using owls?

CR hehe, you never know.... not that i know of... owls are good...

BRFP or something else that's easy to draw :-) I like owls. Big hats. Funny glasses.

CR tortoises are nice too....

BRPF Hmm. true paint their shells difficult to dress as a spaceman? I guess bipedal.

CR and they're semi-elephantish with the stumpy legs... just give 'em a helmet, they'll do fine....

BRFP no real elbows to speak of. makes animation easier.

CR hehe

## 1.3.2 DONE awaiting answer from Louis Pecci

RES

Louis would "never" consider a free game offer. Oh, well, fuck him.

1. **DONE** nag Louis a little

RES

# 1.3.3 TODO set up fucking Bugzilla and log tickets for all this shit

instead of having it in a text file

1. Maybe Gene would "like" to do this?

**GENE** 

## 1.4 Core Design

Romance II server core. New message queue based system, replacing the packet system from Quaestor; binary compiled Lisp, so much faster than Java; lots of nice stuff.

I'm writing up a rather exhaustive manual for that. I hope to sell a few copies of the book. I'm even trying to write some of the chapters up like academic papers; I hope to circulate them individually, as well.

The real reason for the great manual, though, is to get more contributors. If some companies start using this for their own MMO-RPG's, then, yay.

## 1.5 Front-end: HTML5, pseudo-3D.

## 1.5.1 Partial 3D: "Diorama" style

The world itself will be largely 3D polygonal, but with lots of "billboard" elements. The opposite of how FF-VII did it, where they had painted backgrounds and 3D characters.

If I have to create new avatars, they might be low-poly 3D instead, and fuck the 2D part.

The camera is permanently fixed looking down, and to the "north." So, we never see the north-facing side of anything, ever. This also means that the billboarded graphics won't look as silly.

If I could afford to recreate everything in "real" 3D, I'd consider it, but this seems like the best "cheat" for now, and the performance should be good even on (for example) cheap Android tablets. But, I might have to use a native (Java or binary) client to get reasonable 3D on them. Not sure yet.

## 1. **TODO** Consider buying a tablet

like Ginny's kids have for testing.

Some kind of 7-10" Android tab

## 2. **TODO** 3D library

I don't give a shit if it works in MSIE, although I guess MSIE 10 might be worth looking into someday.

Want something for WebKit + Blink + Gecko though.

WebGL is still kinda shitty. Sad panda.

How good can I get without

- needing to spend a year in Blender to get shit done;
- requiring players to buy a \$3,500 PC and reconfigure their video card to get the thing to load
- taking advanced math classes to figure out WTF is going on in the engine's API

#### (a) GEGL

So far, this looks like a winner.

Not "married" to it, but it looks pretty good.

## (b) **TODO** MSIE WebGL plug-in

MSIE:HELP

I set up something that might help people install the plug-in, but haven't really tested it

- (c) **TODO** Android/Chrome enabler helpHELP:ANDROID:CHROME
- (d) **DONE** Opera desktop enabler help

HELP:OPERA

#### 1.5.2 UI Stuff

The UI is JUST A UI. There's no real game-logic on the UI side, except for knowing how to interact with the user.

If I get a chance to rewrite it for other platforms, then, all the better.

## 1. Basic Screen layout

The UI is all one-finger; we look for taps/clicks, and drags. Mouse buttons 2 & 3 should be ignored for now (this includes trapping button 3 so it can't throw up a context menu)

In the four corners of the screen we have the four main controls:

- equipped item; tap to "use" it; what that means depends on the item; also mapped to the Spacebar
- a "status" icon to bring up various things, including inventory; also mapped to the Escape key and Tab key.
   Probably derived from the equipment icon but with some kind of player-avatar representation in it.
- a "face/step" control. Tap once to turn to face a direction (8 ways); tap when already facing that way to take 1 step. Also mapped to the cursor keys and the numeric keypad (digits except 5). Basically meant to look like a gamepad stick and be easier to "tap" to move in narrow spaces or turn-to-face without actually walking.
- "Action" control. Depends on context. Think the (A) button in Ocarina of Time. Also mapped to Enter, Return, or the numeric keypad 5 key. A small "side" icon (which jumps up and takes over when you're near someone) is for "say something" all the time. (See "tap and talk")

For ally we may need/want to be able to cluster these in one or two corners, also. I have some ideas about giving pre-arranged rearrangements for this for users who (a) are using a tablet and holding it from the bottom corners (thumby controls) and (b) who are using some kind of pointer (say, a trackball) where it's difficult to move across the width of the screen, so they want them all combined together.

Tap on the ground to move to a position, using pathfinding.

#### 2. Items and stuff

"Usable items" — you can only equip one item to the button at a time.

Items can have continuous (percentage-full) or discrete (countable number) quantities associated with them; both have a "max" and a "current" amount. This was done in Romance 1.1 as well.

Items can be "targeted," "directed," or "directional," or "immediate."

TARGETED: Click on a specific entity to affect. Click item; click entity. Entity should "highlight" when mouse over to indicate that it's eligible for selection. Gamepad: L-target then "Fire"

DIRECTED: Click on a coördinate; tries to affect that point in space, regardless of whether there is any entity there. Click item; click space. Cursor should be a "ball" of some kind. Gamepad: R-stick aim?

DIRECTIONAL: Click to set a direction, relative to yourself; e.g. click up top-left when standing at center screen means, "aim north-westerly" Click item, then position pointer "around" the character; should maybe show a vector moving parallel to the ground plane in the chosen direction toward infinity to indicate this mode of selection. Gamepad: R-stick aim?

IMMEDIATE: Click to use, here, now. No second click.

## 3. **TODO** Gamepad support?

W3C:CHROME

There looks to be a Gamepad support for HTML5 supplemental recommendation, but I don't see any signs that anybody is really supporting it yet?

#### 1.5.3 Server communication

streaming, probably WebSockets; server should accept raw TCP too.

Entities get tracks; maybe we can use the CSS animation functions in some cases, which is nifty. (\*no, we can't, in WebGL things are different)

Aggregate entities (e.g. character + costumes) are manipulated hierarchically; so if I move the aggregate, the parts move ensemble. Normal behaviour for OpenGL. Different than what I was sending to Persephone, though, where Osiris was handling the subspace summing for the most part.

Basically sending sexp's, probably want to use the MongoDB protocol for the wire protocol this time around, it's pretty nice. BSON, I think. It's Binary JSON. Just a little tighter.

## 1.6 Navigation

## NAV:PHYSICS

"walkable spaces" are totally different in this model, plus we're going to have server-side physics, so there.

"walkable" surfaces = defined by interaction of character type + surface; always must be a "real" 3D surface (not a billboarded object); generally defines as "navigable" "difficult" or "impassible" for the character; the client shouldn't need to know this stuff.

The character will pathfind "navigable" before "difficult" usually.

eg: "navigable" terrain = flat earth. "difficult" terrain = loose sand, or steep incline uphill. "impassible" might be a wall. They may be able to jump it, but they should usually walk around.

## 1.6.1 Adrenaline, Exertion

Character "adrenaline" v "exertion" scale similar to Skyward Sword. If you start going acrobatics (e.g. navigating difficult terrain) the "adrenaline" scale goes up, so you'll accept the "penalty" to your exertion scale and use the more difficult route (e.g. jumping over a small wall) rather than walking around.

## 1.7 Equipment, Slots, Valences

Some equipment are clothes. All clothes are equipment. Equipment can:

- have a passive effect; simply equipping it allows it to "do something"
- have an active effect; this usually means it becomes the item mapped to your "current item" button.

Slots: are like "shirt/chest" "pants/groin" "left hand" and so forth. Items are only equippable in certain slots.

Valences: Some things can be stacked within a slot. Like, you could maybe have a character wearing

- body paint (pattern layer)
- pasties
- bra
- undershirt

- shirt
- waistcoast
- jacket
- overcoat
- cape

... all of these taking the "shirt" slot. Some of them block other slots at the same valence though. Like, the cape might have a hoot and thus extend into a "hat" slot. The "pattern" might cover the whole body. &c

The avatar "exports" its slots. The item "imports" them.

Basic "DON/DOFF" commands.

Hot-swap icon for equipment on a "swipe?" Hide one icon behind the other and "swipe" to swap them? worth considering.

In real life it takes a second to swap items, so no worries if it does in the game, too.

## 1.8 Server Model

Multiple servers running lightweight containers

Containers win for sharing mmapped regions of RO content between themselves so we don't lose anything if we run multiple "logical servers" on one "physical" (possibly also a VM, e.g. Amazon) server. And we just design each one to run in a dead-minimal environment all by itself, no worries about other services running on the same host.

