

Fear, Love and Great BIG Ideas

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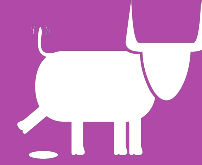
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Please enjoy!



Here are my most recent games,

Kumo Lumo, Lumo Deliveries and Lumo's Cat... Plus a few SEGA games that I fitted in around the Team Lumo stuff..

There are lots more before that but really these are the only ones relevant to today's game industry. And the games industry changes too rapidly to keep on doing the same thing in your games. The more you repeat yourself, the more you risk drifting towards the edges of relevance.



Using “design theory” to keep players playing

Today I’m going to be talking about how to use game design and game Design Theory to keep you players enjoying the game.

I know what you think when you see the term “Design Theory” you pretty much think...

CLICK!

But I hope to prove otherwise. I’m a practitioner. I make games. I’m not approaching this from an academia point of view. This is stuff that I actually do when making my games. And I find it really helps.

FRANK HONEST GRAPHIC OTHER GAMES STILL LEARNING

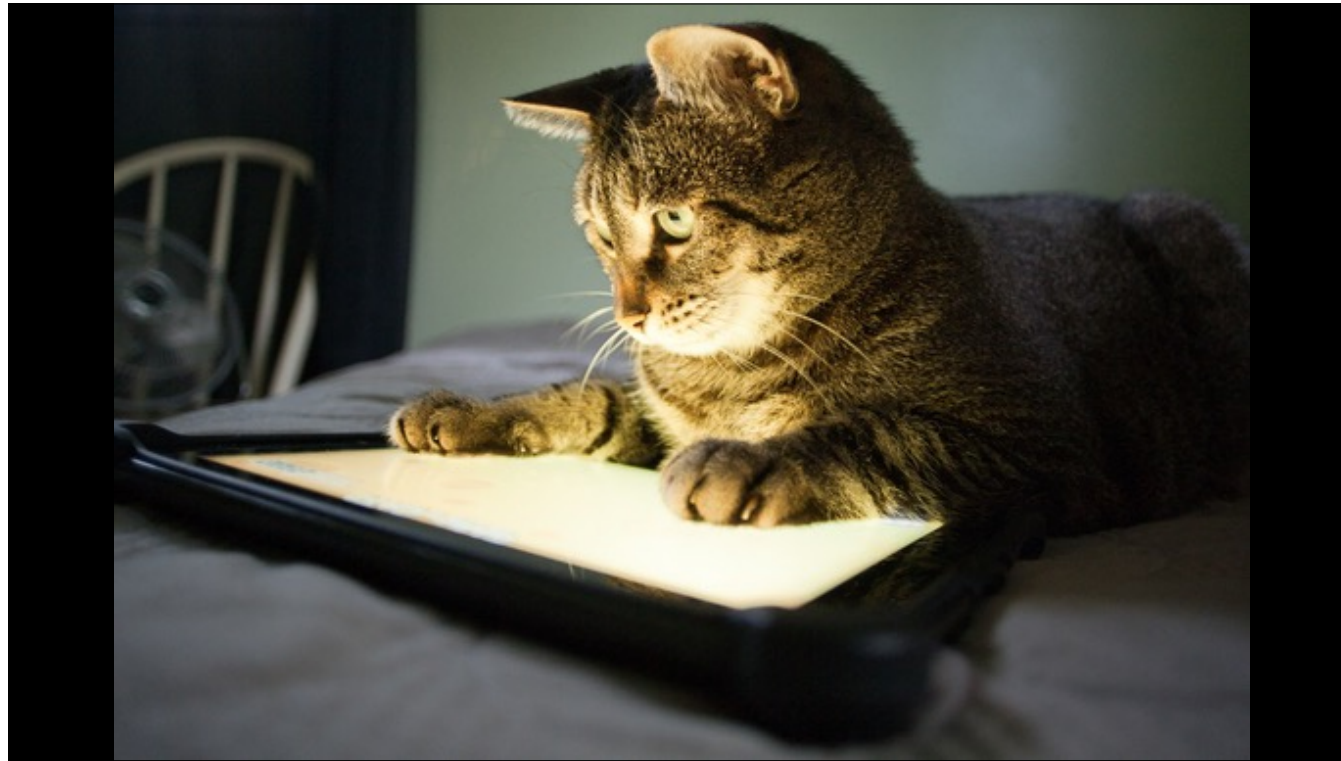
What follows will be a FRANK, HONEST and occasionally quite GRAPHIC discussion about GAME DESIGN. I'll start off talking about other people's games. So everyone will know what I'm banging on about. In the second half of the talk I'll be talking quite a lot about the things that Team Lumo have learned and the that are STILL LEARNING about our own games.

Some of the things I will talk about will be things you do three times before you get out of bed in the morning. Hopefully a lot of it will be really interesting and stimulate your ideas about the games you are working on.



So traditionally - and in many places to this day - this is the received wisdom. That pure creative ingenuity will out and bring you success.
I take issue with this!

Focus on the play, focus on the moment, they say. The player will have fun, they will care - THEY WILL COME BACK!
I think this is frankly, Bullshit, and it's Dangerous bullshit because it flies in the face of well understood player behaviours.



There is much more to your game than just the physical, hands-on experience of play.

The more you investigate and understand the broader context of enjoying a game - the more you'll be able to attract more players and more importantly **KEEP THEM PLAYING!**

That is the hardest thing in the world to do. Making a game is tough - but keeping a player in even a very good game is insanely hard.

Players are like cats, capricious, unpredictable, possibly insane. And usually obsessed with other cats.



Retaining players is SO hard because we don't live on an abandoned digital idyll where players are mercifully undistracted, passively enjoying whatever tiny moments of entertainment that washes up on their shore.



We live in an insane metropolis where there's a firehose of distractions of every kind coming from every direction - and it's not just games, it's Twitter and Pinterest and Netflix and sometimes even going outside and talking to people.

Getting attention is hard - keeping it is almost impossible.

GAME DESIGN!

