



Hi! Thank you all for coming.

My name is Ken Wong, and I'm the Creative Director and Founder of a little development studio called Mountains. Our debut game Florence came out on Valentine's day last year. I was the game's designer, and I also worked on a lot of the art and the story.

I'm excited to be here today to share with you some of the things I learned from working on this game. Lots of spoilers ahead, so I hope you've all played the game.

I have a lot to talk about, so we might not get time for questions at the end. However, I'm going to stick around in the break-out room, so come find me after if there's anything you'd like to follow up on.

## Plan for today

- Setup
- Evolution of the idea
- Narrative design
- Interaction design
- Lessons

Here's the plan for today.

First I want to talk about the **setup**, or how Florence came to be.

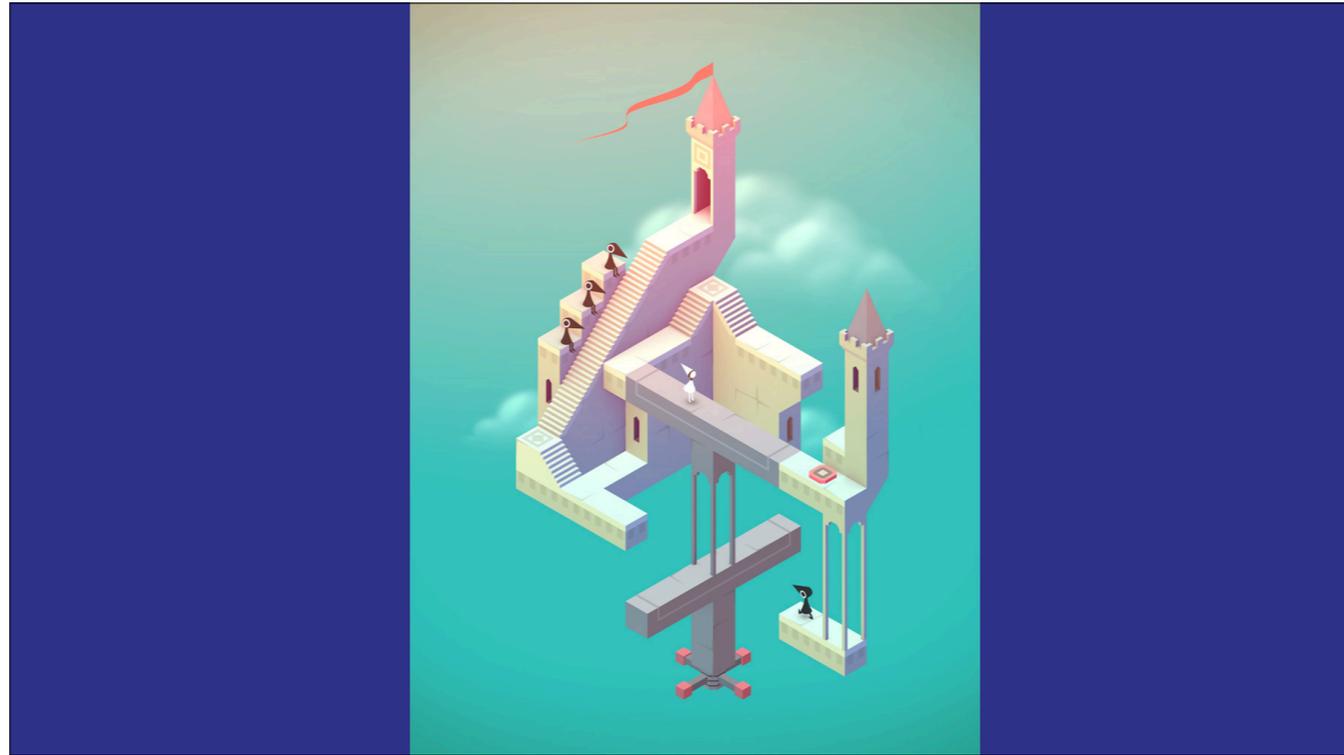
Next, I'll talk about the **evolution of the game idea**, as it changed many times throughout development.

Then we'll look at some highlights of the **narrative design** and **interaction design**.

Finally, I'd like to share a few final **lessons**.

# Setup

Let's start with how this project came to be.



Five years ago, I had the great privilege of working on Monument Valley, as the lead designer, for ustwo games.

Monument Valley was an unconventional mobile game in many ways. At 90 minutes it was very short. It looked like a puzzle game, but it was actually quite easy, and was more about the journey than the reward at the end. It was a quiet and relaxing experience. From top to bottom, we designed this game not for gamers, but for people who don't usually play games.

The game's success gave me confidence that mobile players want high quality experiences. It also gave me confidence in myself as a designer and my ability to make bold design decisions.



I decided that the next challenge I wanted to take on was starting a studio.

So three years ago, I moved from London to Melbourne and started Mountains. This is our producer Kamina, myself, programmer Sam and lead programmer Tony.



Because of the success of Monument Valley, I was able to secure a partnership with Annapurna.

~~Annapurna Pictures is a film studio known for its eclectic, award-winning films like Zero Dark Thirty, The Master, Sorry To Bother You, and If Beale St Could Talk.~~

At the time, their new Interactive division had not yet released any games, but the team included former members of Sony Santa Monica, who published Journey, Hohokum, and more.

It felt like they shared the same goals as me - to make beautiful, unique games. So we signed up. I faced many challenges starting this studio, but fortunately, funding and publishing were taken care of from the start.

## How do we make games at Mountains?

- Lots of iteration. Plan for failure.
- Playtest often
- Short games are okay

In my opinion, many of the aspects of **how** we made games at ustwo worked really well, for a certain type of game. I wanted to carry these over to my new studio.

- Probably the most important: lots of iteration. We want to innovate, and that often means it takes a couple of tries to get something right. Our planning includes lots of room for failure, because this failure helps us gain knowledge and understanding about the thing we're making.
- To support this process, we do a lot of user testing. We're not especially rigorous about it - just friends and other game devs who come by the studio. But we usually don't tell these playtesters anything about the game, and we don't tell them how to play. They should be able to work this out from the game itself, as they would as a regular customer.
- Lastly, short games are okay. Monument Valley taught me that there are many busy people out there that would rather have an experience that's shorter, but high quality throughout.

I had hoped to keep our productions short and tight. I actually wrote into our employee handbook that Mountains would ship a game roughly every twelve months.

## Florence: 22 months



This is how Florence actually turned out. 22 months.

The first six months could be called a period of ideation. We went through a few different prototypes, just to figure out what game we wanted to make.

It took a further 9 months before we could play through that from start to finish - and to learn how to make a good chapter of Florence.

And then it took 7 months of revisions and polish to bring the game to launch.

## evolution of the idea

When I started Mountains, I didn't have in my mind a particular game that I wanted to make.

Of course, over the years I had built up a long list of game ideas - I just didn't know which one would be the right fit for this team, with this budget, at this time.

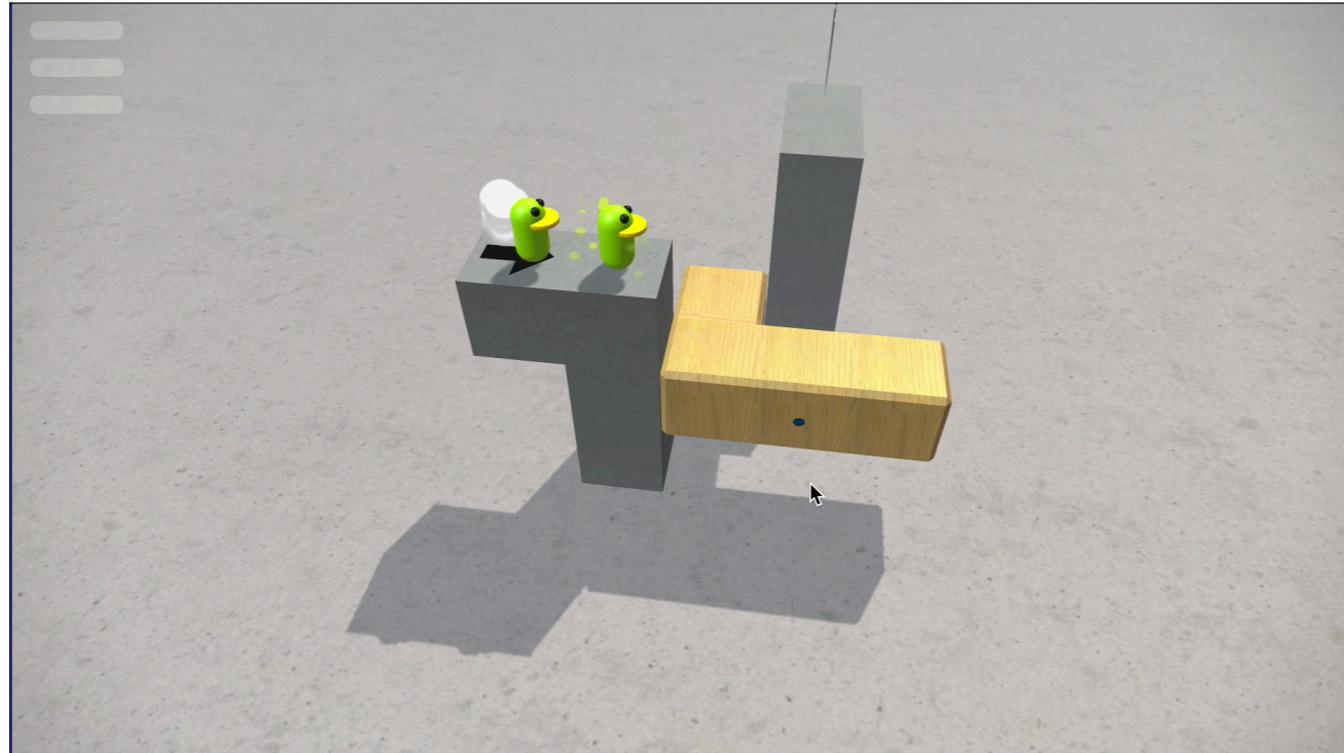
Having a clear vision for what you want to make can be a great benefit. But I think it's also valid to find the idea organically through a process of experimentation and discussion, and that was the case with Florence.