Game core itself = monolithic executable that sniffs its environment and command-line to decide which task to do on that instance; thus, lots of shared RO storage, and so much of a game server is overhead logic stuff that there isn't much of a ballooning either way.

Message Queue = leaning toward ZeroMQ or RabbitMQ. No opinions yet. Need to research. Main question, which is easier to set up for a dynamic environment where we might spin up more server instances (containers or hosts)

DB = Postgres. Need to figure out a clustering solution.

## 1.9 Dev Infrastructure

DEVEL

Open source components http://github.com/romance-ii Private stuff @ Raven:/pub/Software/ for now. Git also. Separate "assets" git tree.

## 1.9.1 TODO set up Bugzilla

**GENE** 

Bugzilla – I can set up the config, but it's a bit of a pain to build. Separate Postgres instance for hosting its data, versus the game; or at least its own schema, if it knows how to do that. (They're cool with pg these days, right?)

## 1.9.2 TODO set up Koji

**GENE** 

Koji – argh. requires some other infrastructure to set it up, but it's really what we need. If I can't get it running, I might fall back on Jenkins instead, but ick. Infrastructure like Kerberos.

#### 1.9.3 TODO Postfix

Mail server = Postfix.

Eventually we'll want some automated mail handling stuff.

## 1.9.4 TODO static web server?

Web (static) server = flip a coin, nginx or Apache? shouldn't matter much, the "fun" stuff will all be on the dynamic server anyways

Might just say fuckall and use a serve or Hunchintoot and build it into the same executable . . .

### 1.10 Tap And Talk

**TAPNTALK** 

Madlibs-style interface

limited vocabulary

map directly to logical assertions or queries

separate content from language

big issue = selecting nouns. lots of stuff to choose from, how to make it not take forever to bring up a concept?

most-recently-used set will help

but might need to "talk about" things that are not in your inventory, far away, whatever; that will make them ornery to select

if you haven't "heard of it," you can't talk about it.

Shapir-Whorff Hypothesis in action for the AI's too.

#### 1.10.1 SINGING tortoises

SOUND

Pick a voice and we'll run the dialogue through some kind of "note generator" so whenever you say the same word, it'll "sound" the same.

Not English hashes like we had looked at before. I'll just take the conceptual tokens used in the AI and use them as indices to pick a starting and ending frequency and duration.

Maybe MOD-style. Pitch-bend, duration, and pick a "sample" to play.

- 1. **TODO** What kinds of sounds do tortoises make?
- 2. **TODO** sound in the browser

How shitty is it? Is it as bad as I think it is?

Might need to create a "sound rendering" server and stream this to the client.

My initial tests at synthesizing music had "crackling" effects that I couldn't shake. Need to reconsider/re-evaluate this.

1.11 TODO Sound effects; foley

SOUND

1.12 TODO background music

SOUND:MUSIC

1.12.1 TODO Creative Commons music

Look into pulling Creative Commons music en masse for the "radio"

## 1.13 Geography

MAP

There WILL be one big map. I'll probably run some noise generator over a sketched map to create a huge heightmap of the island.

1.13.1 TODO re-draw a non-Tootanga map.

MAP:BRP

1.14 Physics

**PHYSICS** 

Looks like it's Bullet.

NB: this is handled server-side mostly, but the client will need/want to predict things also. Having the same library compiled two ways would be the optimal solution, of course.

- 1.14.1 TODO make new Lisp bindings, the old ones are kinda shitty
- 1.14.2 TODO make a JavaScript binding?

## 1.15 AI planners

AGENT

A-star Djikstra style (give or take)

their "intelligence" score is kinda the number of steps the planner evaluates per "turn"

same I/O as players. only distinction P-C v NPC = where the I/O goes. temporal associative logic

Andi-land style stuff

conceptual trees for memory: when do they forget?

when do they "notice" something? — interests trip passive perception; active perception triggered on other events

1.16 Teams TEAMS

loose thing

really just a UI thing?

any net effects? maybe passive items activate for a whole team. (mass buff/debuff)

## 1.17 Buddy List?

BUDDYLIST

eh. I really don't care.

double-accept? (Facebook-style or Google+-style?)

1.18 Sidekick SIDEKICK

Non-registered player-character shows up as "XXXX's friend"  $\,$ 

basically treated like a pet

but they share the same inventory, so you have to loan them your clothes and tools.

- Zero barrier to entry to play
- Parents can bring their kids on or vice-versa

1.19 Pets PETS

follow you around, and stuff

basically simpler AI's

non-linguistic

same as any other animal, but they "like" you a lot

1.20 Vehicles VEHICLE

definitely want a high speed rail network

also revamp the idea of cars for both transportation and racing — the mechanic/inventor will invent them after we're online

"walkable space" concept to keep cars only on the road

"obey the crosswalk" magic gimmicks, like a teaching video; as soon as someone enters a crosswalk, they proceed across it without running, cars must stop.

## 1.21 Passports

**PASSPORT** 

In Tootsville 2, once you got invited to a place, you could go back there by clicking on your passport icon, but we ditched or broke that concept pretty early on.

Now that you can walk across the whole world, though, maybe once you've found a train station or fountain in a village you can get your passport stamped — perhaps even have some minigame type thing to get your stamp — and once your passport is stamped, you can buy train tickets to go back there any time

How about sidekicks? They must be able to come with you

## 1.21.1 TODO better name than "Passport"

## 1.22 Compass; Metal Detector; Dowsing Rod COMPASS

Like in Zelda, give or take. Some kind of Compass, Metal Detector, and other item(s) that can be used to find certain types of prizes in the world. Dowsing Rod.

## 1.22.1 TODO develop the list of prizes and ways to search COL-LECTIONS:COMPASS

Not every collectible item needs to be detectable in the same way

## 2 The Story

"Why is it so dark?"

"In the beginning, it is always dark. ... This one grain of sand; it is all that is left of my vast empire."

21

## 2.1 The Back Story

A bunch of big tortoises found themselves on top of a magical elephant graveyard, which turned out to be a gateway to a special alternate dimension

#### BLAH BLAH

Somehow they mutated. Somehow, in a way that does not involve rats, little alien guys with no legs, or bank drive-through tubes full of jelly.

Seriously, I want to be **very careful** to avoid any potential for comparison with the Teenage Mutant Ninja Turtles.

## BLAH BLAH

So now, tortoises can cross through this one-way portal and find themselves in TODO WORLD-NAME

Their birdy friends — finches — come along for the ride and serve as a mail service.

A few other random critters might exist, but they're special-case one-off beasties with very specific jobs.

The world is somehow TODO cloaked in some kind of impenetrable fog or something so that we have a natural barrier that gradually disappears as we (designers) add more terrain to the geography.

#### 2.1.1 TODO world name

### 2.1.2 TODO why can't you go everywhere?

fog of war

magic barrier

edge of scroll radius doesn't really work in 3D

## 2.2 Characters

There are a team of characters who provide the basic story-movement capabilities for the game designers. They'll have the most developed personalities and are regarded as being particularly "special" by all of the other AI's.

They're also the original group that arrived first.

These basic characters also serve as models that players can (hopefully) identify-with; and, by virtue of building their personality types, other characters will in turn be able to exhibit features of them.

They're the archetypes, from which all AI's descend.

They're intentionally based upon the models of how (we wish) players will interact with the world, thus by merely existing and participating, them-

selves, we'll see a continuous test of the game world's ability to withstand players.

The current working models here have been drawn from the elemental system of Chinese astrology as well as various psychological documentation with a bit more scientific rigour; the various categories will likely be merged into fewer characters as we develop them.

http://www.gamasutra.com/view/feature/6474/personality\_and\_play\_styles\_a\_.php

http://www.yukaichou.com/gamification-study/user-types-gamified-systems/

#### 2.2.1 TODO leader

A Leader.

The natural leader, capable of making a binding decision for everyone; a monarch, a benevolent-dictator-for-life, and the leader of the group; s/he takes everyone's opinions into account, but they accept his/her decisions as law.

## 2.2.2 TODO wacky inventor

## 2.2.3 TODO earth person

Most Earth-type people are trustful, steady, loyal and responsible. They are honest, religious, reliable, and keep their promises.

The characteristics of Earth are standing still, being slow and steady, and stationary. Therefore the Earth people don't like to move their body and change their mind too often. They are honest, trustworthy, and responsible. They also have good faith. They can sit in one position for a long time. They accept religion since they like rumination and meditation. They are slow to react. They like to collect things, and enjoy their collectables at home, but not outdoors.