Platformer, First Person Shooter, Survival Horror, Puzzle, Match-3, Infinite Runner, RPG, Spikey Hair, Upgrade Path, Tech Tree, Tower Defence, Onboarding, Game Loops, High Score, Movement Speed, Jump Distance, Free-to-Play, Narrative Design, Infinite Runner, Tutorial, Level Design, System Design, Clip Size, Health Packs, Power-Up, Extra Life, Pixel Art, Render Targets, Physics, Shaders, Pizza, Gold Coins, Gems, Retro, Holistic Design, Music, Kolb Learning Theory, Sound Effects, Localisation, Visual Effects, User Acquisition, In-Game Advertising, Release Date, QA Testing, Usability Testing, Bug Trackers, C#, C++, JavaScript, Unity, UnrealEd, Gamemaker, Textures, Meshes, Animation, Cut Scenes, Emotions, Analytics, Players, First Five Minutes, Monetisation, Ludo-Narrative Dissonance, Retention, Patches, Community, Conversion, Demographics, Free Demo Version, iOS, Android, PC, XboxOne, Playstation 4, Wii U, 3DS, PS Vita, Psychology, Milestones, Agile Development, Waterfall, Project Management, Budget, Inverse Kinematics, USPs, Primary, Secondary and Tertiary Feature Lists, Result Screens, Restart Cycle, Middleware, Realtime Strategy, Deferred Rendering, Arcade, Beat 'Em Up, Resource Management, Difficulty Curve, Controls, Joypad Mapping, Touch Zones, Art Style, Graphics Pipeline, Attention Bandwidth, Cognitive Load, Churn Rate, ARPPU, MAU, DAU, T-PAU, Tool Chains, Social Media, Trailer, Publisher, Developer, Concept Art, Sub-Contracting, Contract Law, Schedule, Powerpoint, Maya, Dev Studio, Design Document, Pitch, Funding Partner, Promotions, Launch Party, Steam, Leaderboards, Website, Press Contacts, Screenshots, Search Presence, Tea, Game Conferences.

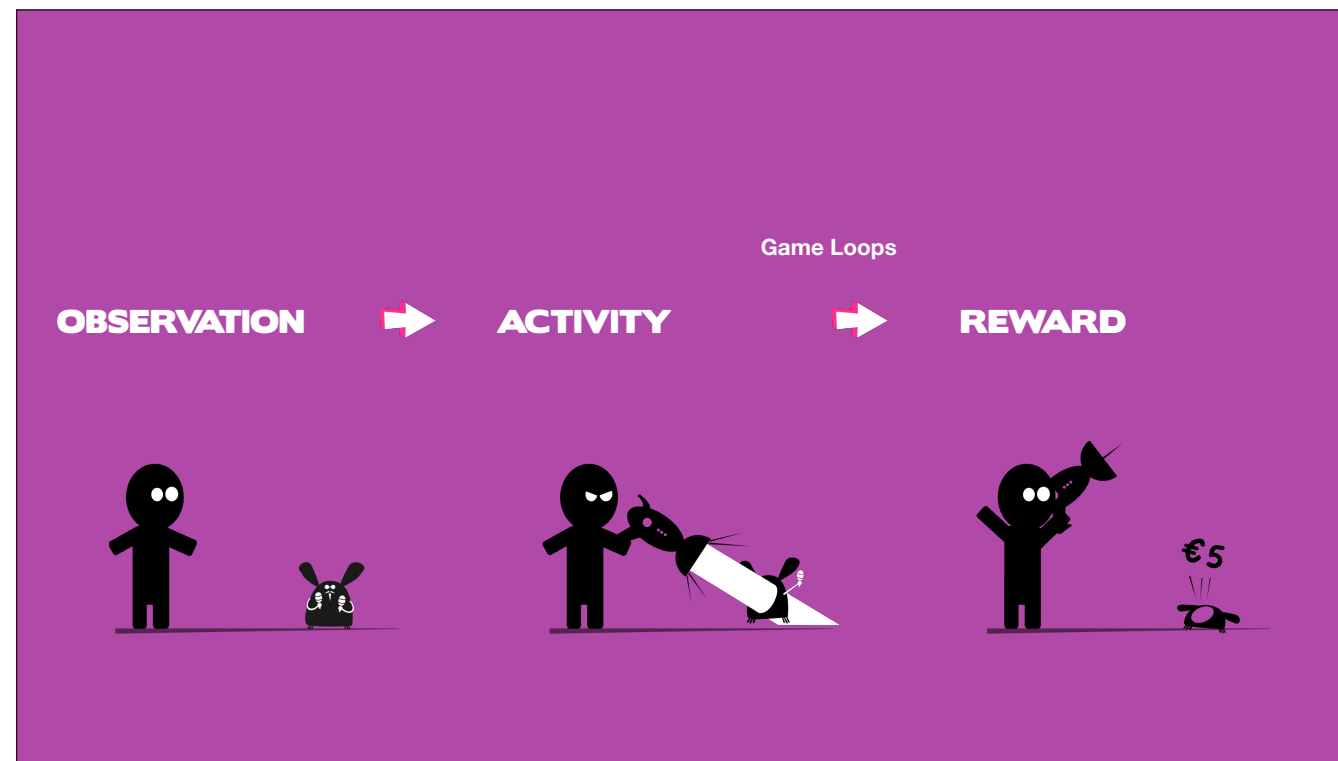
So we need to know what we're doing - which basically means we all need to be experts in ALL OF THIS STUFF!!

Which is scary and terrifying. And in reality we get AMAZINGLY GOOD at some of this stuff, and just sort of muddle through with the rest and get people we trust to take on some bits.

GAME DESIGN!