## STARTING POINT

“manipulation of 3D objects  
on a touch screen”

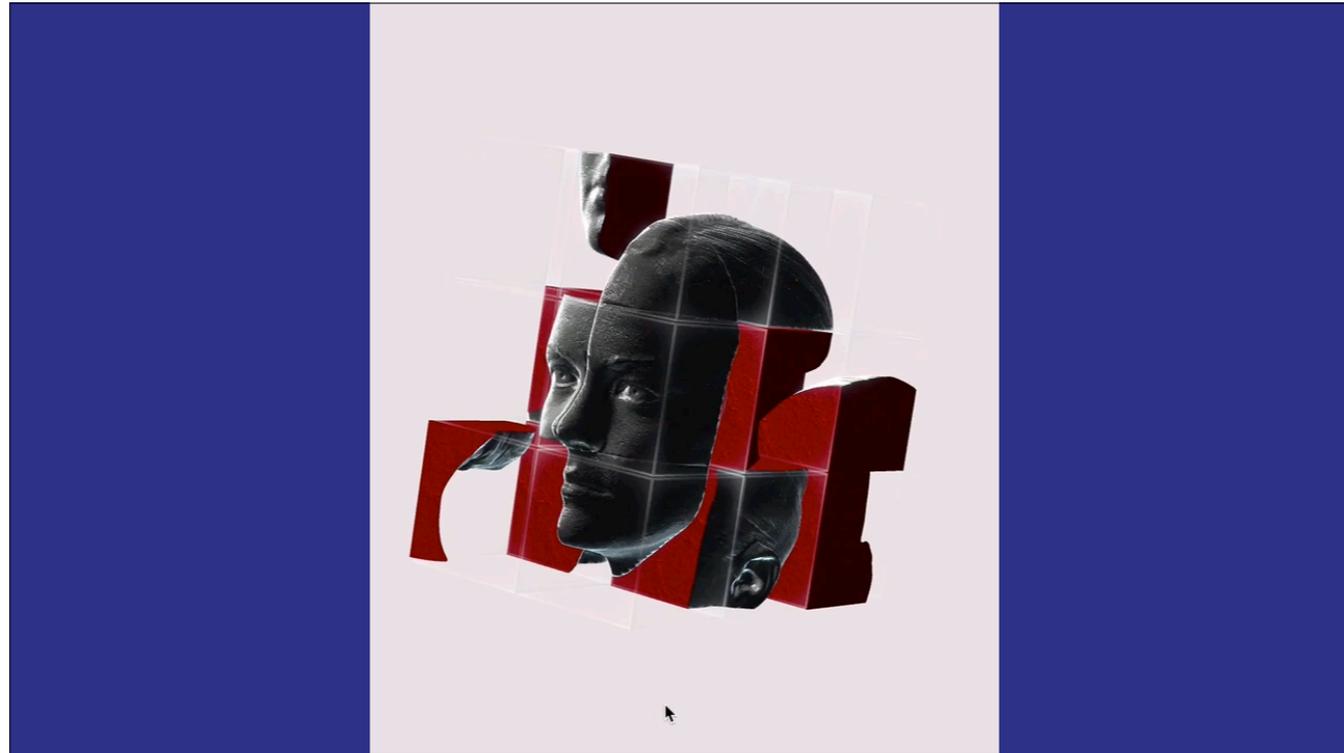
Instead of a game idea, I had a starting point, an area for investigation. And that was:

“Manipulation of 3D objects on a touch screen”. Only a handful of games like *The Room* and *Shadowmatic* had done a good job of this and I wanted to see if we could find our own solution to this challenge.



Our first prototype to explore this was called Parade.

Parade could probably have become a decent game, but I realised I wanted more than just solid mechanics and good level design - I wanted to make an emotional impact.



So our next prototype included a more human element - human heads. The idea was to put human heads together, like 3d jigsaw puzzles, or like rubiks cubes. I thought this mechanic would allow us to explore identity and psychology.

It was pretty cool, but once you've put one human head together, further heads just felt the same.

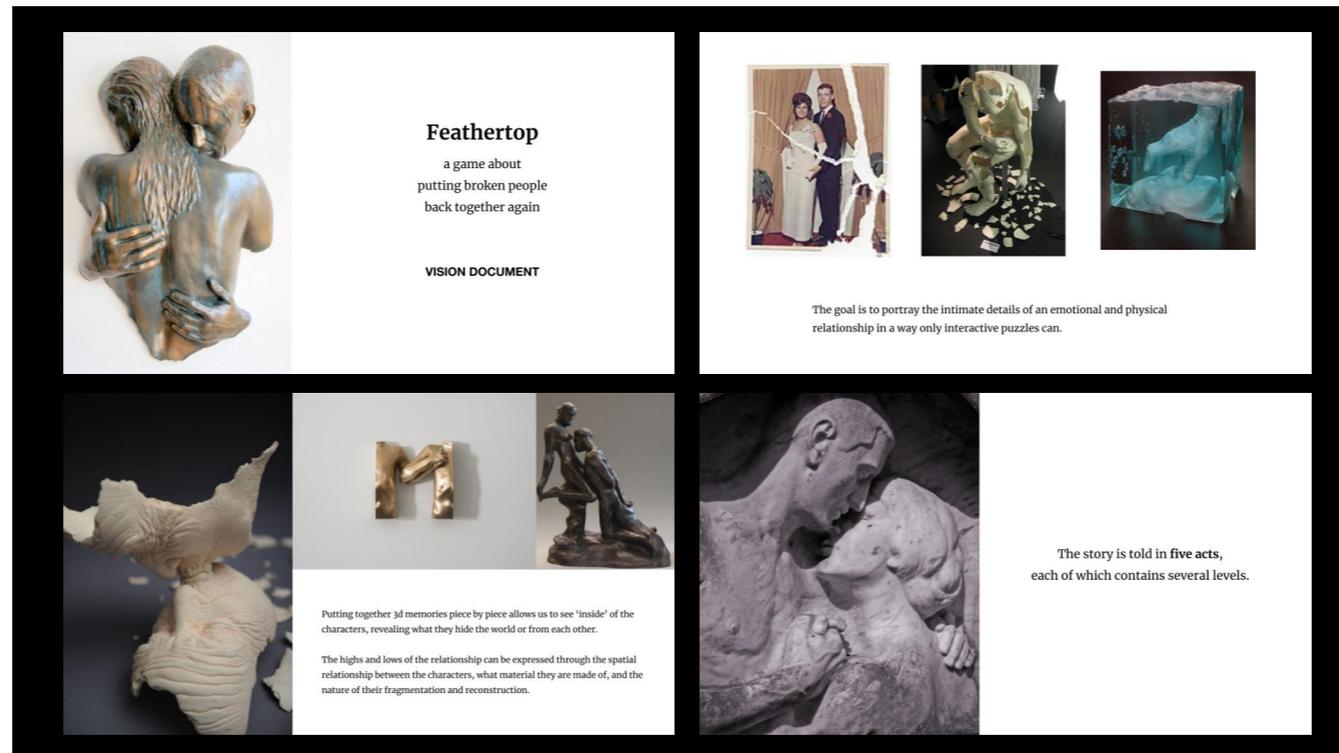
GAME CONCEPT

“the story of a relationship,  
told through 3D jigsaw puzzles”



I still thought the idea of 3D puzzles had potential, so I came up with a list of five things we could use 3d puzzles for, and what the team honed in on was a game about a relationship between two people.

If I were to write out what the concept of the game was then, it would be this:



We'd reuse the structure of Monument Valley - a linear series of chapters. Each chapter would use a variation of a 3D jigsaw puzzle as a metaphor for all the high and low moments in a relationship.