People lacking Earth are selfish, insincere, and self-indulgent. They tend to ignore other people's opinions. They might take immediate advantage of others unethically. They don't care about the people around them and do not keep their promises.

People with excess Earth are stubborn, inflexible, cheap, lonely, plain and simple. They cannot keep their word either.

## 2.2.4 TODO metal person

Metal-type people are righteous, faithful, gallant and chivalrous. They like to know and help people.

Metal is the substance in which internal particles squeeze and condense together. There is a force from the outside to the inside that keeps Metal hard. Metal reflects light, so it is shiny. It may have a clear sound when it's hit. Therefore, a Metal-type person has great strength, discipline and enough courage to aid needy people, which may make them famous.

Metal people are brave, disciplined, trained, organized, authoritative, determinative, routine, firm, resolute and have an urge to win. They have a large sense of honor. They like to spread their fame. They are sensitive in grief and sadness.

People that lack Metal are quiet, cautious and nervous. They tend to think too much, and cannot make quick decisions. They do not express what is on their minds in public, but will complain about something afterwards.

People with excess Metal are often unkind and destructive. They are brave but may have no resourcefulness and no intelligence. They have little grace and no mercy. They do not keep secrets.

#### 2.2.5 TODO water person

Water-type people are smart, wise, frank, and resourceful. They have good memories and think before they leap.

There are two types of Water: Floating Water and Still Water. Floating Water makes people active and restless and feel like traveling. Still Water makes people clam and peaceful.

People lacking Water are unstable, cowardly, narrow-minded, and have no stamina. They lack intellect, good sense, understanding, and foresight. They also tend to keep changing their mind.

People with excess Water are smart, sly, tricky and plot dark schemes. They like to move or travel around and have a sensual life. They are likely to dream too much, and keep changing their mind as well. They also are only interested in what concerns them and have no interest in outside world affairs.

## 2.2.6 TODO wood person

Wood-type people are kind, steady, sympathy-sharing, understanding and gentle. They like to help people and make donations.

The essence of Wood is a tree. The force inside the tree is like growing upward to the sky. Trees often compete with each other aggressively when growing up. Because of the characteristics of trees, Wood-type people are steadfast, organized, logical, practical, innovative, unique, assertive, fortitudinous, independent, challenging and direct. They like to plan things, take action, and go on adventures and challenges. They are perfectionists who tend to push themselves to the limit and seek out the best, and take first place in competition.

When their ambition and optimism is overwhelming, Wood-types can become upset, nervous, unstable, impatient, intolerant, and lose their humor by the frustration of many obstacles.

People lacking Wood essentially are weak in their opinions. They lack the determination to change their options when situations change. They are likely to be jealous when they don't have a strong viewpoint of their own.

People with excess Wood are often inflexible, prejudiced and biased. They tend not to accept or absorb others' opinions.

## 2.2.7 TODO fire person

A Fire-type person is courteous, eloquent, polite and expressive. They are good at compliments in speech.

Fire people are energetic, artistic, passionate, easily excitable, and have a tendency to rapidly change emotional states as well as become aggressive. They love sensation, drama and sentiment. They seek joy, gratification and the attention of others. They like to be invited to a party and dislike being alone.

People lacking Fire are aggressive but have no persistence. They are inclined to have little confidence and have plenty of worries.

People with excess Fire are often talkative, overstated, overexcited, overheated, sweet-talking, smart and restless. They tend to lecture and offend others because of their short temper.

## 2.2.8 TODO killer person

Killers like to provoke and cause drama and/or impose them over other players in the scope provided by the virtual world. Trolls, hackers, cheaters, and attention farmers belong in this category, along with the most ferocious and skillful PvP (player versus player) opponents.

Artisan/Killer: Finally, there are the Killers (or, as I prefer to call them, Manipulators). These can be difficult to understand in a gameplay context

because most virtual worlds have encoded rules that marginalize their play style as "griefing" (i.e., upsetting other players) and try to prevent it. As Bartle puts it, "Killers get their kicks from imposing themselves on others." He also points out that Killers "wish only to demonstrate their superiority over fellow humans."

This desire for power over everything in their world is most closely echoed in the Keirseian description of Artisans, who (as their temperament name suggests) delight in the skillfully artistic manipulation of their environment. The Artisan/Killers are the tool-users, the adrenaline junkies, the natural politicians, the combat pilots, the high-stakes gamblers, and the negotiators par excellence. They instinctively find and exploit advantages in any tactical situation, and they express this need for dominance of their world in order to retain the greatest amount of personal freedom possible (External Change).

I believe a very good example of this can be found in Ryan Creighton's "social engineering" of the coin-collecting game at the Social Game Developers Rant of the 2011 Game Developers Conference. A Guardian/Achiever would have played by the rules and raced around the room begging others for their coins to try to win the game; an Idealist/Socializer would have asked for coins as a way to meet new people or help others win; and a Rational/Explorer would have sat quietly watching the flow of coin exchanges to try to understand the nature of the game. But an Artisan/Killer would instantly see how to short-circuit the designed system, and, as a born negotiator, would find it easy to persuade the person holding one of the bags of coins to hand the whole thing over... which is exactly what happened.

If the attendees needed to hear a rant from anyone, it would be the Manipulator who is out there, just waiting to exploit any opportunity to bring a little chaos to the carefully designed order of a social game. (See Ryan's description of the event for a wonderful first-hand account of gameplay from what appears to me to be a classic Artisan/Killer perspective.)

A final note on the Keirsey/Bartle linkage: the Keirsey temperaments and Bartle Types may appear not to line up directly where attitudes toward other people are concerned. This is because the Bartle Types were developed within a multi-player environment, which selects for more extroverted, sociable gamers, while the temperaments include both extroverts and introverts.

So, for example, the "Socializer" term that makes sense within the Bartle Types for its emphasis on interacting with other people can seem not to apply to an introverted Idealist who prefers to play single-player games. These less-social Socializers are more likely to prefer individualized entertainment or abstract games, making it difficult to distinguish them from

Rational/Explorer gamers. Closer study is usually required to see whether their primary reason for playing is to feel good (an Idealist preference) or to exercise their thinking skills (a Rational goal).

## 2.2.9 TODO achiever person

Achievers are competitive and enjoy beating difficult challenges whether they are set by the game or by themselves. The more challenging the goal, the most rewarded they tend to feel.

Guardian/Achiever: For the Guardian, the world is an insecure place, so it's necessary to protect oneself by accumulating material possessions... just in case. Thus, Guardians focus on earning money, on competing with others for resources perceived as scarce, on buying nice things and maintaining them, on forming stable and hierarchical group relationships, and generally on working hard to make their place in the world secure by locking down their connections to the world as possessions (External Structure).

Compare that to Bartle's description of Achievers: "Achievers regard points-gathering and rising in levels as their main goal" and "Achievers are proud of their formal status in the game's built-in level hierarchy, and of how short a time they took to reach it." Leveling up, leaderboards, and the accumulation of vast quantities of looted items are all behaviors that are driven more by a security-seeking motivation than by other motivations such as powerful sensations, understanding or self-growth.

This explains why the Guardian/Achiever is willing to persist in long stretches of "grind" that other kinds of gamers don't perceive as fun at all. To this gamer, rewards should be proportional to the amount of effort invested. When a game is designed around simple, well-defined tasks that enable the competitive accumulation of status tokens, that game is virtually guaranteed to attract security-seeking Guardian/Achievers.

## 2.2.10 TODO explorer person

Explorers like to explore the world – not just its geography but also the finer details of the game mechanics. These players may end up knowing how the game works and behave better than the game creators themselves. They know all the mechanics, short-cuts, tricks, and glitches that there are to know in the game and thrive on discovering more.

Rational/Explorer: Rationals play in the same way that they do everything else – they find pleasure in discovering the organized structural patterns behind raw data (Internal Structure). These can be patterns in

space (as in geography) or patterns in time (as in morphology). Or they can be cause-and-effect patterns (entailment) or relationship patterns (connections). Ultimately, it's all about achieving a strategic understanding of the system as a whole thing.

As Bartle describes Explorers: "The real fun comes only from discovery, and making the most complete set of maps in existence." Of the core motivations – sensation-seeking, security-seeking, knowledge-seeking, and identity-seeking – exploration as "discovery" is most closely aligned with the Rational's knowledge-seeking preference. For the Rational/Explorer, once the principle behind the data is revealed, that's enough – understanding is its own reward. These gamers can enjoy imparting knowledge to others, but no extrinsic reward for doing so is needed or expected.