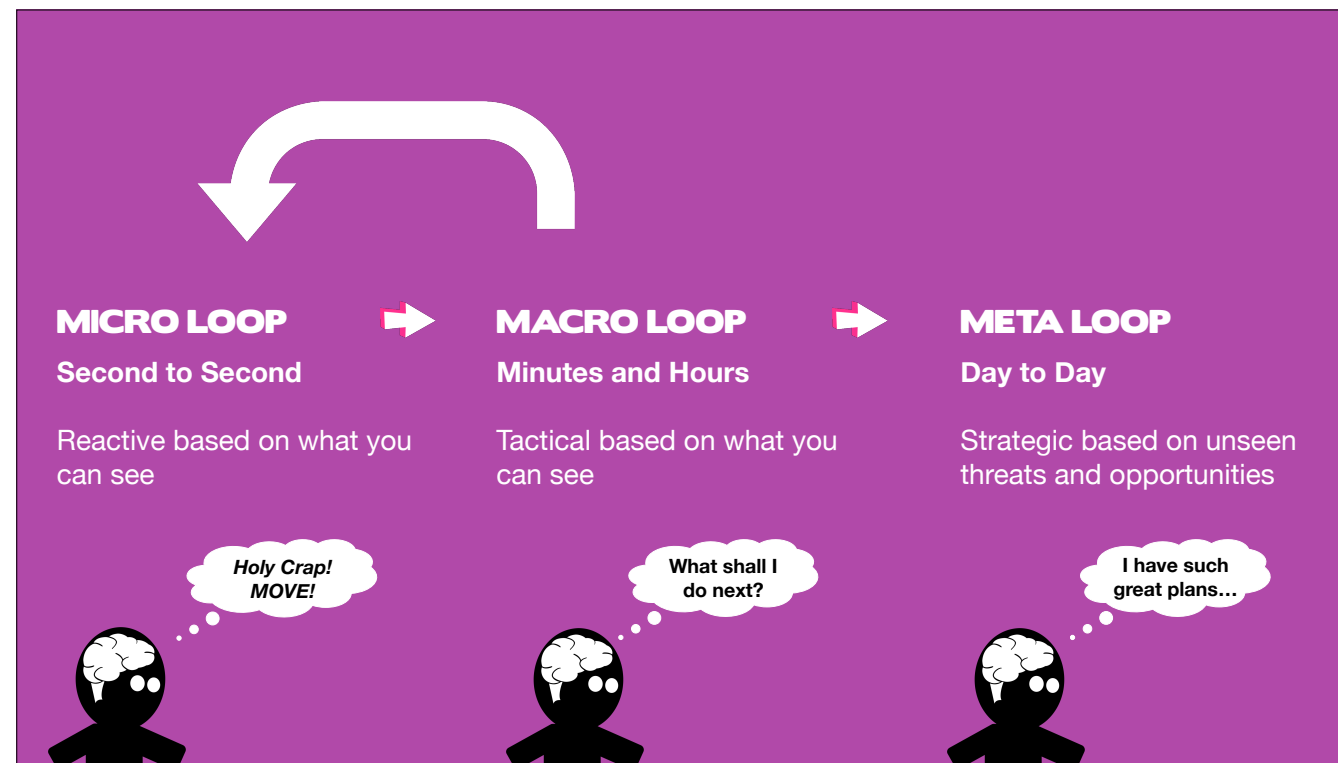
Platformer, First Person Shooter, Survival Horror, Puzzle, Match-3, Infinite Runner, RPG, Spikey Hair, Upgrade Path, Tech Tree, Tower Defence, Onboarding, **Game Loops**, High Score, Movement Speed, Jump Distance, Free-to-Play, Narrative Design, Infinite Runner, Tutorial, Level Design, System Design, Clip Size, Health Packs, Power-Up, Extra Life, Pixel Art, Render Targets, Physics, Shaders, Pizza, Gold Coins, Gems, Retro, Holistic Design, Music, Kolb Learning Theory, Sound Effects, Localisation, Visual Effects, User Acquisition, In-Game Advertising, Release Date, QA Testing, Usability Testing, Bug Trackers, C#, C++, JavaScript, Unity, UnrealEd, Gamemaker, Textures, Meshes, Animation, Cut Scenes, Emotions, Analytics, Players, First Five Minutes, Monetisation, Ludo-Narrative Dissonance, Retention, Patches, Community, Conversion, Demographics, Free Demo Version, iOS, Android, PC, XboxOne, Playstation 4, Wii U, 3DS, PS Vita, Psychology, Milestones, Agile Development, Waterfall, Project Management, Budget, Inverse Kinematics, USPs, Primary, Secondary and Tertiary Feature Lists, Result Screens, Restart Cycle, Middleware, Realtime Strategy, Deferred Rendering, Arcade, Beat 'Em Up, Resource Management, Difficulty Curve, Controls, Joypad Mapping, Touch Zones, Art Style, Graphics Pipeline, Attention Bandwidth, Cognitive Load, Churn Rate, ARPPU, MAU, DAU, T-PAU, Tool Chains, Social Media, Trailer, Publisher, Developer, Concept Art, Sub-Contracting, Contract Law, Schedule, Powerpoint, Maya, Dev Studio, Design Document, Pitch, Funding Partner, Promotions, Launch Party, Steam, Leaderboards, Website, Press Contacts, Screenshots, Search Presence, Tea, Game Conferences.

I'm just going to talk about this bit here... **Game Loops!**



You're probably all very familiar with the concept of the Game Loop - the series of stages that a piece of player takes the player through - **OBSERVATION** - **ACTIVITY** - **REWARD**. It's pretty basic stuff and we probably all do it in our sleep!

However I would argue that in every game there are in fact **THREE GAME LOOPS** - All working simultaneously - but affecting different layers of the player experience!



Here are the 3 game loops! I also call these the **Micro** Loop, the **Macro** Loop and the **Meta** Loop.

The top two generally stack, multiple Micro loops compose the Macro loop. The Meta loop often utilises some bespoke features and feedback.

Some people talk about your Core Loop but I don't think that is much use as a concept as it is defined by the designer, these three attention loops are far more defined by the player.

MICRO LOOP

Main Activities...

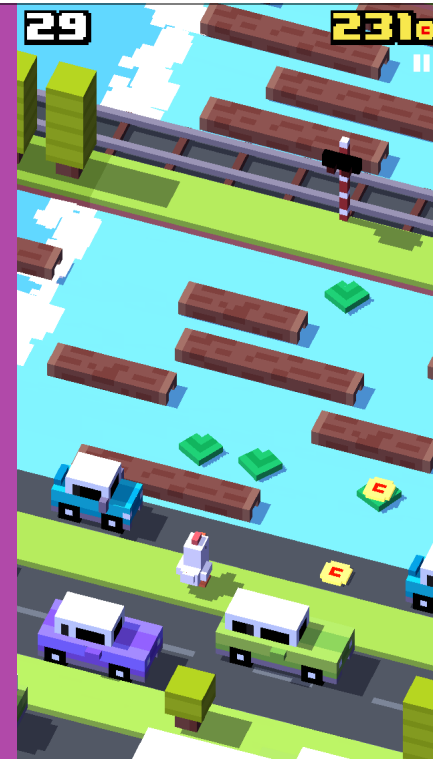
- Shoot one Invader
- Overtake an opponent
- Slide that tile
- JUMP!



A lot of this gameplay is the traditional arcade stuff. Very physical, immediately satisfying.

MICRO LOOP

- Physical... Reactions... Dexterity...
- Quite primal emotions - Fear, Excitement, Anger (*or nothing...*)
- Action leads to next decision
- Easy to Diagnose!



Very often, the gameplay comes in short, intense bursts - then leads to a decision or an observation phase as you re-assess your next actions. So even within a Micro Loop you are putting the player through **alternating mental states** of **high activity** and **careful consideration**.

This stuff is the easiest to diagnose a problem with. People can tell you in 60 seconds what is wrong! And they will!

MACRO LOOP

Main Activities...

- Complete a Level
- Clear an area of Invaders
- Build a new structure
- Win the Race

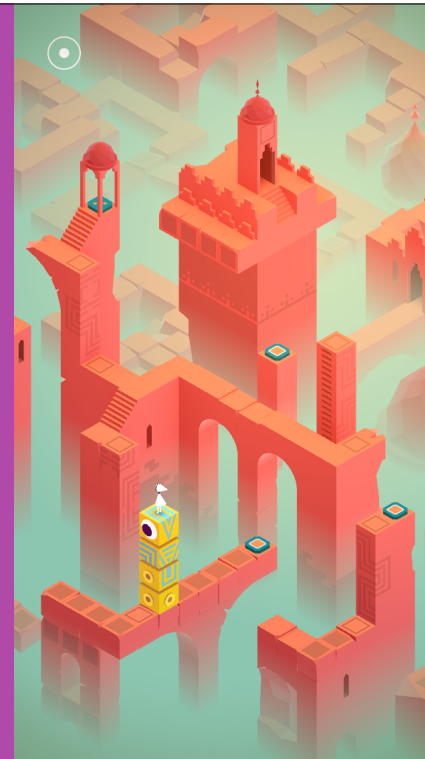


The Macro loop is interesting - it is WAY more emotional than you think.
In a thoughtful game, it is about planning and tactics.