It had taken us six months just to reach this point. Throughout this process, Annapurna seemed patient. They know that you need to break a lot of eggs in order to make a hit indie omelette.



The next nine months were a real uphill battle.

I slowly realised that my initial exploration direction of 3d manipulation was just not going to work out. It turns out it's actually really awkward to manipulate 3d objects on a touch screen, and the third dimension wasn't adding anything to the storytelling.

So we switched to 2D puzzles. They were clearer and more straightforward, but our concept of the game was becoming simpler and simpler. Is this what Annapurna had signed up for?



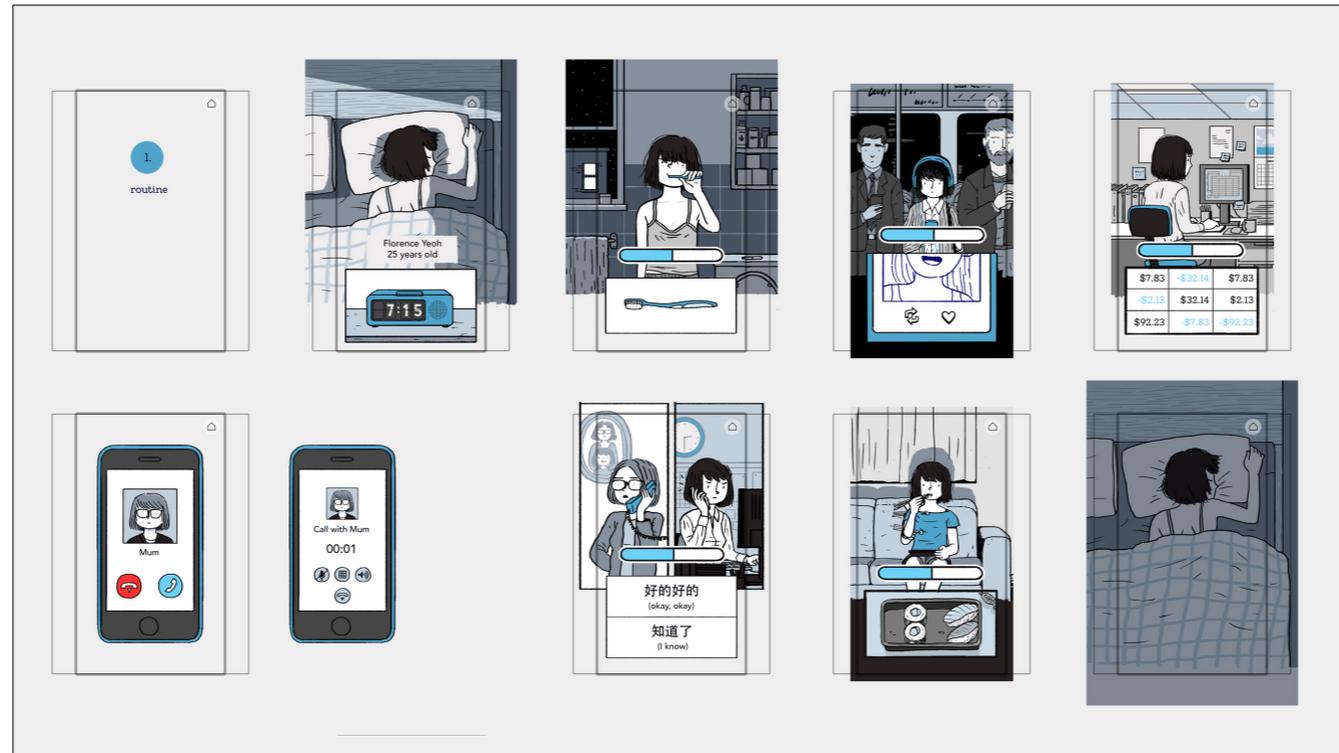
We also really struggled with how to make a good chapter of Florence. It felt like for every four ideas we had, three wouldn't work. We'd spent two or three weeks creating a prototype... only to find that the emotion or the story just didn't come across. Sometimes we'd have to throw away all that code and art and try again with a different approach.

As the game designer, and the founder of this young studio, it was very disheartening work. Everyone around me was very supportive, but I couldn't help but feel I like my team and my publisher were trusting in me, and I was leading them down the path to disaster.



But gradually, we found mechanics that DID work. A few chapters started to feel strong, like they would actually make it into the final game.

More and more levels started to not be jigsaw puzzles at all, and we opened ourselves up to using whatever mechanic was needed in order to tell that story beat.



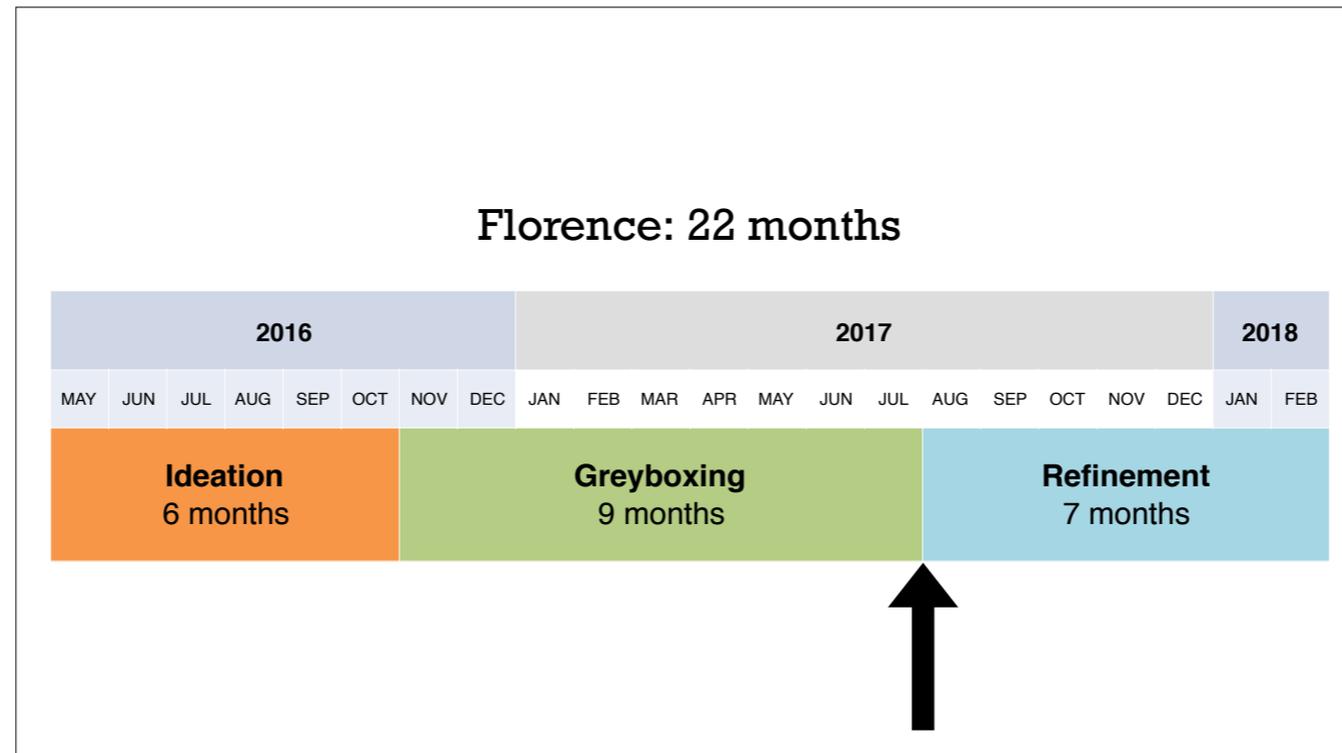
We also let go of the idea of each chapter using just one mechanic. Instead, each chapter became like a container that could contain one mechanic or several, interspersed with non-interactive images panels.

The game began to resemble Wario-Ware, but also interactive comic book. I began to use storyboards like this to plan chapters.

GAME CONCEPT

“the story of a relationship,  
told through different touch screen mechanics”

You could now describe the game as “the story of a relationship, told through different touch screen mechanics”.



In July 2017, 15 months since we started the company, we finally could play through the game from start to finish in a very rough form.

It wasn't good yet. Many of the emotional beats just didn't land. But now I had a complete first draft, that worked well enough that I could reflect upon it and start improving. And I was confident that some version of this game was going to ship.

narrative

Let's rewind a bit, and talk about narrative.

i personally don't enjoy narrative games

I personally don't enjoy most narrative games. I don't have anything against them, they're just not my cup of tea.

But sometimes not being a fan of something can be an advantage.





4: Happy days

One of our first tasks was to cast our two main characters.

My first instinct was to try and make them as blank as possible - maybe no names, and no particular character traits, and ethnically ambiguous. I thought at the time that making them as generic as possible, would make them relatable to the widest audience.