## 2.2.11 TODO socializer person

Socializers are often more interested in having relations with the other players than playing the game itself. They help to spread knowledge and a human feel, and are often involved in the community aspect of the game (by means of managing guilds or role-playing, for instance).

Idealist/Socializer: Socializers are described by Bartle as "... interested in people, and what they have to say. ... Inter-player relationships are important ... seeing [people] grow as individuals, maturing over time. ... The only ultimately fulfilling thing is ... getting to know people, to understand them, and to form beautiful, lasting relationships."

This is closely related to the Keirseian description of Idealists, who are very aware of other people as part of their lifelong journey of self-discovery (Internal Change). In a way, the highly imaginative Idealists are always role-playing; they are constantly creating images of themselves (or others) that they feel they should model through their own actions in order to produce the emotions in themselves that they want to feel.

#### 2.2.12 TODO conqueror person

"I'll beat any challenge"

Play: Hard Agon Emotions: Anger/Fiero, (Fear?) Skills: Strategic, Tactical & Logistical

The fiero-seeking Conqueror is the economic mainstay of the upper market of videogames, thriving on a diet rich in First Person Shooters. Challenge is the draw for this player – when the complaint "it was too easy" is heard, it is heard from a Conqueror. Fiero, the emotion of "triumph over adversity"

requires that the player be put through the ringer, pushed to their limits, and as a result anger and (possibly) fear are likely to be related emotions. It is likely that Conquerors are younger on average than other players.

## 2.2.13 TODO manager person

"I have to know how it works"

Play: Complex Ludus, Agon Emotions: Contentment, Fiero Skills: Strategic

The strategic-minded manager is a complexity-seeking player. Games with many rules, including both strategy games, and certain cRPGs, are the mainstay of such a player, although adventure games will also be enjoyed by many. Although fiero is likely to be a theme, the Manager is less dependent upon this one emotion, and seeks the satisfaction of knowledge or mastery, expressed through the feeling of contentment. They can rack up serious hours on the games they really love.

## 2.2.14 TODO wanderer person

"Escape to another world"

Play: Mimicry, Paidia Emotions: Wonder, Curiosity, (Fear?) Skills: Tactical & Diplomatic?

The escapist Wanderer seeks immersion in the sense of engagement with an imaginary world. Such a player enjoys the beauty of fantasy worlds, and is driven by a curiosity to see what is out there. Story (specifically characters) is a greater drive than challenge, and indeed the desire to know how the story ends may drive engagement with any game. Fear may be enjoyed for the experience, in the manner of a fairground spook house.

## 2.2.15 TODO participant person

"Let's play together"

Play: Agon? Paidia? Emotions: Belonging, Amusement, Naches Skills: Any?

The archetypal social player, the Participant doesn't want to play alone. Although competition (agon) is enjoyed, it is enjoyed principally for the opportunity to be part of something taking place between people. The need to belong, to be part of something, is likely to be expressed most strongly with such a player.

## 2.2.16 TODO hoarder person

"As much as I can get"

Play: Mimicry, Ludus? Emotions: Greed, Contentment Skills: Logistical The logistically minded Hoarder cannot resist acquisition of game resources. Likely found playing equipment-heavy cRPGs, as well as MMORPGs, the Hoarder is a thorough player, gaining satisfaction (and hence contentment) from the completion of "stamp collections" and the like. When they finish a game, they usually find they have accumulated an absurd amount of equipment, ammunition or money.

## 2.2.17 TODO zoner person

"Time has lost all meaning"

Play: Simple Ludus, Alea, Ilinx? Emotions: Excitement, Relief Skills: Tactical

Puzzle games are the zoner's remit – lost in the flow of an abstract game, they become intent upon the actions of the game they are playing to the exclusion of all else. However, as much as they love the games they play, they may not play for long period of times. Short games played often is the nature of the experience.

## 2.2.18 TODO juggernaut

"Knock 'em down"

Play: Easy Agon, Mimicry, Paidia Emotions: Amusement, Contentment, Excitement Skills: Tactical?

The Juggernaut seeks a little resistance in the game they are playing, but mostly wants to push through everything with comparative (and amusing!) ease. A little excitement is desired, but the Juggernaut isn't looking for the degree of challenge that would consistently supply fiero. Rather, they just want to play around – often completely dominating the game they are playing. For the Juggernaut, games aren't about stress, they're about unwinding.

#### 2.2.19 TODO monster

"Evil is my middle name"

Play: Agon, Paidia Emotions: Schadenfreude, Amusement Skills: Strategic? Tactical

The emotion of schadenfreude – taking delight in the misfortune of others – drives the Monster. Mischief is their primary occupation – "griefing" of strangers in a MMOG, and playful annoyance when among friends. The Monster player is not interested in rules – except in so much as they can find new ways to break them.

## 2.2.20 TODO hotshot person

"The thrill of the ride"

Play: Ilinx, Mimicry Emotions: Excitement, Relief, (Fear?) Skills: Tactical

The master of high speeds and nail biting rides, the Hotshot is the master of vertigo (ilinx). The ultimate payoff of victory (fiero) will be enjoyed, but it is the experience of being at the brink of control – the excitement (and perhaps fear) of being right on the edge that is the driving force.

## 2.2.21 TODO agon person

http://onlyagame.typepad.com/only\_a\_game/2006/03/the\_challenge\_o.html

## 2.2.22 TODO alea person

http://onlyagame.typepad.com/only\_a\_game/2005/11/the\_rituals\_of\_.html

#### 2.2.23 TODO mimicry person

http://onlyagame.typepad.com/only\_a\_game/2006/01/the\_imagination.html

## 2.2.24 TODO ilinx person

http://onlyagame.typepad.com/only\_a\_game/2006/05/the\_joy\_of\_ilin.html

## 2.2.25 TODO ludus person

http://onlyagame.typepad.com/only\_a\_game/2006/04/the\_complexity\_.html

## 2.2.26 TODO paida person

http://onlyagame.typepad.com/only\_a\_game/2005/12/the\_anarchy\_of\_ \_1.html

## 2.3 Non-Tortoise Characters

## 2.3.1 The Mockingbird

The Parrot is a "village elder" who gives advice to new players. This is the tutorial section also. New players come in throught the portal and have to follow the mockingbird's instructions to get through.

#### 1. **TODO** name him

#### 2.3.2 Finches

The Finches travel around spreading whatever news we (admins) want them to. They're the Town Criers and also deliver mail/packages.

#### 1. **TODO** need a list of names

I'm tempted to get themey and use, say, famous literary figures' names

## 2.3.3 TODO The Big Bad

The Big Bad wants to do something cataclysmic to seek power for himself, but is never seen;

He gives "gifts" to his minions

Probably the source of the thing that obstructs access to most of the map

Now he's a boogeyman, never seen; like Sauron, he lurks in the (TODO) region and marshalls his forces without ever being seen, himself. All of the characters fear the day that The Big Bad shows up again; they don't know if he's regaining his evil magic as fast as they've been building up their skills

## 2.3.4 TODO the polluter

Goal is to pollute the world, he leaves trash around that players need to wash up.

Very much Super Mario Sunshine. Sorry, Nintendo.

#### 2.3.5 TODO the mail thief

tries to steal the mail and such, but if he gets caught, he'll drop what he's taken. Otherwise, he'll take the packages and stash them in various places throughout the world.

Players "catching" him will "free" up whatever packages he's stolen but not yet hidden; the hidden things will be in trapped boxes. Recovered, stolen goods should be dropped into any mailbox for re-delivery.

## 2.4 Currency

**MONEY** 

Need to come up with something to use for currency.

Scottish Pounds in the underwater area. Manatee money is only for manatees. Teach them to deal with currency exchanges.

No money on the space station. Totally socialist.

When you "own" something like a house people know it's yours

if you drop other shit in public you might be littering or it might be civic improvement —

#### 2.4.1 TODO how do the AI's decide?

if you drop other shit in public you might be littering or it might be civic improvement —  $\,$ 

## 3 Minigames

Note, none of these are pop-up minigames or whatever. They're just things to do in the game with the same interface as any other things.

#### 3.1 Football Core

FOOTBALL

Basic core that we can use different rules variations easily for: soccer, volleyball, baseball or softball or kickball, basketball, possibly miniature golf or croquet, . . .

#### 3.2 House and Lot

HOUSE

Lots: Miami-style. Each village has a town square with a main Ave and a main St that are analogous to 0 Ave / 0 St

Streets run E-W and have numbers running north or south.