In a dexterity based game, Success is less about that individuals skill level, and more about keeping your cool and holding that dexterity together for the 3 minutes or however long that section is.

MACRO LOOP

- Satisfaction within single game session
- Complex Emotional narrative:
Control - Pressure - Power!
- Player stories generated here!
- Relatively easy to diagnose



The most powerful aspect of the Macro Loop is the Emotional Narrative that takes the player from being in **Control**, to being under tremendous **Pressure** as the gameplay kicks in, then ends up with them feeling **Powerful** as they succeed. This is a very important idea for the heart of your Macro loop.

It's still relatively easy to diagnose a problem with the Macro Loop. People will complain about your level difficulty or how long this or that section is.

META LOOP

Main Activities...

- Level up to Exotic gear
- Self Expression
- Social Competition
- *And on and on...*



This is often where the emotional commitment to the game really lives. Why do I want to see this out?

What am I going to do next?

Who do I want to be?

A good meta game can be explained in a single sentence - motivation in a Nutshell.

META LOOP

- Emotional Interest
- Motivation and Feedback
- Best player stories live here!
- No-one will tell you this is wrong, many people won't even KNOW!



Meta Loop is not necessarily your game's story. A Story is not a loop, it is an Arc that you travel through just once. A Meta Loop wraps around that story by providing opportunities to play in interesting ways and experience the game/world.

It's REALLY hard to diagnose a problem with this aspect. Not only will lots of players not even realise that this is the problem - they might even tell you that YOUR GAME IS GOOD if you've done a good job on the Micro and Macro loops!

But instead of angry tweets - they'll just... drift... away...

MIXING AND RELATING THE MICRO, MACRO & META LOOPS

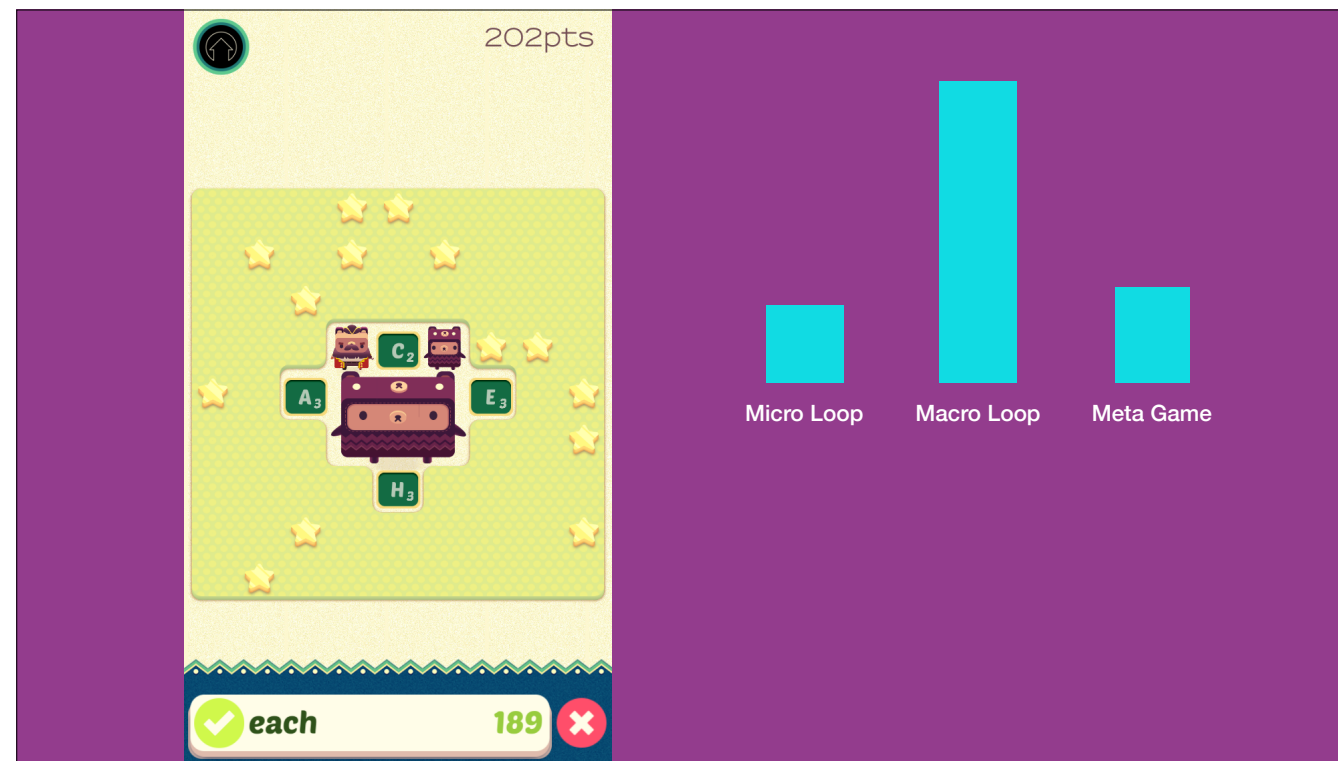


Crossy Road has this amazingly compelling Micro Game. TAP HOP TAP HOP TAP HOP DIE!
It's all thrill, terror and doom - ah shit whatever!

Oddly, there is a Macro Loop happening within the session as you cross a large piece of the road. Fear and Terror, then Reward and Peace as you decide who to tackle the next stage of the road. That pacing of small roads to wide highways and rivers is far cleverer than it looks!