I can't remember how exactly we got the idea to head in the opposite direction - to make these characters very specific. Perhaps we found it difficult to write a story for characters with no personalities, or maybe we realised that creating an 'average' person is impossible.

“...you honor the universality of [Fresh Off The Boat] by honoring the specificity... you can't please everybody, and you don't want to, because that's when things becomes watered-down.”

C O N S T A N C E W U

I found guidance on this topic in an interview with Constance Wu about her television show Fresh Off The Boat. She talked about the impossibility of representing all Asian-Americans in just one show. That pressure only existed because it was the only show depicting the Asian-American experience.

What they could do, was tell an authentic story about one particular Asian-American family. By making these fictional characters specific, detailed, flawed, deep characters, they honoured the complex and varied lives of real Asian-Americans.



So as the primary writer, I decided to fill the characters with details from my own experiences, and those of my friends and family. Establishing our characters' ethnic backgrounds helped anchor their identities, and informed their relationship.

Like me, Florence was born in Australia, to ethnically Chinese parents who emigrated from Malaysia. Her surname Yeoh is my mother's maiden name. Like many of my female Asian friends, Florence has a sometimes tense relationship with her mother, who she only speaks to in Cantonese.

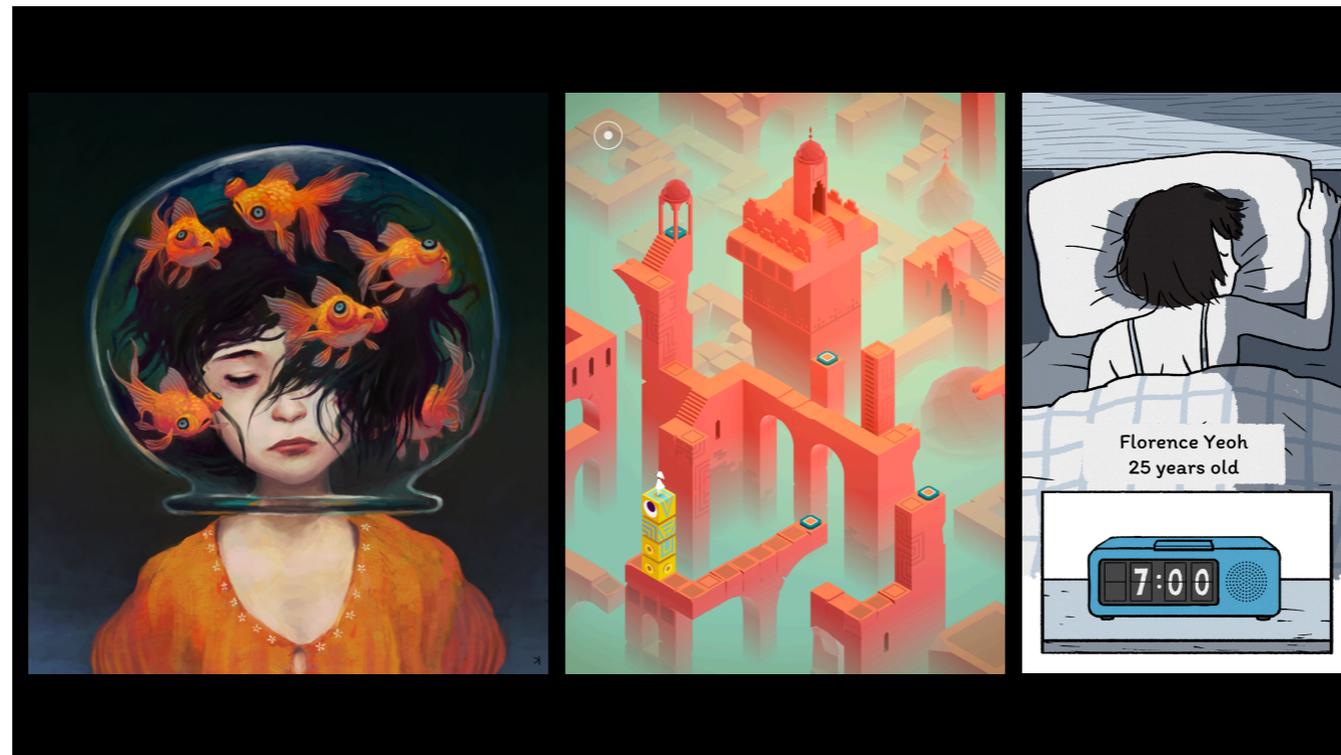
Krish is Indian-Australian. I loved the idea of a dark-skinned, hairy, artistic man being our object of desire. Krish's family is based on the family of a Sri-Lankan friend from high school, and his surname comes from one of our producers at Annapurna. My South Asian friends all reinforced that Krish would probably be very close to his family.

Krish introduces Florence to his family early on in the relationship, while Florence keeps her relationship a secret from her mother.



Our couple happen to be two people of colour, of different faiths, and the children of immigrants. This is such a mundane, ordinary thing in Australia, which is where we made this game, and where the game is set. Believe it or not, we exist and we have lives and we fall in love.

It's so normal... and yet, this representation is meaningful, because we're still not used to seeing people of colour and people of different faiths as the central characters of the stories we tell. We received so many tweets and emails from people who played Florence, who felt themselves represented in a video game for the first time felt.



Before I was a game designer, I was an artist, illustrator and art director. Telling stories with pictures is my native language. That background has really shaped how I design games, which you can see in both Monument Valley and in Florence. Both games use almost no words, but make heavy use of visual composition, colour and music.



It took me a long time for me to find the Florence art style.

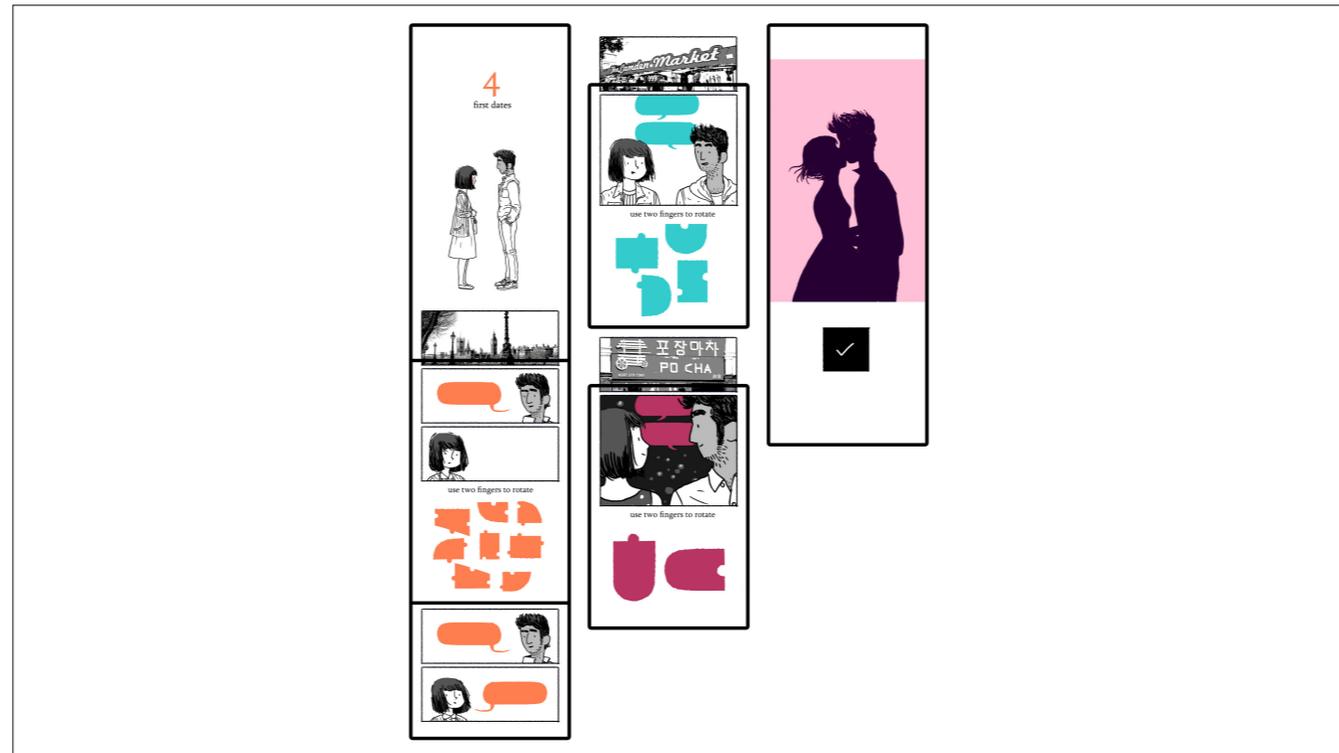
Here's a couple of experiments that happened along the way. In the first one I'm definitely trying too hard to come up with a really unique art style for the game. The later two are more subtle, but they still don't quite set the right tone for the story.