Avenues run N-S and have numbers running east or west

Buy a lot and build a house on it Build more rooms and decorate the yard

3.3 The Mazes MAZE

Originally planned for Tootsville IV, but we never got decent art and then the client-side support blew up. Yay Sam.

Mazes exist as:

- lilypads across the lake near the treehouses where the finches live
- lava floes in the caves into the Lost World
- under The Manor, Venetian theme; Venice, Roman catacombs, or the Temple Of The Gods in Wind Waker.
- The Manor maybe also a hedge maze
- something like a maze around the Ranch?
- going down hamster tubes on the space station
- traversing a Coral Reef near the Manatee village ...

The Maze areas are made up of "tile"-like objects that are either "positive" (places one **can** walk) or "negative" (one can only walk where they are **not**); e.g. lilypads are a positive-space maze; hedge mazes are negative-space; lava floes might be a combination of both, with positive-space islands amid negative-space lava amid positive-space.

Before a space transitions, there's an obvious transitional state; e.g. lily pads partially submerged/arisen.

Some spaces may be "dangerous" and reset the player to something like the start of the maze, but will have obvious "hints" to warn the player of this.

Over time, the dynamic stepping stones are changed slightly: one might appear or disappear randomly.

Stones won't disappear or become dangerous while someone is standing upon them?

Keys and locked doors (of whatever kinds) may exist in each maze

The Locked Door can only be opened if the player possesses the Key Pivitz and is standing nearby to it, within a predefined area. Once unlocked, the Key is "destroyed" [but

therefore can be obtained again], and the door remains unlocked [and passable] as long as the player remains nearby. Once the player leaves the area [either by walking away or walking through the door], the door locks again, requiring someone [same or other player] find the Key to the door again.

doors can also be teleports

The exits from each room re-enter other maze rooms more-or-less at random: they are not laid out in a grid, and walking back through the same door may not return you to the same room. Doors may change where they go over time, perhaps daily or hourly.

Possible alternate Key/Lock mechanism might be to obtain a Key and require it to go to a Lock elsewhere in the maze, which then opens a door distant from the lock for a given time (say, 5 minutes or so).

NPC hinting, per the old Tootsville IV plan it went like

A Super Toot Bot will stand just inside the entrance from the Castle with a short phrasebook explaining the basic rules, e.g.:

The maze is changing all the time.

If you can find the key, there's a prize behind the locked door.

Watch out for slippery stones or you might be sent to Shaddow Falls!

If you get lost, use your Compass to escape.

Run away if you see The Big Bad! He'll steal your peanuts!

Upsides: serves puzzle-solving players; fairly good replayability Downsides: requires new assets [prizes, rooms] to be added from time to time.

#### 3.4 Cleaning up after Smudge

Vacuum (?) up stains left by Smudge

## 3.5 Tower Defense Picnic

One idea: columns of ants marching in. The "towers" throw ant-foodstuffs at them: seeds and such. When the ants have "absorbed" enough "hit points"

[carbs?] worth of food, they turn around and march peacefully away. "Sated" ants change colors and move faster; they're not targeted by the weapons.

The player's "base," then, is a picnic basket, with a certain number of peanuts in it. As the ants successfully take peanuts, they are "sated" and rush off screen. Once the entire picnic has been stolen by the ants, the game ends.

Since kids crave closure, we could have the game "end" after a certain number of rounds.

This could be done now [Nightmare] as a minigame, or later [Osiris] as an in-world game.

## 3.6 Digging Game

This was a knock-off of Astro-Pop.

Basically:

Move spaceship left or right across bottom of board.

Use "tractor beam" to pull down blocks which are the same color. Collect blocks from one or more columns, then push them back into another column by dropping them.

When enough blocks of the same colour collide, they "pop," and trigger any adjacent special blocks to drop their prizes as well.

Note that the implementation of the pattern-search for the blocks array was something that PopCap? did very badly in their first implementation of this game, so we should watch out for "gotchas" in that.

We could probably invert the screen vertically and have this as a digging game. The blocks would be various chunks of earth; moving them together causes little "cave ins." The prizes are carried up out of the earth by grateful bugs [earthworms, ladybirds, etc.] to the player walking across a scaffold at the top of the screen. The players could them collect a certain type of prizes as a goal, once they receive enough of these [gems?] they could move on to a higher level.

## 3.7 Zuma/Luxor concept

Games like "Zuma," include the popular "Luxor" clone, we could easily produce one of these.

The only difficulties we had in production of Zuma from PopCap? were: asynchronous ball-rolling animations in the axis of forward travel tended to cost a lot of CPU power; we went to a synchronous, general animation for the seat-back systems; and the tunnels code gave me trouble.

Oh, wait, we're 3D now. Squelch that.

# 3.8 Insaniquarium-inspired fish pond?

"Feed fish; fight aliens."

The bear kids were stoned or something, but it's an addictive format. We should probably rework it into something other than an aquarium, of course.

Basically, you drop fish-food into the tank, to feed the fish, who in turn both grow, and crap out gold coins. Clicking coins collects them, to give you money, to buy more fish [and some other helpful creatures that assist in feeding and collecting coins].

From time to time, aliens beam into the tank, and you click on them to LASER them until they explode back to their alien universe.

Both aliens and larger fish eat the smaller fish.

The object, naturally, is to have your fish survive for as long as possible.

3.9 Mail MAIL

Leave mail in mailboxes; finches distribute Write messages, wrap parcels monsters tries to steal them

# 3.10 Luigi's Mansion?

#### 3.11 Platformer areas

# 3.12 the spaceship game

**SPACESHIPS** 

used to be called Zap's spaceship battle or something

Let's make it into "asteroids"

When there aren't human players, some robots will have to jump in, to keep the space station from being damaged by the never-ending barrage of falling rocks and space junk

# 3.13 Dangerous areas: The Big Bad

On a pseudorandom schedule, The Big Bad will appear in one of the maze rooms and steal peanuts from all players who don't flee fast enough, e.g.:

• The Big Bad appears

- Tendrils weather sets in
- "Hahaha! I'll steal # peanuts from you all!"
- $\bullet$  Wait for # seconds
- steal peanuts [#givenuts -# @room]
- The Big Bad vanishes
- Repeat randomly every 2 hours or so

Consideration: Perhaps not The Big Bad himself. I don't want to introduce the character too early and end up making him a mere nuisance.

Perhaps having Targ or Welduh or something do this kind of harassment makes more sense.

Allowing some use of Wishes to stop them would be good

4 Places MAP

1. **TODO** map

#### 4.1 Downtown

Tortoise St and James Ave

#### 4.1.1 Main plaza

(a) The shopping area From 2009, I wrote:

SHOP

- 9.6 Shopping
  - Shopping is now an in-world action. If desired, storekeepers can even be conversant NPC:s.
  - Players can walk through shops and view items on shelves, and then purchase them by clicking on the items and choosing to buy them or not. When clicked upon, store items will pop up a detail sub-window similar to the previous "web catalog" views.

- This gains us the additional psychological advantage that players will literally see "everything" for sale, rather than only ever seeing a few items at a time. This makes the shops look much bigger, even though from an artwork perspective we only need to draw [and then replicate] a couple of "shelves" graphics.
- None of the shopping functions require special handling on the client side, since the stores are just ordinary 3D rooms with some special logic on the server side to handle purchasing items [and, possibly, speaking with the clarks at the stores].

We didn't really live up to it at the time, but the examples of actually trying to do so in Tootsville (like Capes & Cowls) seemed to validate the statement.

#### (b) Restaurants

a few of these.

i. **TODO** CookingCooking game, like Cooking Mama.Baking Mama.

MINIGAME

- ii. **TODO** Waiting Tables MINIGAME Waiting tables game, like Diner Dash
- iii. **TODO** Washing Dishes MINIGAME Washing dishes game
- (c) Train station

TRAINS main station

(d) Theater

The Theater ... will need some ideas here, but Archive.org and <video> might be a cool fit, if we can overcome browser-related issues. Running old cartoons and such.

Yes, this is the same idea I used for Tootsville when Louis's original content didn't come through, so it's kinda "been there, done that," but it is an idea.

i. **TODO** Video "recording"?

MINIGAME

What if players could act out scenes on a soundstage and record them, and then enter a contest of some kind to have their videos posted here?

Kinda rehashes something the Tootsville players had "invented" on their own.

#### A. **TODO** YouTube?

It's even possible we could share out the "best of" to YouTube.