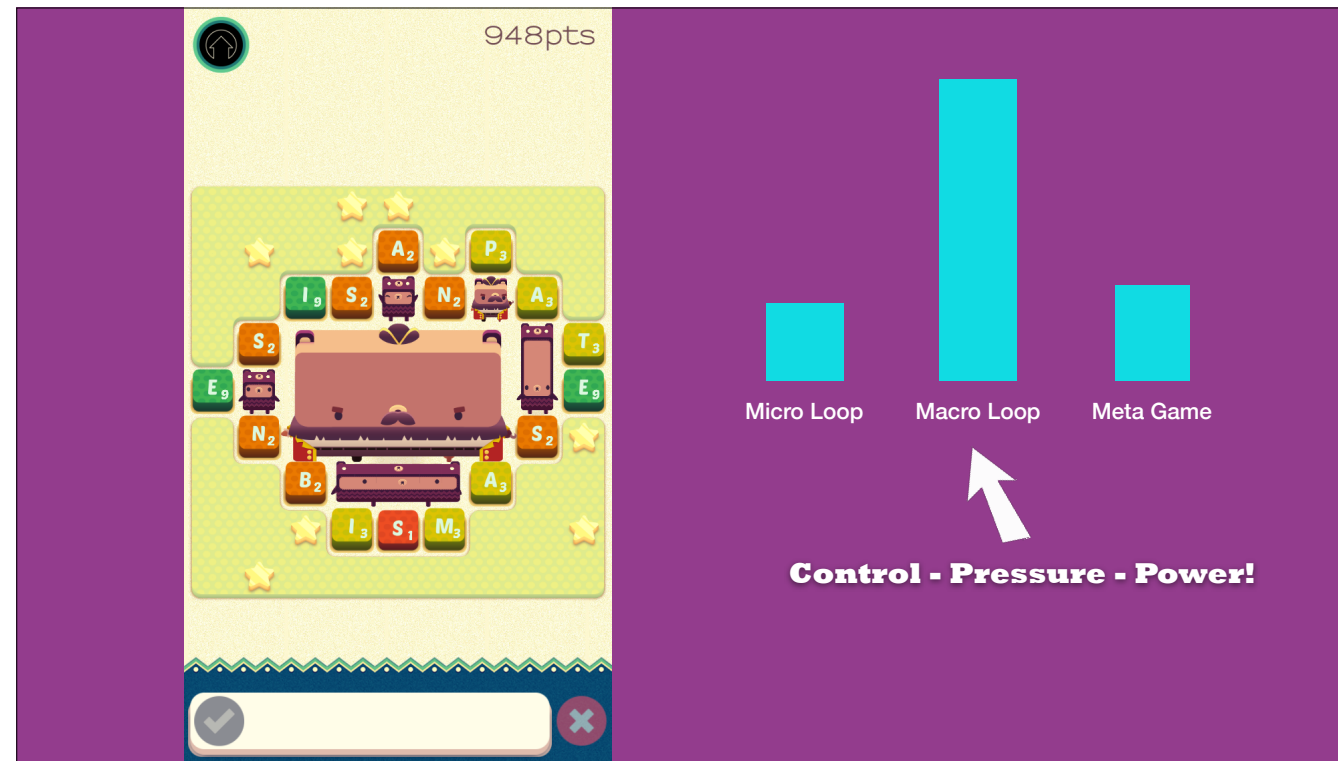
This Micro Loop takes about the time it takes to hold one breath. Breath in - Hop to the next safe area Breath out.

The big players stories live in the Meta Game. No-one will say, "I jumped across loads of lily pads" they will say "I unlocked the Wizard!"



Alphabear, great game.

This is a lovely example of a puzzle game with an emotional narrative arc through the Macro loop. Right now, in this screenshot, I'm still in Control.



A few words later and things have fragmented, I've got red characters flashing... I am starting to panic!

The Meta game of earning more Bears and levelling them up is definitely nice. But, it's not playing much in my brain when I'm away so we will see how well Alphabear sticks around when people have been playing for a few weeks.
I hope it does well.



Halo is a wonderful action game. Loads of thrilling twitch action that has remained largely unchanged since the very first game.

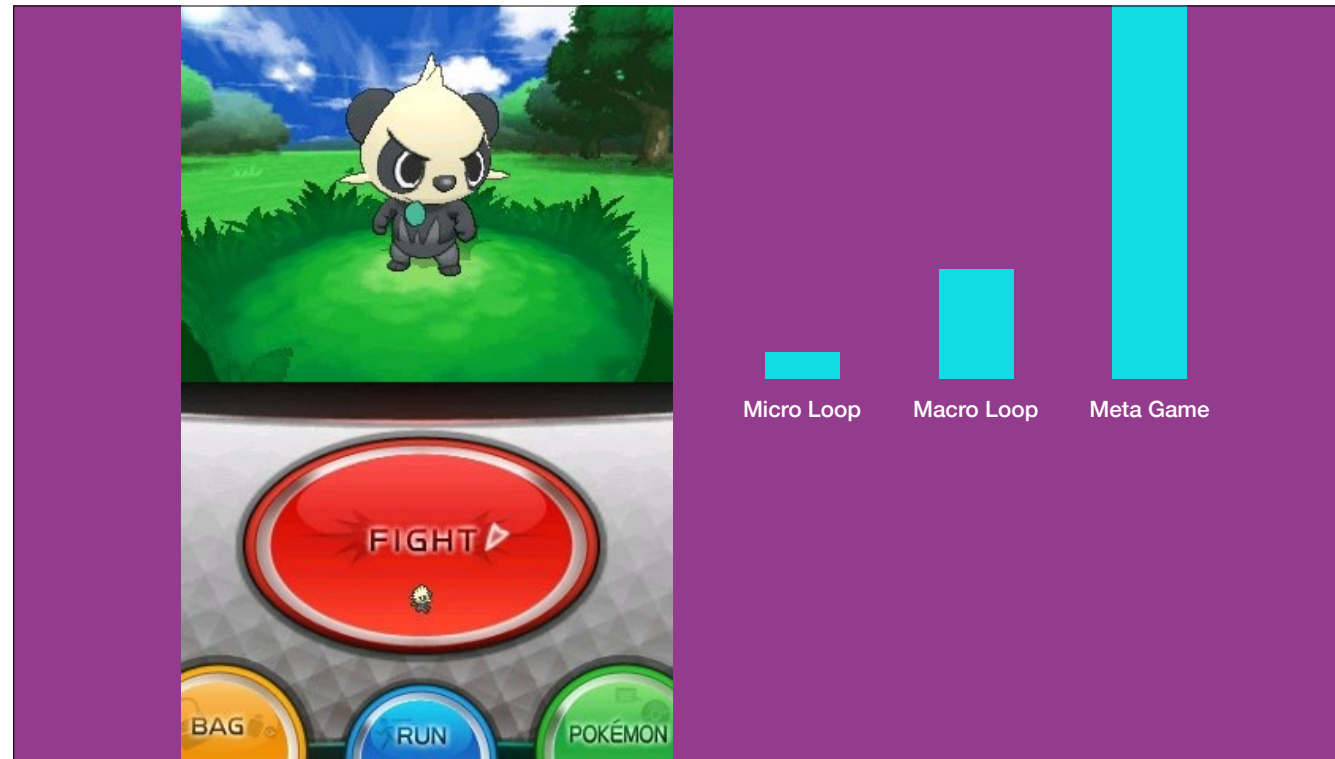
Bungie always said that the gameplay was 10 amazing seconds repeated with huge variety. And indeed it is. Fighting one enemy is sort of ok, but fighting a group of enemies - and groups are always mixed enemy types - is always wonderful. The timing is always perfect in Halo fights and there's loads of wonderful decisions and moments between each enemy contact. Weapon choice, enemy choice, terrain use, attack or retreat.