I'm actually not very good at drawing the same thing or even the same character over and over again. I've never drawn a comic longer than a single page. So it wasn't immediately obvious that we should borrow from the language of comic books.

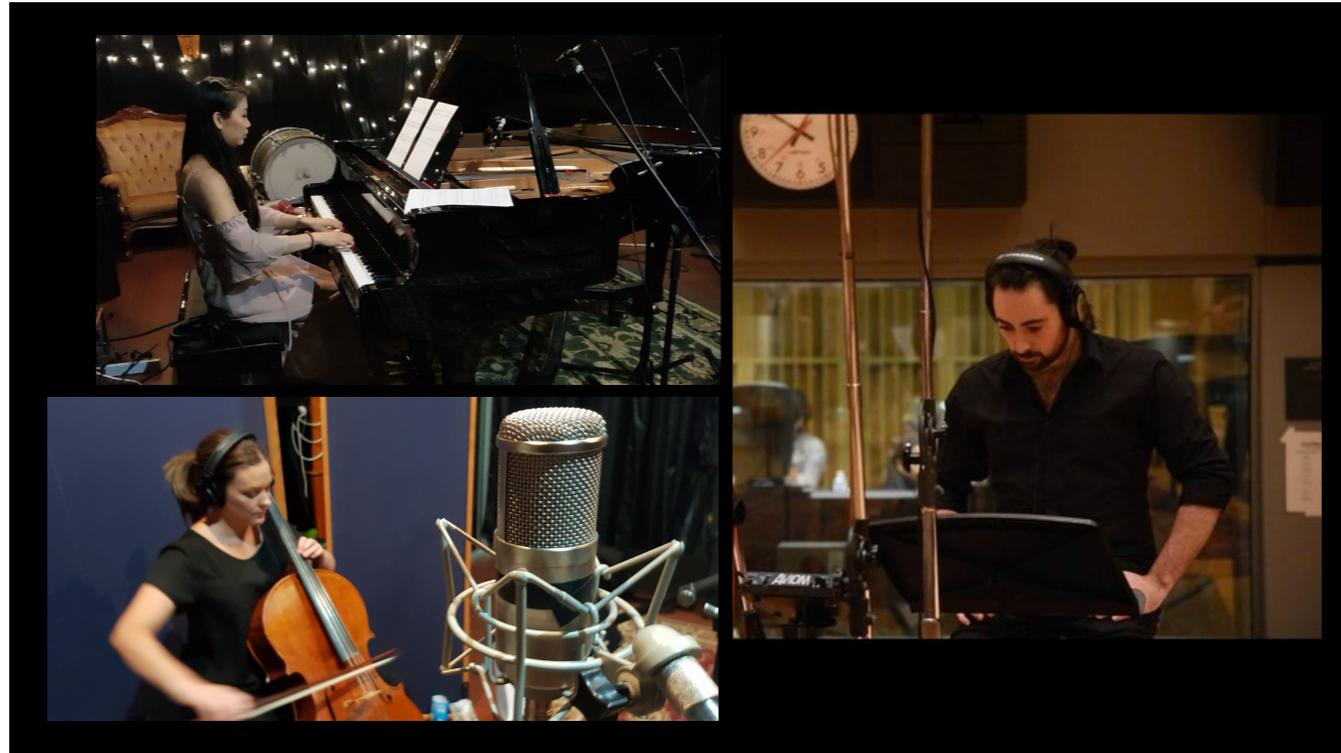
But once we went down that direction, it totally made sense. I took visual cues from slice-of-life graphic novels and zines. These would often feature incredibly personal narratives, and would be printed with limited colours. The art style simple and ordinary, and rough around the edges, but it brings a sense of vulnerability and authenticity.

These two mock posters were some of the first images I drew in what was almost the final art style. When I drew the poster on the right I was like... that's it! That's the hero image of the game. No other game looks like that. That's what I want as the banner on the App Store.



Another consideration with the art was that many people would be playing this on their phones.

A traditional comic page with 5 or 6 panels on the screen would be quite cluttered. So our comic strip sequences are almost all single width panels. They scroll up and down, more like a website or a social media feed than a comic book. This lets people focus on one image at once.



Music of course, plays a huge part of the story, and we were very fortunate to have Kevin Penkin on board as composer. I could spend this whole talk on all the amazing things his score does, but it's probably best that Kevin give that talk, another time.

Today I'm just going to touch on one aspect of of the music, and it's that we realised that the two main instruments could act as the voices for the characters.

We knew quite early on that Krish would play an instrument, which ended up being a cello. One of Kevin's first assignments was to write Krish's theme, which he's playing when Florence comes across him in the street. You only hear the cello when Krish is around, or when Florence is thinking of Krish.

Florence also has a theme, which actually comes from Kevin's audition track for this project. It's played on piano, so the piano often serves as the voice for Florence.

When it came time to write music for the characters' first argument, I asked Kevin to just write a cello and a piano having an argument. And it worked perfectly.

## gender options

A few months before launch, we had two curveballs to deal with.

The first was a conversation that we had about gender and sexuality. Annapurna asked if we'd consider allowing the player to play as either a masculine or feminine version of the main character. They could also pick whether the love interest appeared masculine or feminine. Only the art assets would change - the story would be identical.

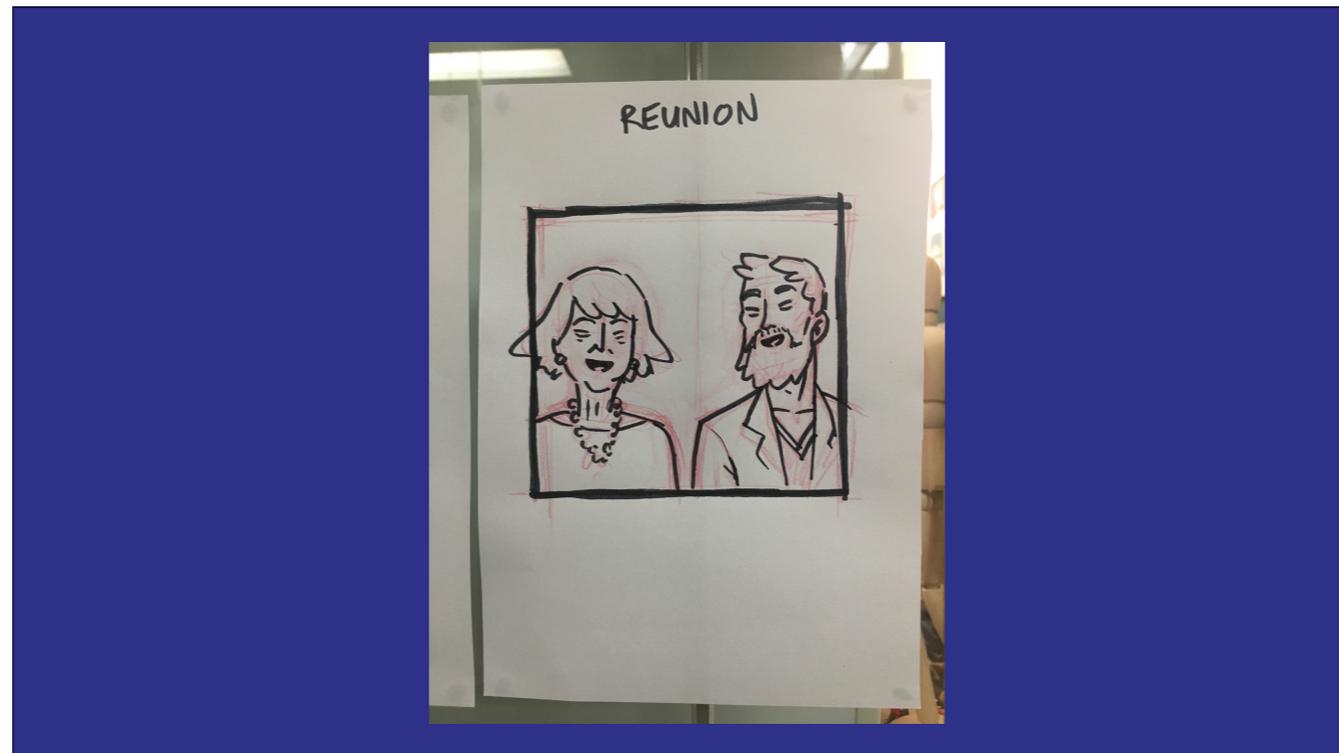
Creating two sets of assets would extend production, so Annapurna was prepared to increase the budget. I was a bit shocked. I didn't expect a publisher to ever propose increasing the scope and budget of a game.

Internally at Mountains, we had discussed the topic of gender at the start of the project. Arriving at a female protagonist and a male love interest was the result of many considerations. As the primary writer, I wanted to write a straight couple, because those are the experiences I know first-hand.

We liked having a female point of view character, to add to the underrepresented field of female protagonists in games. We liked the idea of a male person of colour as the love interest, as they are also underrepresented, and it helped us avoid the trope of the manic pixie dream girl.