# ii. TODO Video playback?

Tech issues? <VIDEO> element support, transcoding, bandwidth

- (e) Inventor's Shop crazy Rube Goldberg physics engine tests
- (f) Fairgrounds for events
- (g) Hall Of Heroes statues for famous players?
- (h) Spaceport

the launch/landing pads for rockets to the space station are here

i. **TODO** Launch minigame MINIGAME minigame to help run the countdown from Mission Control; if you fail, the rocket launch will abort and you'll have to wait for them to refuel; nobody else can go to the space station until the next launch window

#### 4.1.2 School?

need some actual contents here walk the halls get a locker take a class...

honour roll?

# (a) **TODO** design classes

RESEARCH:MINIGAME

actual minigames based on learning things in classes

- maths: basic arithmetic, fractions
- money handling (US currency, coins, arithmetic)
- basic physics: simple tools and such (lever, plane, pulley)
- English grammar and vocabulary (?)
- Spanish vocabulary
- penmanship? tough sell with a mouse but OK on touchscreens or so forth, but will require deeper level coöperation with the front-end
- drama class? Acting out simple plays? shadowcasting?

• very simple real world history/geography. Where is Rome? Where was the Roman Empire? Where was Alexander's Empire? Who were the Ancient Egyptians?

#### 4.1.3 Sports Arena

(a)	TODO Soccer game	FOOTBALL:MINIGAME
(b)	<b>TODO</b> Baseball game	FOOTBALL:MINIGAME
(c)	TODO Archery?	MINIGAME
(d)	TODO Track?	MINIGAME
	(tough sell. speed stats?)	
(0)	TODO Deleverese?	MINICAME

(e) **TODO** Relay race? MINIGAME (maybe better than track)

(f) **TODO** Mini Golf! FOOTBALL:MINIGAME
Based on the football model; but knock the ball through various obstacles

(g) **TODO** Kids' Calisthenics RESEARCH:MINIGAME teach them useful stuff. I dunno. VAGUE idea.

Tag or Kick the Can or so forth interval training?

#### 4.2 The Beach

Peninsula to the south, around the bay of TODO, where the Manatees live

Note: tortoises can swim.

# 4.2.1 TODO Volleyball

**MINIGAME** 

Volleyball game: Character keeps score, join a team and play a game, same as soccer and baseball basically

## 4.2.2 TODO watercraft

maybe jet-skiing, small boat rental

# (a) **TODO** Pirate Ship

LATER

Pirate Ship: when it arrives (future), it'll go on tours of the area to various small desert islands; the pirates will collect and bury treasure, maybe give out treasure maps with X marks the spot

# 4.3 Manatee Village

Manatee residents? because Manatees are huggable

The currency here are different than on land, and only useful in the sea, like how Scottish Pounds are (were?) useless in London.

#### 4.3.1 Underwater lab

Let's see about getting some "wonders of the undersea world" kind of educational content in here, too

#### 4.3.2 TODO Coral Reef Maze

MINIGAME:MAZE

# 4.4 Space station

need a launchpad to get here rockets launch and land periodically

# 4.4.1 TODO asteroid mining

MINIGAME

The space game should be reproduced; Buy spaceships, fly them around, play asteroids

#### 4.4.2 TODO hamster tube maze MINIGAME:MAZE

Hamster tubes through the station; like Jeffries tubes, but for tortoises. They get re-arranged by space station engineers all the time, this is one of the 'always changing maze' areas.

# ${\bf 4.4.3 \quad TODO\ contact\ Space X\ about\ allowing\ use\ of\ Dragon/Falcon}$ in game

permission to use Dragon vehicles to access?

It'd be cool to include actual spacecraft, just need a trademark license. Maybe Musk is feeling excitable about merchandising and will feel like manufacturing some spacecraft toys

## 4.5 jungle, savannah, prarie

jungle exploration — jungle turns into the forest — this is yet another maze area that is always changing

Savannah turns into prarie for ranch

Digging in the savannah you might find different things buried

#### 4.6 Forest

Elders' Cottage for healing

Hopping around tree-tops, swinging on vines, platformer-style play

#### 4.6.1 Butterflies

MINIGAME

gather wild butterflies — chase them around, with a net or a bubble wand, catch with a net and they'll give you rewards, or you can do something different with them

fairy in bottle?

#### 4.6.2 Finch Village

singing frogs?

maze of super-sized lily pads across the lake, always changing Located near the big lake

#### 4.6.3 caves lead to Lost World MINIGAME:MAZE

avoid lava floes, which shift around from time to time (maze) navigate them on floating rock islands

#### 4.6.4 Lost World

dinosaurs roaming around maybe some in-world gaming things regarding the dinos?

#### 4.7 Ranch

Homes out here on the prarie

#### 4.8 The Manor

big old French Chateau kind of thing

# 4.9 Snowy place

ice and snow and stuff

# 5 Time, Weather

#### 5.1 Time

Time flows in an 18-hour day. (56/3)

Perhaps we should invent a "clock" that treats 18 hour days normally? Like, we stretch the hours such that 24:00 = midnight; 12:00 = noon; 06:00 and 18:00 are sunrise and sunset;

By that scale, an hour = 140/3 minutes or 46 minutes of real world time.

If we call these "star hours" we can even vary the seasonal sunrise/sunset tables based on some arbitrary real-world latitude

#### 5.1.1 Nons

"Weeks" have 9 days (Nons like Roman calendar)

Every 9th day is Market Day

The days need renaming based on the basic characters we end up having

The days are: (mapped to Eastern TZ)

(a) 1 Star Day

(Sat/Sun M - Sun 1846)

The sun is a star

(b) 2 Sport Day

(Sun 1846 - Mon 1334)

Aligns with football night

(c) 3 Music Day

(Mon 1333 - Tue 0820)

New music releases on Mondays

Special events: ?

(d) 4 Electric Day

(Tue 0820 - Wed 0306)

(e) 5 Science Day

(Wed 0306 - Wed 2153)

new comic book day

(f) 6 Animal Day

(Wed 2153 - Thu 1639)

(g) 7 Friends Day

(Thu 1639 - Fri 1126)

new movie releases Thursday midnights

ok, maybe we'll release **really old** movies instead?

(h) 8 Flowers Day

(Fri 1126 - Sat 0613)

Special events: ?

(i) 9 Market Day

(Sat 0613 - Sat/Sun M)

the main day for major special events

The Market Day should align with Saturday for the UK through Au as much as possible, so when we do special things for Market Day they're accessible to the most players

#### 5.2 Weather

Weather flows pseudo-randomly. Maybe we just pick random cities in the real world and follow its weather.

Weather conditions: rain; cloudiness; fog; snow

# 5.3 Other minigame ideas?

#### 5.3.1 Pac-Man.

If we're going to do Pac-Man, do it like Katamari Damacy. That was a cool Pac-Man clone; and it can be done in-world.

Perhaps a "harvesting" theme.

Problem is resetting the "board"

#### 5.3.2 Tic Tac Toe

do I have to explain this one?

Actually, we could give users the ability to play Tic-Tac-Toe multiplayer by positioning oversized tokens in the game world.

Kinda like Hobo Chess. http://i14.photobucket.com/albums/a349/benjistour/P1010228.jpg

# 5.4 Building the code

#### 5.4.1 Directory Structure

#### (a) build

Everything that gets temporarily constructed during a make should be in here, and is wiped out by make clean

#### (b) dist

The actual final distribution files go in here.

There are two bundles, one for code, one for pure assets. Eventually these would be on the game server and on a static asset server/network/farm potentially.

They're also versioned separately, see the control-cards § at top of Makefile

#### (c) doc

documentation sources live here

#### i. doc/design

docs for game designers how to use editing functions and such

#### ii. doc/devel

docs for people working on the game code here. like this mess you're reading, it lives there.

# A. TODO devel docs into Makefile

that includes this big mess you're reading now

## iii. doc/legal

contractual stuff and all of that

#### A. TODO doc/legal/licenses

Licenses for all program components and assets need to make their way here with some kind of system for concatenating them to generate the "full spiel"

#### iv. doc/user

user-facing docs

- marketing
- help files

# A. TODO user docs into Makefile

they need to be distributed with the game assets ui-help.lisp is going to reference them as well so the names need to be stable

# B. **TODO** user docs templating system

probably want to write them in LATEX or something and render via a templating system to give consistent and manageable headers, footers, CSS, whatever

# (d) src

All source code should pretty much live here anything that's getting compiled (or minified), for sure

#### i. src/css

CSS to be minified

A. **TODO** consider Closure CSS or LESS or something?

# ii. src/ps

Parenscript code: the entire front-end lives here.