There's loads of interesting things going through your brain and you are constantly on an emotional journey from **Control** to **Pressure** to **Power**. This happens within a encounter - You charge at an enemy, shooting wildly - and in the time it takes to take in one breath - the encounter is over.

You get a much more complex version of this in the Macro loop - which deals with whole areas or rooms. Many decisions, tactics and movements as you go from **Control** to **Pressure** to **Power**

That's a powerful story there!

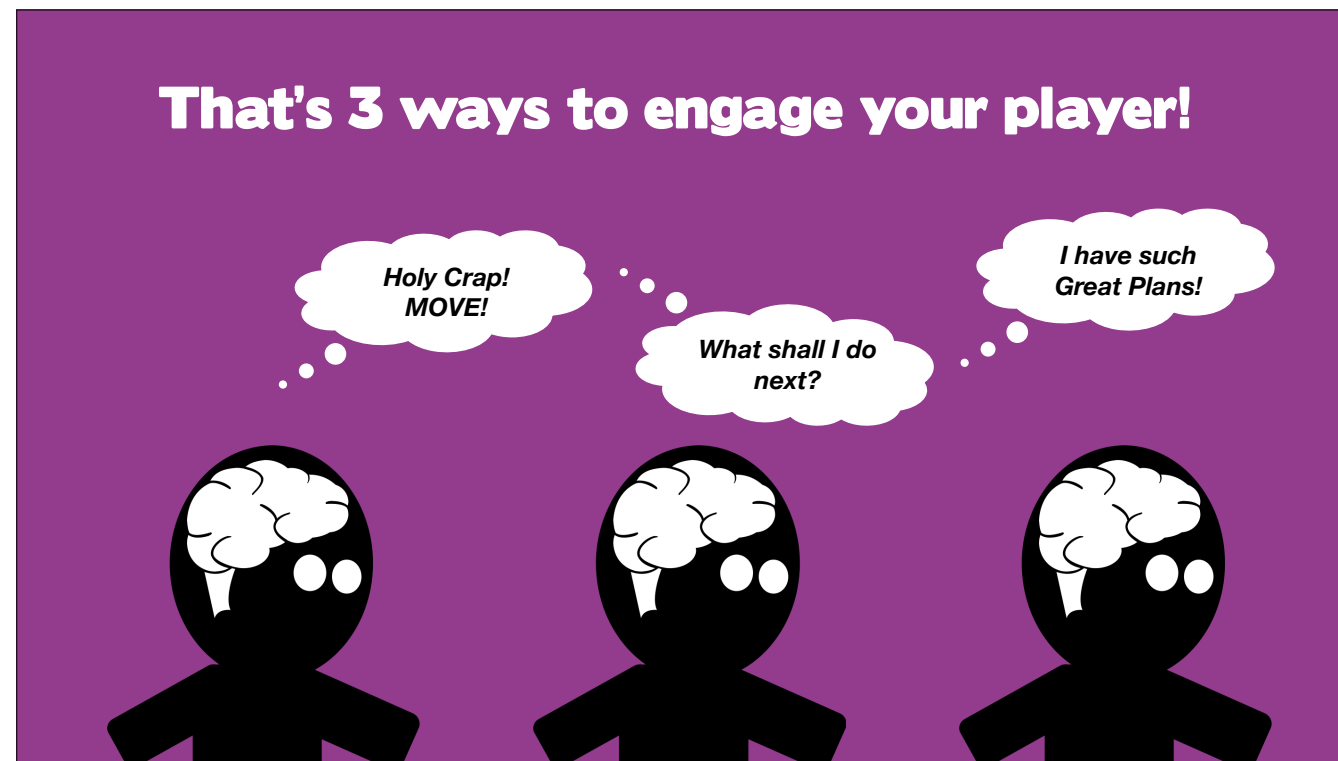


Pokemon!

Fights are fun, and given that they are the core Micro Loop since they punctuate the navigation as well as being the thing you look out for the most. But the act of launching an attack is not that exciting in and of itself. You don't get the sort of thrill you find in an action game. Each fight more relates way more closely to the end result of the battle. Do you win?

But it's in the Meta Game that Pokemon's genius truly shines. Summed up in 4 words **"Gotta Catch 'Em All"**

WOW!



So these three loops appeal to different parts of your players' brains.
You may even find them appealing to different groups of players.
Hitting all three of these loops can, therefore increase the amount of people playing your game!

If you're a **Designer** - That's three chances to engage your players' hearts and minds.

If you're a **Producer** - That's possibly three players paying you money!

HOW I LEARNED THIS...

I'll turn now to the game I have worked on.

Here's how I learned this stuff, and how I have actually used it - and sometimes failed to use it properly.



Kumo Lumo was where it all began again really. Certainly for me as a game maker and for the people I was working with.

The **Micro Loop** was always wonderful You rained on things to make them grow - or to fight off bad guys.

The **Macro Loop** had a more interesting journey - Initially you rained on stuff until you ran out of Water - then you died! But that meant that the game always ended with Suicide - which is not among the more popular retention mechanics it has to be said.

Thankfully we did fix this and implement a standard level system with an objective counter.