But Annapurna's suggestion asked us to revisit these decisions.

I think there's definitely a game to be made in the same mould as Florence, with gender options. Is that a better game? Does it tell a better story? I don't know. Every member of our team cares about representation, but as the designer, I'm not sure if this would have been the best way to achieve it. In the end, I made the call to stick with the path that we were on, and only a few months away from completing. I had really come to know these two characters, and I wanted to see their story through.



The second late development was the rewriting of the ending.

Since the beginning of development, the story had always been about two people coming together, breaking apart... and then... 30 years later, meeting again by chance. We got as far as prototyping this ending.

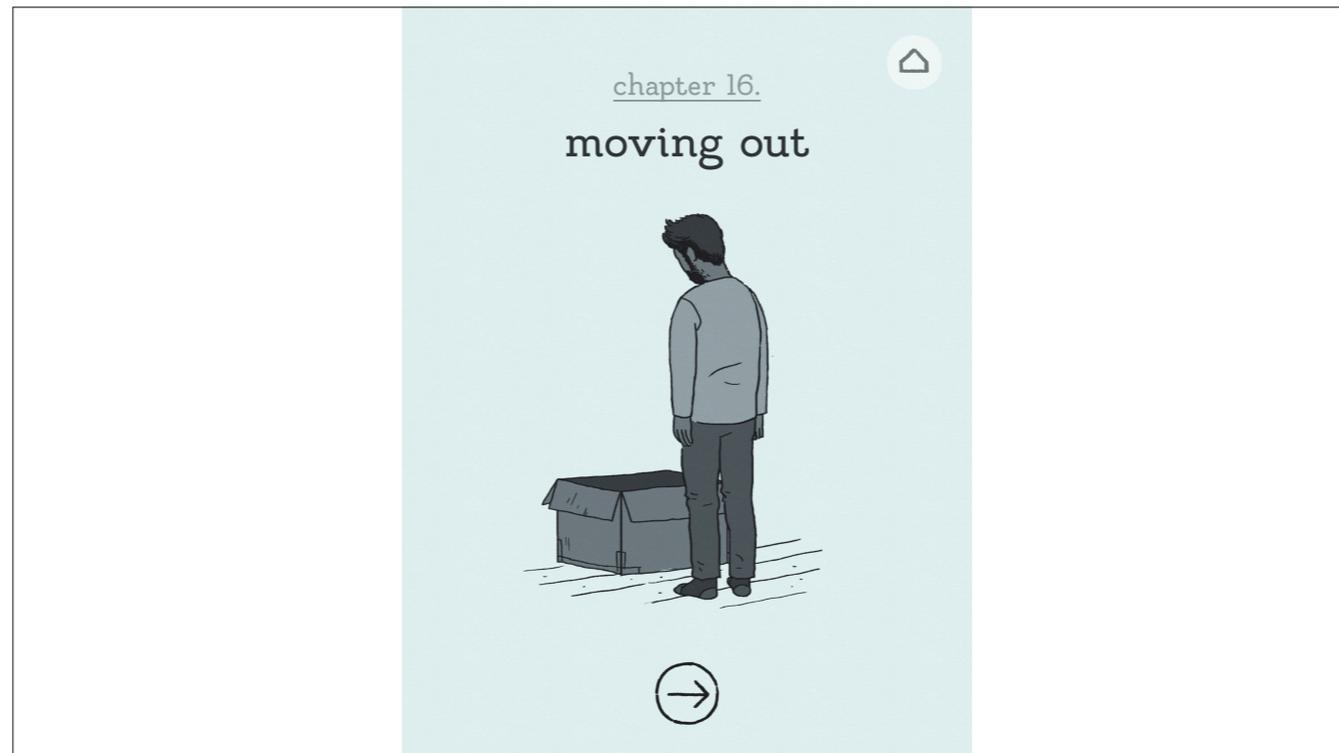
I wrote this version of the story when I was recovering from a really difficult breakup.

But over the ensuing year of development, I had gotten to know Florence really well. She felt like a real person to me. I wanted the best for her. Slowly, I understood what all my teammates and collaborators had been pushing for the whole time. Florence's story shouldn't end with a chance reunion with Krish, and it shouldn't end with her meeting someone new either.

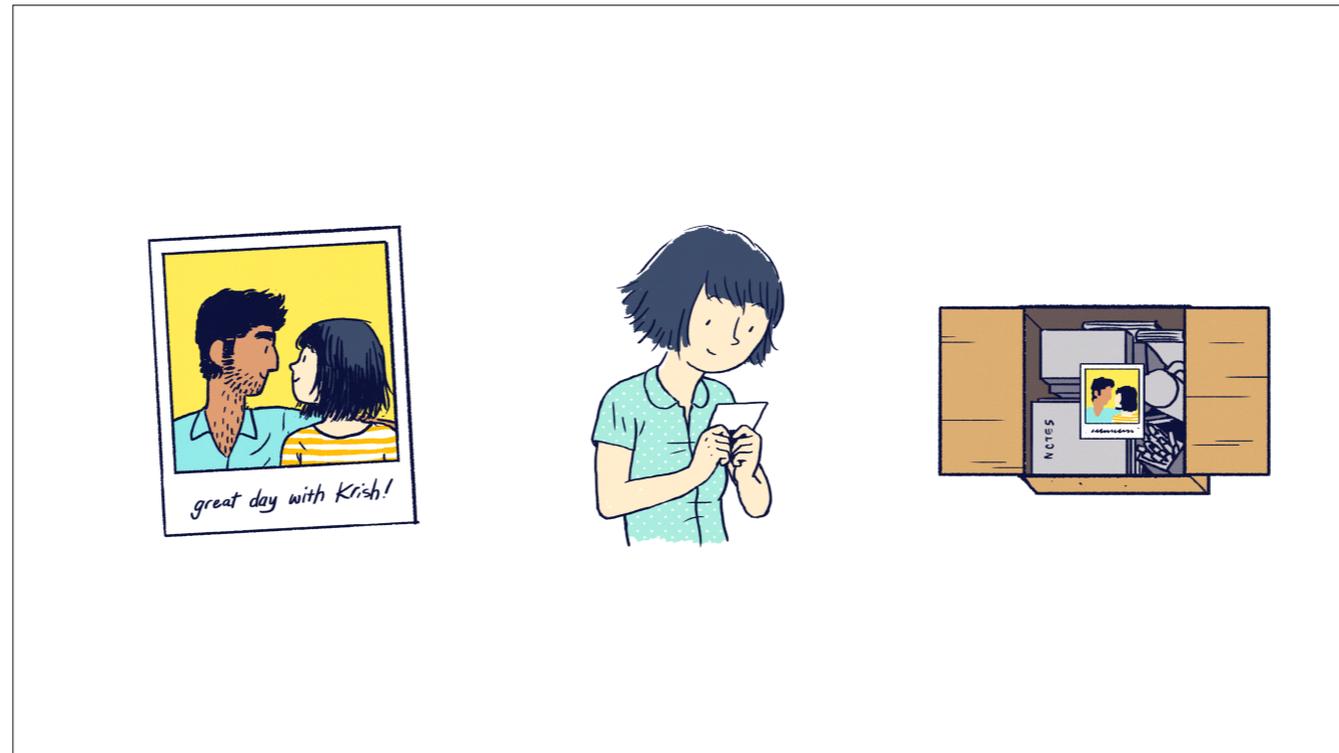
All this time I had told Florence to let go, but then always ended up leading her back to Krish. It turns out I was the one that needed to let go, to let go of this ending that had been so personal to me, that I once thought was the reason I wanted to tell a story at all.



This part of Florence's life **needed** to end as it began, with Florence by herself. But because of the time she shared with this really amazing person, she's become more confident, more independent, more fulfilled.



So how do we say goodbye to Krish? The last time we saw him, he was packing up his things on a rainy day. And he left his toothbrush behind. The worst.



So I wrote this tiny, little goodbye. As Florence is clearing out her office, ready for the next stage in her life, she finds an old photo of Krish.

Florence smiles. It's a happy memory. We hear cello for the final time.

She puts the photo in a box with the rest of her things from her past, and closes the lid.

## interaction design

Let's move on to the final way in which Florence tell story, interaction design.

### Traditionalist game design

- Game mechanics should be about challenge and skill
- Games should be about choice and agency
- Games should be at least a few hours long

### But what if...

- Game mechanics can be used to evoke a feeling or an idea.
- Use whatever game mechanic is needed to tell the story
- Games can be whatever length they need to be

In general, I think there are some ideas about what a video game is that could be summarised as traditionalist.