Keep it flat, for now, the compiler doesn't descend subdirectories

cross-module dependencies are not resolved in any way; don't share variables and things if you can help it

#### A. src/ps/00-preamble.lisp

The macros needed by other Parenscript files

# B. src/ps/01-preamble.js

Common JS code that hasn't been converted to PS yet gets glued to the front of the concatenated js files before minification

# C. src/ps/asset-loader.lisp

pre-load assets of all kinds as needed

# D. **TODO** show loading indicator

partially done

needs some TLC but it's a viable start

see how it actually works when we start loading shit

#### E. src/ps/gl-utils.lisp

all the WebGL-related stuff goes in here might end up with the 3D sound stuff as well mostly should be just some glue and helper functions in the end

#### F. **TODO** camera movement

camera angle relatively doesn't change, but has to scroll around to follow the player

also change the zoom level to bring up panoramas or pull in closer

#### G. **TODO** translucency

when player moves behind things, make them translucent

#### H. **TODO** indoors rooms

#### I. **TODO** billboarded vectors

might not need these so much after all

#### J. **TODO** billboarded text labels

mostly for character names and maybe other selected items

try to keep them from getting obstructed, and scale based on browser text size perhaps?

# K. **TODO** speech bubbles

basically a special case of billboarded text / billboarded vectors, but an important special case

when they fade out, it would be nice to show some kind of affordance that they're going away to the chat log area

#### L. **TODO** entity picker

needed for various other things, perhaps allow hover highlighting and display name if it has one (and isn't already displayed)

- M. src/ps/network.lisp
- N. **TODO** connect to server WebSockets
- O. **TODO** exchange login credentials
- P. **TODO** log in as sidekick
- Q. **TODO** log in using openid?
- R. **TODO** log in using password
- S. **TODO** login box needs to handle all in one easy place:
  - MOTD
  - QoS indicators
  - log in with user name + password
  - log in with openid
  - log in as a sidekick
  - register new user
  - recover forgotten user name / reset password
  - general link to m+b subsystem
- T. **TODO** invite sidekick
- U. **TODO** sidekick share via social media?
- V. **TODO** sidekick share via other channels?
- W. **TODO** redirect to M&B system for registration
- X. **TODO** redirect to M&B system for forgotten passwords
- Y. **TODO** accept entity data and populate simulation
- Z. **TODO** send actions to the server
  - .  $\ensuremath{\mathsf{TODO}}$  check for disconnections
  - . TODO auto-reconnect
  - . **TODO** diagnostics for disconnections
  - . **TODO** integrate with offline-detection
  - . **TODO** polyfill for browsers without WebSockets?
  - . **TODO** migration support gentle migration:
    - First, connect to the new node
    - Test that connection
    - Transfer it to being the primary

- Then, close the old one
- . TODO src/ps/mb.lisp
- . **TODO** registration
- . TODO change gecos info
- . **TODO** change password
- . **TODO** change openid binding
- . TODO view account activity
- . **TODO** parental controls
- . **TODO** create child account
- . TODO annex child account
- . TODO edit child account gecos
- . TODO set restrictions on child account
- . TODO time limits
- . **TODO** sidekick limiter
- . TODO sidekick required / baby-sat mode
- . TODO assign other guardians to child
- . TODO view child account activity
- . TODO disable child account
- . TODO delete child account
- . TODO delete account
- . src/ps/string-utils.lisp

The big thing here is for the string table accessed via (msg) in the code.

All user-visible strings should be in that message catalog, and we'll later be able to translate it en masse

We use a simple formatting thing for these that is similar to Java's String.format as well, so re-ordering words in the message won't break on params

. **TODO** analogue of  ${}^{\sim}R$ 

Actually I think I like the idea of having a few variants

- spell out words or fall back on numerals when they're "too long," as defined by the language. In English, we usually stop at "nineteen" . . . "20" boundary.
- abbreviate to no more than 2 significant figures, with rounding. "two thousand" for 2,000; "about two thousand" for 1,994

- the proper pluralization system described below
- . **TODO** handle pluralizations in a sane way test cases:

(and (equal "one car" (plural 1 'car)) (equal "two cars" (plural 2 'car)) (equal "un auto" (with-language :es (plural 1 'car))) (equal " " (with-language :ru (plural 1 'car))) (equal "nine cars" (plural 9 'car)) (equal "nineteen cars" (plural 19 'car)) (equal "20 cars" (plural 20 'car)) (equal "no cars" (plural 0 'car)) (equal "four children" (plural 4 'child)) (equal "four red houses" (plural 4 '(house red)))) Note that Russian counting is about the worst-case-scenario because it's not going to fit the singular/plural pattern like EN, ES, FR.

Note also that Asian counting requires that the symbol  $\rightarrow$  word dictionary provide the counting words type.

- . **TODO** handle full inflections, including plurals needed for some languages like DE, RU, GR, LA not usually needed for EN, ES, FR, JA, CN **EXCEPT** in EN, ES, FR needed for pronouns only (I/me, he/him &c in EN; tu/te/ti in ES...)
- . TODO src/ps/ui-help user interface helper stuff dialog box creation and all should be doing this using nice HTML overlays within the page possibly also a way to load help screens without opening new windows/tabs
- . TODO pop-up message
- . **TODO** multiple choice buttons yes/no ok/cancel dialog
- . TODO help viewer
- . **TODO** launch external page gently evading pop-up blockers and the like
- . TODO src/ps/controls UI controls tap-n-talk
- . TODO selected inventory item display
- . **TODO** engage paperdoll display
- . TODO click-to-use item, no target

- . **TODO** directional item
- . **TODO** target-positional item
- . **TODO** target-entity item
- . TODO discrete counter
- . TODO scalar display
- . TODO tap-n-talk
- . TODO load possible vocabulary from server
- . **TODO** allow user selections
- . TODO compose sexp and send
- . TODO chat  $\log$
- . TODO src/ps/paperdoll inventory/paperdoll system

#### iii. src/romans

The server components

The software components are named for (in)famous figures of Roman history. Note, if you are familiar with the components in Romance 1.x, some of these may have changed in their tasks slightly.

A. **TODO** need to nail down the MQ service type

ZeroMQ and RabbitMQ seem to be my favourites for the moment

Requirements:

- FAST
- FUCKING FAST
- Easy to marshall arbitrary stream data OR BSON data
- BSON is nicer but I don't much care
- Flexible distribution grid
- Lossless
- In order of preference: Quicklisp sources that work; Lisp sources that work; clear enough docs to write Lisp bindings without crying
- Doesn't require PhD to install/configure

#### B. Appius

Appius Claudius Caecus handles network I/O. All socket connections from clients are routed through Appius, and into the message queues for the game itself.

Appius Claudius Caecus was notable for building a major road out of Rome, the Appian Way, as well as being blind, and twice Consul.

# C. **TODO** socket-activation server

working with SystemD for TCP streams (and WebSockets streams as well?)

# D. **TODO** TCP stream binding

• return packets the same way regardless of TCP or WS

# E. **TODO** WebSockets binding

how to listen? native listener seems best, is that Kosher with same-origin policy?

if not, how do we tie in to the HTTP server enough to make same-origin happy? serve the live HTML from the chat servers?

some experimentation will be required for this bit

- return packets the same way regardless of TCP or WS
- F. **TODO** binding to MQ
- G. **TODO** BSON coding for packets
- H. **TODO** BSON-to-MQ
- I. **TODO** MQ-to-BSON
- J. **TODO** JSON coding for packets
- K. **TODO** JSON-to-MQ
- L. **TODO** MQ-to-JSON
- M. **TODO** QoS indicators
- N. **TODO** connection pool moderation

when one guy's getting too many connections and another one is light, alter the usual round-robin selection to balance the load

# O. **TODO** migration support

when bringing up/down Appius nodes, migrate users around to balance the load

#### P. Asinius

Asinius handles connectivity to the Postgres database server, for long-term storage and disaster recovery.

Gaius Asinius Pollio was a consul noted for constructing the first public library in Rome, the Atrium Libertatis, as a posthumous favor to Caesar.

- Q. **TODO** MQ-to-Postmodern
- R. **TODO** Postmodern-to-MQ
- S. **TODO** QoS indicators
- T. **TODO** QoS indicators extracted from Postgres
- U. **TODO** Postmodern schema mapping to entity data
- V. Caesar

Caesar oversees the system on which it is running, and ensures that sufficient resources are available for uninterrupted operations. Caesar may terminate workers when they are no longer needed, or requisition additional resources (such as starting a new virtual machine or requesting additional storage space) when necessary. Gaius Julius Caesar was known as a famous general.