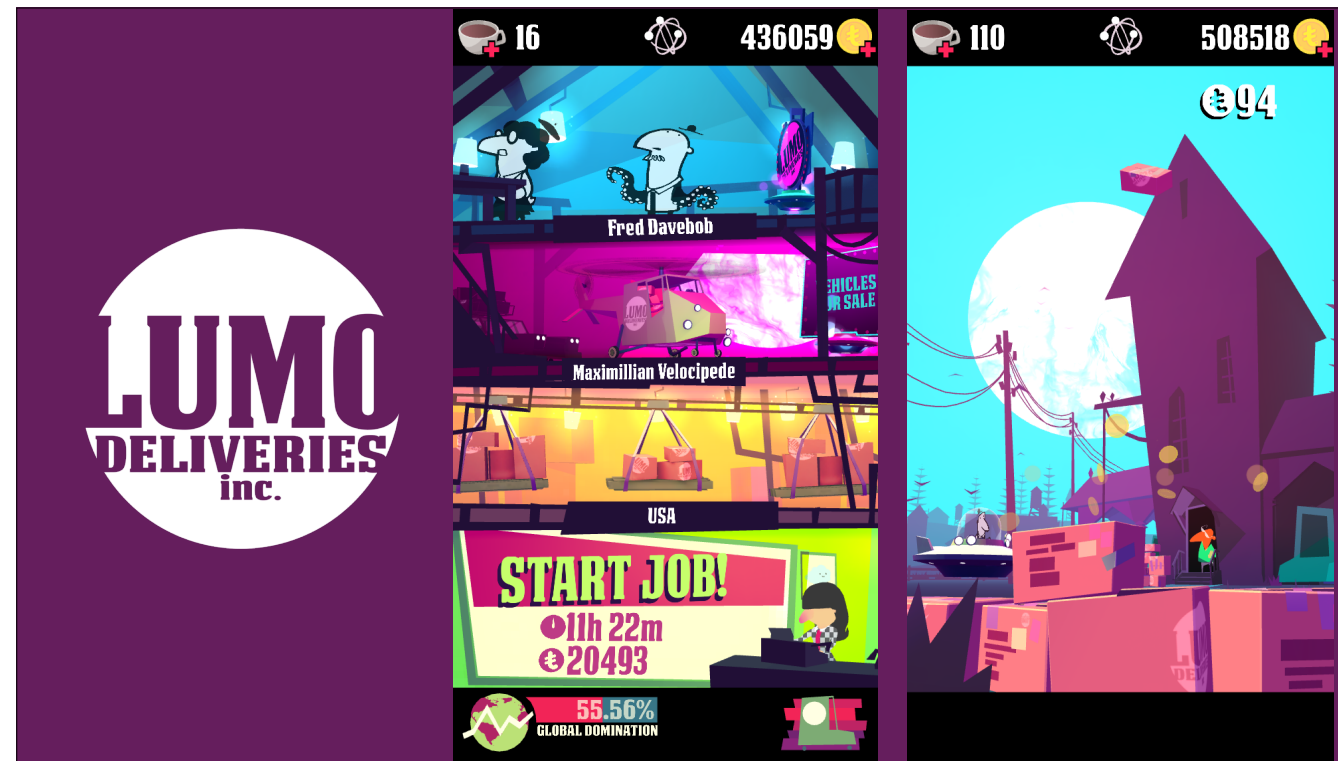
This was good - it did work.

But the **Macro Loop** of simply completing all the levels was a little weak, certainly even in 2012 when we made the game it was okay, but these days it wouldn't stand a chance.



But we DID start working with the gameplay narrative. I didn't really understand the power or value of it back then. It was instinctive game design sensibility rather than considered action.

But the game did get better as a result.



Now we knew that Lumo Deliveries was a very different type of game. It deliberately and knowingly played fast and loose with these Game Loop ideas by splitting the Macro Loop into 2 chunks and separating those by a time delay.

So sending a Delivery, and then later completing the Delivery - **Action** and **Reward** - were anything between Minutes, Hours or even Day away from one another.

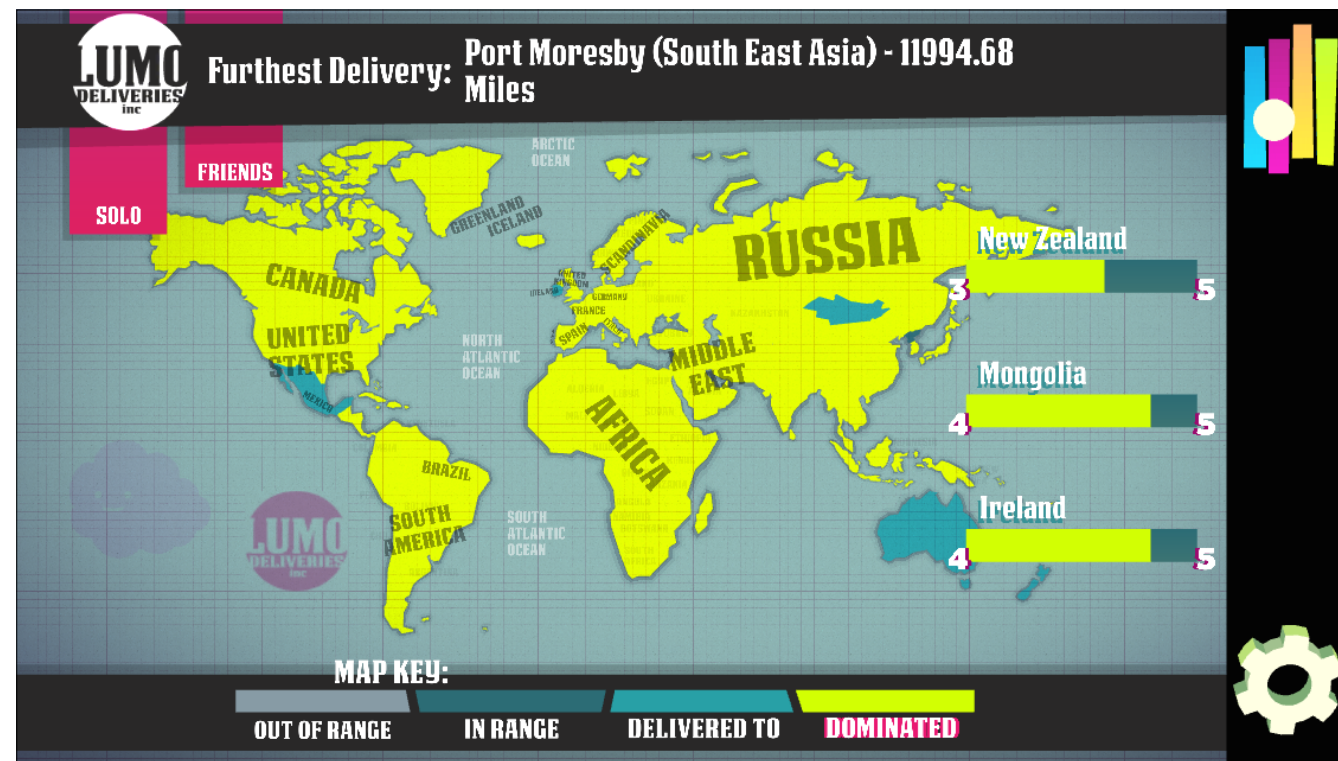
But the slightly atypical experience flow didn't seem to be a problem - starting one delivery and then taking the reward from an entirely different delivery didn't seem to cause any sense of discontinuity and less emotional reward.



Why?

Everyone agreed that the game was funny, joyful, stylish and enjoyable to play - but there seemed to be no adequate long term goal!

People still asked “Why?”



So we added a map - and with a display of your World Domination of the delivery industry. Not a massive idea but a very simple one that fits within the fiction of the game.

We knew we'd done something right when the complaints started.

Mexico is impossible to find. North Korea never turns up... I've been stuck on 66.67% Dominated for EVER!

Every single one of these complaints is justified - and a legitimate problem that we need to fix (and we will!)

BUT - Each one of these complaints is also a validation that people REALLY care about this. We have a slightly broken Meta-Game that has got a pretty awkward conclusion - but we still have something that taps into our player's imaginations and desperate need to achieve Unrivaled Global Domination.

See what I mean about **Great Big Ideas!**



This is where we really perfected the **CONTROL - PRESSURE - POWER** loop. We started the gameplay from the question “How do I want the player to feel?”