- Game mechanics should be about challenge and skill
- Games should be about choice and agency
- Games should be at least a few hours long

I think a lot of what being a creative, an artist and a game designer is about, is questioning assumptions, and searching for new perspectives. Some of the insights that informed Florence are:

- Game mechanics can be used to evoke a feeling or an idea.
- Use whatever game mechanic is needed to tell the story
- Games can be whatever length they need to be



Passage



Papers Please

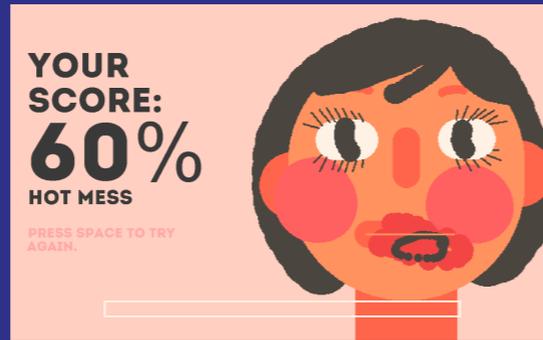


Gone Home



Everything

Many games over the years have helped me question what a game is and what effect game mechanics can have on the player. Some of the games that made a big impact on me were Passage, Papers Please, Gone Home and Everything.



*Morning Makeup Madness*  
Jenny Jiao Hsia



*How Do You Do It*  
Nina Freeman

On this project I was particularly inspired by the vignette games of Jenny Jiao Hsia and Nina Freeman.

Jenny's game *Consume Me* is coming out soon. Remember, if you think it looks a bit like *Florence*, it was her work that inspired ours, not the other way around.



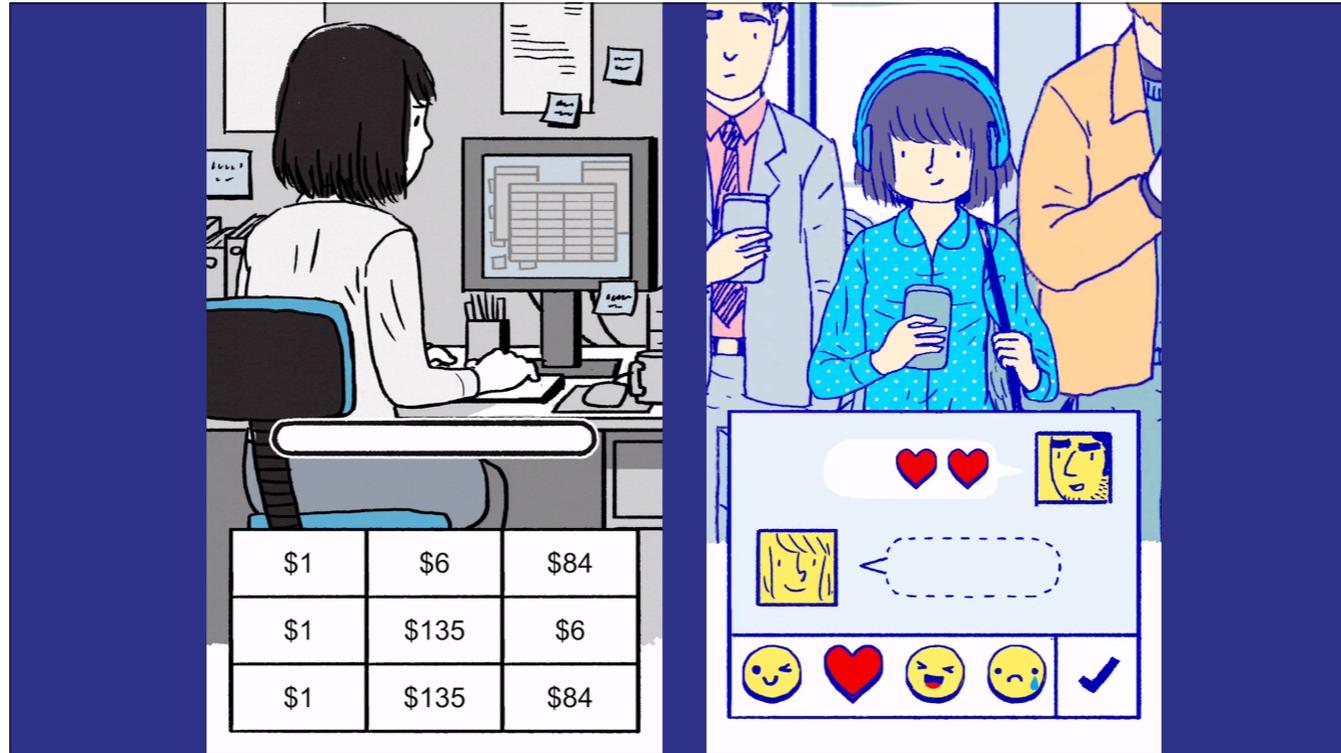
Let's look at how some of the mechanics of Florence work.

None of the mechanics are what you would call deep, from a systemic point of view, but that's not the point. In vignette games, mechanics are often about **evoking** a feeling or an idea, or perhaps bringing up similar memories that the player has, and thereby creating an empathetic connection with the character.

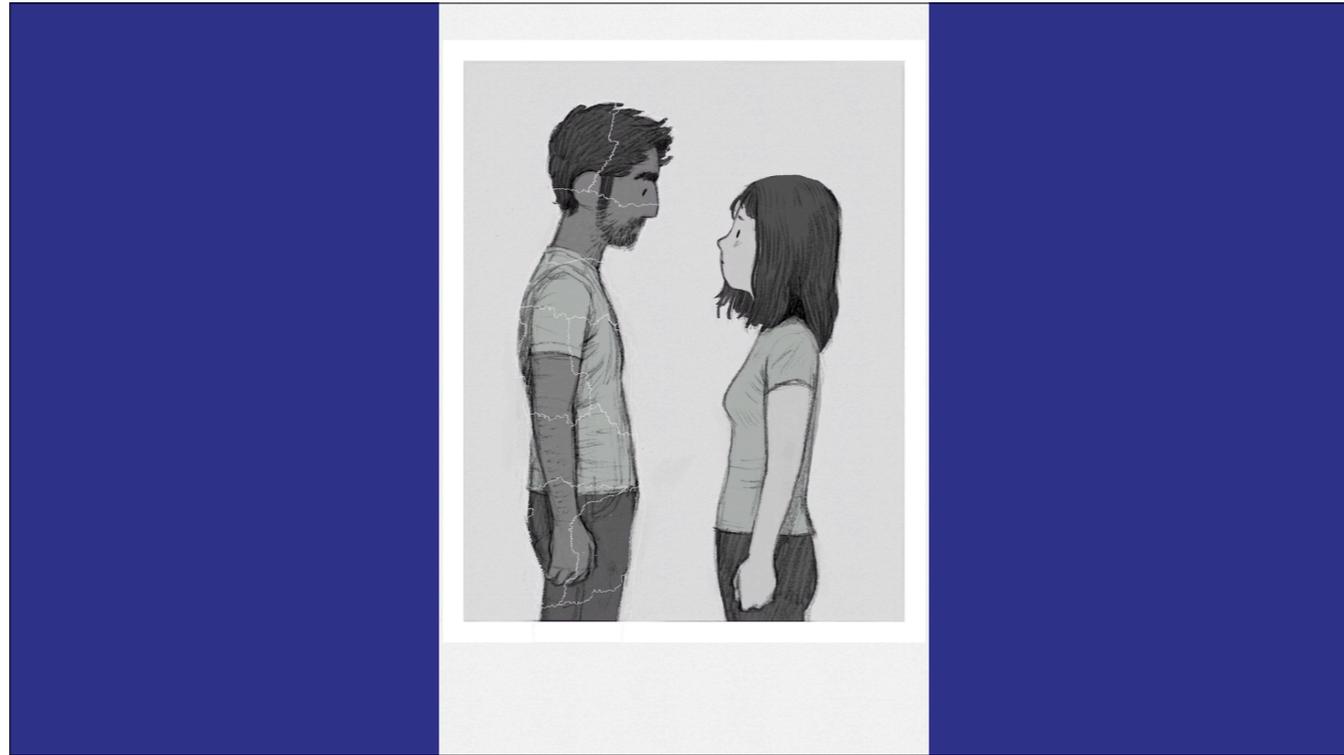
A great example is the toothbrush interaction.

It's such a simple action, but it says so many things at once! The interaction is not difficult at all, but it's repetitive enough to suggest monotonous work. The presence of a progress bar signifies gamification, as if Florence is living life for the sake of arbitrary completion.

The fact that of all the moments in Florence's life, we're featuring her brushing her teeth, says something about how exciting her life is at this point.