- W. **TODO** collation of QoS reports
- X. **TODO** heartbeat failure detection
- Y. **TODO** start a new program container
- Z. **TODO** remote start a program container
  - . **TODO** stop a program over MQ
  - . **TODO** remote stop a program over MQ
  - . **TODO** shut down a program container
  - . **TODO** remote shut down a container
  - . TODO kill a program
  - . TODO remote kill a program
  - . TODO STONITH a container
  - . Catullus

Catullus handles the textual interface whereby humanprovided strings are parsed and tokenized into propositions understandable to the AI characters, and rendering the "thoughts" of AI characters into string form.

Gaius Valerius Catullus was a noted poet/songwriter.

- . **TODO** accept sexp from MQ / tap-n-talk
- . **TODO** parse incoming utterance properly
- . **TODO** return utterance in English
- . **TODO** proper handling of edge cases of English

- . TODO adjudicate utterance
- . **TODO** evaluate utterance
- . TODO answer yes/no questions
- . TODO anaphora resolution
- . TODO unbound anaphora resolution: ask questions
- . TODO unbound anaphora resolution: take a guess
- . TODO adjudication trust levels / lie, joke
- . **TODO** failed adjudication: decide joke or lie
- . **TODO** encode utterance for MQ / reply
- . **TODO** prompted utterances: self-introduction
- . TODO prompted utterances: curiosity
- . TODO prompted utterances: make a request
- . **TODO** prompted utterances: imperative
- . **TODO** prompted utterances: statement of interest
- . TODO imperative handling: adjudicate obedience
- . **TODO** imperative handling: resolve ambiguities
- . Clodia

Clodia handles the processing of the artificially intelligent characters.

Clodia Metelli Pulcher (also spelled Claudia) was the grand-daughter of Appius Claudius Caecus, and notable for her political intrigues, enmity with Cicero, disregard for the admiration of Catullus, and allegations of murdering political figures by poison.

- . **TODO** QoS reporting
- . **TODO** AI core identity, intelligence, control subroutines
- . TODO core memory model
- . TODO forgetfulness
- . TODO common data core
- . **TODO** knowledge of physics
- . **TODO** knowledge of game world history
- . **TODO** knowledge of geography
- . **TODO** knowledge of inventory
- . **TODO** observation
- . TODO passive attention

- . **TODO** active attention
- . TODO like/dislike system
- . **TODO** virtue evaluation
- . **TODO** clothing selection
- . **TODO** self-preservation instincts
- . TODO navigation
- . TODO conversation
- . TODO crafting
- . TODO game-linked behaviours
- . **TODO** playing sport
- . **TODO** observing and refereeing
- . TODO playing soccer
- . TODO playing volleyball
- . TODO playing baseball
- . TODO playing basketball
- . TODO playing "asteroids"
- . TODO Smudge: making a mess
- . TODO Targ: breaking shit
- . **TODO** crafting things
- . TODO generating mazes
- . TODO pirates: burying treasure
- . **TODO** mail delivery
- . TODO mail theft
- . TODO construction crew
- . TODO singing
- . TODO space launch crew
- . Galen

Galen handles the system whereby superposed states of quiesced arrondissements are collapsed into a discrete state. In other words: Galen burgeons areas that had been quiesced previously.

Galen was a noted philosopher, logician, and inventor. This subsystem won't be in place yet for Romance 2.0

. Narcissus

Narcissus handles the simulation of physical forces.

Named for the famous wrestler Narcissus, who may have once assassinated an emperor, not the mythological character who was turned into a flower.

- . **TODO** Interim basic ground-based non-physics just enough to get us going, for testing and such, not enough to keep us running indefinitely.
- . **TODO** New CL bindings for Bullet
- . **TODO** world sub-region divisions how to load-balance physics between Narcissus / Bullet nodes without having weird freakish edges
- . Lutatius

Gaius Lutatius Catulus [Latin: C·LVTATIVS·C·F·CATVLVS] was a Roman statesman and naval commander in the First Punic War. Temple to Juturna, built by Catulus to celebrate his victory at Aegades islands, in Largo di Torre Argentina, Rome.

He was elected as a consul in 242 BC, a novus homo. During his consulship he supervised the construction of a new Roman fleet. This fleet was funded by donations from wealthy citizens, since the public treasury was virtually empty. He then led the fleet into victory over Hanno the Great's Carthaginian fleet in the Battle of the Aegates Islands. This was the decisive battle of the First Punic War. To celebrate his victory, he built a temple to Juturna in Campus Martius, in the area currently known as Largo di Torre Argentina.

- . **TODO** inventory equipping
- . TODO using an item
- . TODO sidekick enablement
- . unnamed module / system needed for . . .
- . **TODO** player registration
- . TODO player passwd
- . TODO player chfn
- . **TODO** player authentication
- . **TODO** child account manipulation / sudo-like
- . **TODO** enforcing parental controls
- . TODO sidekick enablement

#### iv. src/static

JavaScript that we blindly copy into place

A. **TODO** get upstream libs into the build system

#### v. src/tools

Homebrew tools used **during compilation** go in here, e.g. the parenscript compiler utility should be here; only the ones that get compiled, stuff like Bash or Perl scripts can live in tools directly

#### vi. src/violetvolts.html

the actual "play now" HTML page

all the HTML overlays should be in here, styled display: none; might want to break them into separate files/fragments and build the file up somehow, but for now that doesn't seem to be much of a problem

#### (e) tools

Stuff used to compile that isn't in Stock Fedora.

Should be Git Submodules where possible or inherited Subversion repos possibly.

Google Closure Compiler

YUI compressor

Moved Uglify-JS out, it's in Stock Fedora, yay. (but it's even worse than YUI? wtf?)

Also: custom scripts and binaries

#### i. **TODO** tools/bin should have all the scripts

# ii. tools/bin/smaller

used to check file sizes and return which one is the smallest misnamed, it accepts multiple files not just two

# iii. TODO tools/bin/parenscript-compile

once I get around to buildapp:ing this should live here

#### iv. tools/swf2svg

this is a Perl program that is a work in progress

it rips apart SWF files using swfdump and writes out SVG of all the artistic components

I just wrote this as a way to see what assets we get as SWF:s from Res — so it can be dumped altogether.

# v. TODO tools/bin/swf-to-3d

**JUNK** 

Based on swf2svg, can be dumped. note that GLGE has an XML format but that's damned verbose

vi. **TODO** fix up the existing Tools like Closure Compiler pull in as submodules or whatever

#### 5.4.2 DONE Makefile

The Makefile is pretty solid now, at least for the code parts.

## 5.4.3 TODO Parenscript compilation

Parenscript gets routed via a Lisp program to handle some odd cases. Basically:

- First, we load macros out of 00-macros.lisp
- We compile each file form-by-form
- we concatenate the results onto 01-preamble.js where we put any other snippets that haven't made it into Parenscript yet
- (a) **TODO** source maps

#### 5.4.4 DONE Minifiers for JS, CSS, HTML

I have a few minifiers in place, make basically "races" them against one another and the smallest output file "wins," which has a downside that the build might be minified differently from day to day

## (a) **TODO** maybe just Closure

I'm seeing such a massive difference/improvement using Closure that I might want to just use it

# (b) **TODO** static libs separately?

The various static JS libs might do better being minified their own ways or loaded from a CDN

particularly they might not cope well with the ADVANCED mode of Closure Compiler so we might want to minify them with a gentler setting and then use ADVANCED for our own code, where it'll be easier to fix it when it breaks (e.g. adding JSDoc annotations or being careful about using dot-accessors versus string-accessors)

# 6 Policies

# 7 Non-Violence Manifesto

# 7.1 The original notes from 2009

- Darkstar Forces II: Jedi Knight
- God of War
- Castlevania: Harmony of Dissonance
- Avernum
- The Secret of Monkey Island series
- Phoenix Wright: Ace Attorney
- The Seventh Guest, The Eleventh Hour
- Blue Dragon
- The Journeyman Project
- American Mc Gee's Alice
- The White Chamber
- Shivers
- Killer7
- Silent Hill
- Hugo's House of Horrors
- Myst series
- Sokoban

- Kwirk
- Tomb Raider series
- Pokemon series
- Paper Mario
- Lua II
- Golden Sun series
- Little Big Adventure
- $\bullet$  Wild ARMs
- Rogue Galaxy
- Broken Sword 3
- Final Fantasy Mystic Quest
- Tales of Symphonia
- StarFox Adventures
- Perplex City
- La Mulana
- Dragon Warrior III
- $\bullet$  Zork series
- $\bullet$  Boxxle