So we used CONTROL - PRESSURE - POWER as a literal design guide for the gameplay.

And it does work really well!

But there is one more really important thing that I learned from designing levels from Lumo’s Cat.

CLICK

“It is not my job to make the game hard, it is my job to make the player panic.”

Taking the player from self imposed despair and panic, and giving them the tools to overcome seemingly overwhelming challenge creates a wonderful thrill of empowerment. The ICE COLD to GLOWING WARMTH contest is so delicious.

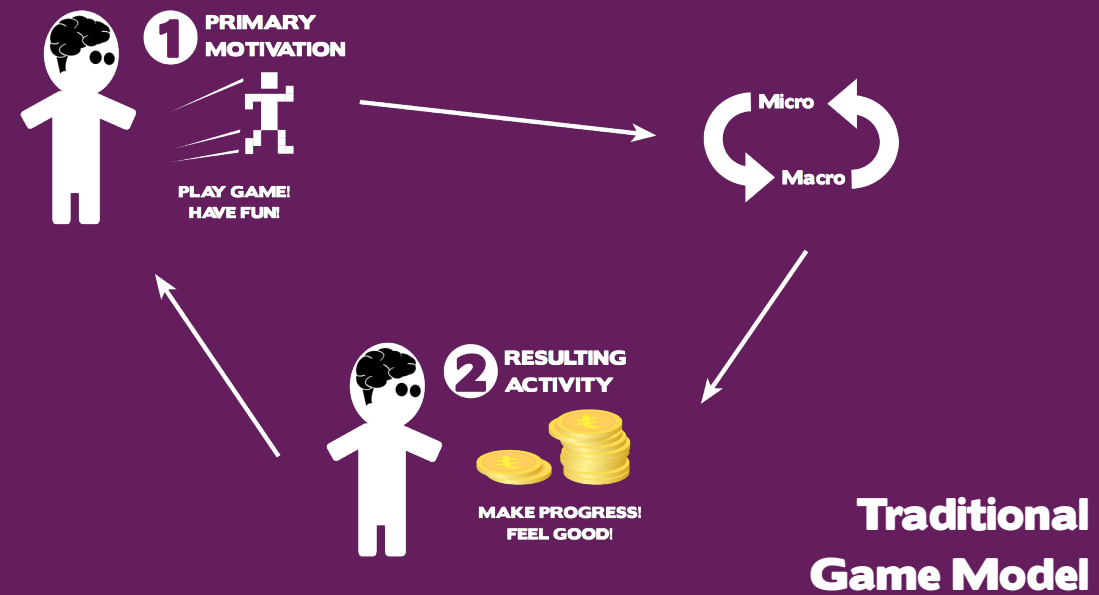
That is the emotional story I want to tell in the game.



Around 50% of the design time has been spent on the Meta-game.

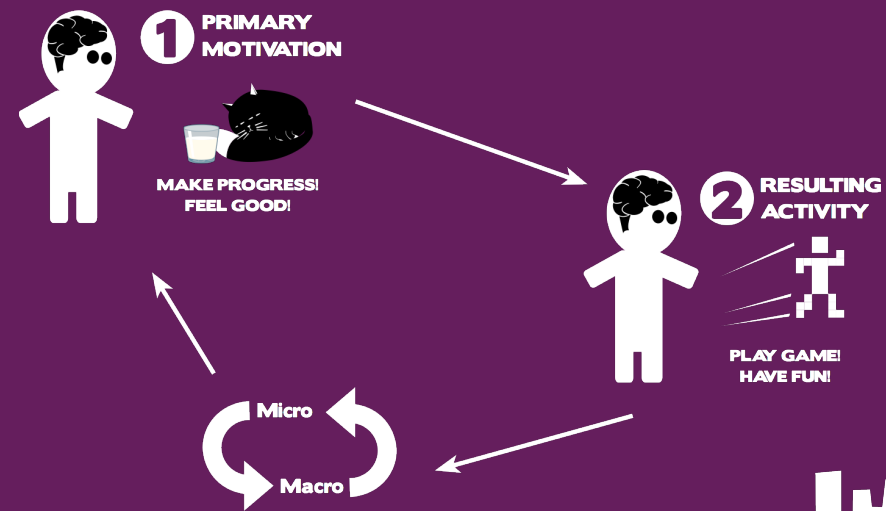
The Meta Loop is atypical - but also creative for the player. Everything boils down to “Look after the cat” - in Macro loop terms this means keeping the cat well fed. In Meta Game this means creating a long Cat Blanket, and adding your own creativity by directing the gameplay to achieve different patterns on the blanket. This drives you back to play the game itself - which is all about looking after the cat.

Motivation Flow...



In many games the motivation flow starts with the desire to play the game. You then engage in the Micro and Macro loops then the resulting activity is progress in the Meta Game. A useful side-effect.

Motivation Flow...



**Lumo's
Cat**

In Lumo's Cat we reverse the Motivation flow.

You want to keep your cat fed and happy, so you enter the game to feed it, this leads you into the Micro and Macro loops so you can make that happen.

The “gameplay” becomes the side-effect. But the Primary motivation is an emotional desire to look after your cat - a universal appeal! (Apart from dog people...)

META GAME: THEMATIC RELATIONSHIP



ENVIRONMENTAL

You need to save the world



BUSINESS

You have to dominate the Delivery business



PROTECTION

You have to look after the Cat

So we think we have the Thematic link between Meta game and Macro loop correct in Lumo's Cat, we definitely nailed it in Lumo Deliveries Inc - but looking at it this way, it is clear that our Meta Game was broken in Kumo Lumo. The game was about saving the world, but the Meta Game made no real use of this idea. We now know what we would do next time!

Three Game Loops

Micro - Macro - Meta

So remember your three loops - and make sure they are recursive loops - especially the Meta game
(Don't let yourself get away with a Meta Arc!)

Micro loop...

Raw Emotions

Fear! Anger! Excitement!

The Micro Loop is often Physical and driven by raw, bright emotions.

Macro loop...

Emotional Story

Control - Pressure - Power

The Macro loop is powered by the emotional Story of **Control** to **Pressure** to **Power**. This is amazingly powerful!

Meta loop...

Player Motivation **Great Big Ideas!**

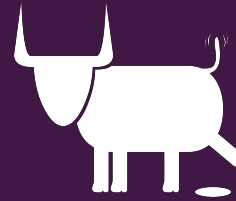
Why?



The Meta Loop is where the Emotional connection with your game lives.

A good meta game keeps you awake at night - remember that you can be playing a Meta Game even when you are not actually playing the game! If that happens you've done it right!

**You might end up making a
“great game”**



If you do all those Loops right - you might even end up making a Great Game!

(Just watch out for falsely convincing yourself of that!)

Any Questions?

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THX!