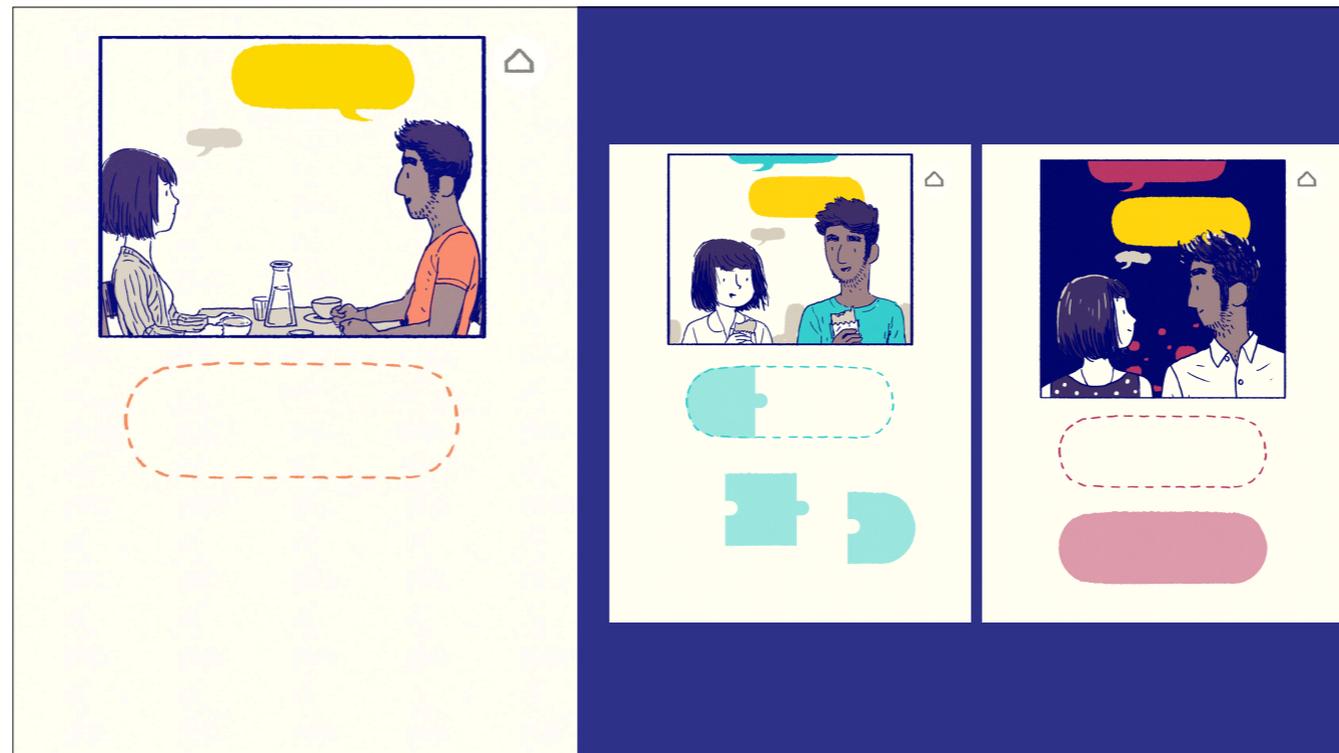


Many of the interactions in the game are simplifications of things we already do in real life, perhaps even things we do on our mobile devices. So the game is using the player's familiarity with mobile interfaces to tell a story, while also creating a connection with Florence.



Other interactions in Florence are abstract puzzles or activities that are metaphors for what's going on emotionally with the characters.

One example is the chapter called fragments. The player has to tear up an image of Krish piece by piece, but it's a metaphor for Florence losing Krish from her life. This is where the touch-screen can be so powerful - the player is having to actually tear Krish apart with their bare hands.

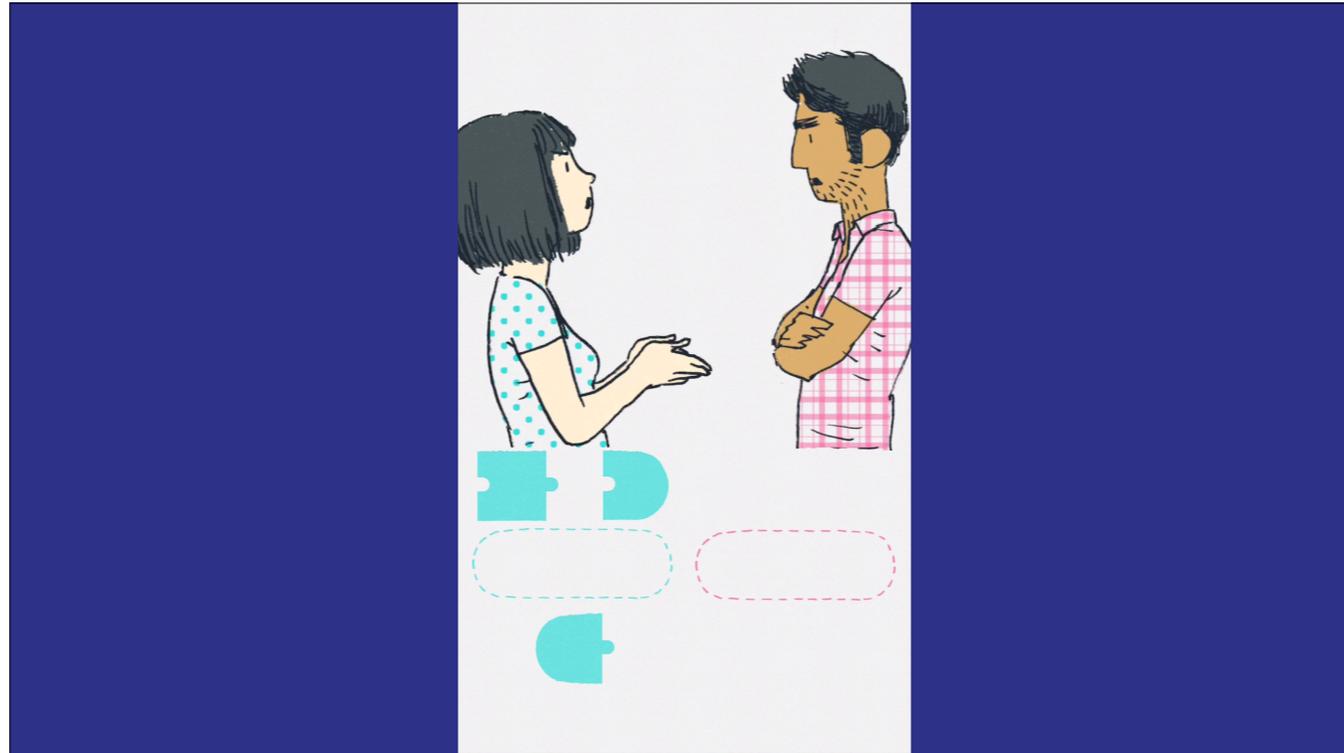


In this chapter, we wanted to convey that Florence is really nervous for her first date with Krish.

Forming a speech bubble out of puzzle pieces requires just enough brain power and just enough time to make the player feel like it's taking effort for Florence to think of the right words to say to Krish.

The resulting speech bubble itself is a coloured shape with no actual words in it. This suggests to the player that what's important is not what was said, but what it took to say it. Krish, on the other hand, responds pretty quick, as if he's relaxed and confident.

As Florence and Krish go on more dates, the puzzles get easier. The player, applying the metaphor, understands that Florence is becoming more comfortable around this person, and the words are flowing easier.



We found that revisiting mechanics was a great way to show that the characters or the relationship had undergone change.

Here we see a different take on the speech bubble mechanic, when Florence and Krish are having their first big argument. We're still creating speech bubbles out of pieces, but the shape of the pieces, and the way the characters talk over each other, produce a very different feeling.



The final two chapters are sort of a best-of compilation of mechanics from the rest of the game.

It's as if Florence (and the player) are using everything they learned along the way, in order to complete this phase of Florence's life.

## lessons

Finally, I'd like to talk about a few of the takeaways I have from working on this project.

premium mobile is tough

I'm very proud of what our little game accomplished. The success of Florence was enough for Mountains to secure new projects. Our little studio will continue to exist and to grow, which I'm very very grateful for.

But despite all the awards it's won, and all the wonderful reviews and word of mouth, Florence only did 'okay'. It made it's money back, and then some. We could afford to raise our salaries a little, and do a little a sponsorship, but we're not at the point where we can completely fund our next project by ourselves.

It makes me wonder how premium games fare when they don't win Apple Design Awards? Or if they don't get constant featuring on the App Store? If your business plan is based around premium mobile, you're up for a tough challenge. I don't know if that's any more challenging than standing out in the free to play crowd. Some industry commentators predict Gamepass-style subscriptions will be the next big thing, but we'll have to wait and see who that benefits.

## A few stats

- 88% iOS / 12% Android (no China Android version)
- China is 41% of iOS sales. USA: 22%

A few stats: iOS makes up 88% of sales, Android 12%. Note that Florence is not yet on Android in China.

Despite this, and despite our lack of marketing there, China is our biggest market on iOS by far, over 40%. That's almost double the next biggest country by sales, which is the US. China is a massive and important market.

## Some anecdotal player patterns

- Couples
- Recent break ups
- Kids?!
- On planes, trains, buses
- Men cry too

We love it when our players share their experience of Florence with us through email and social media.

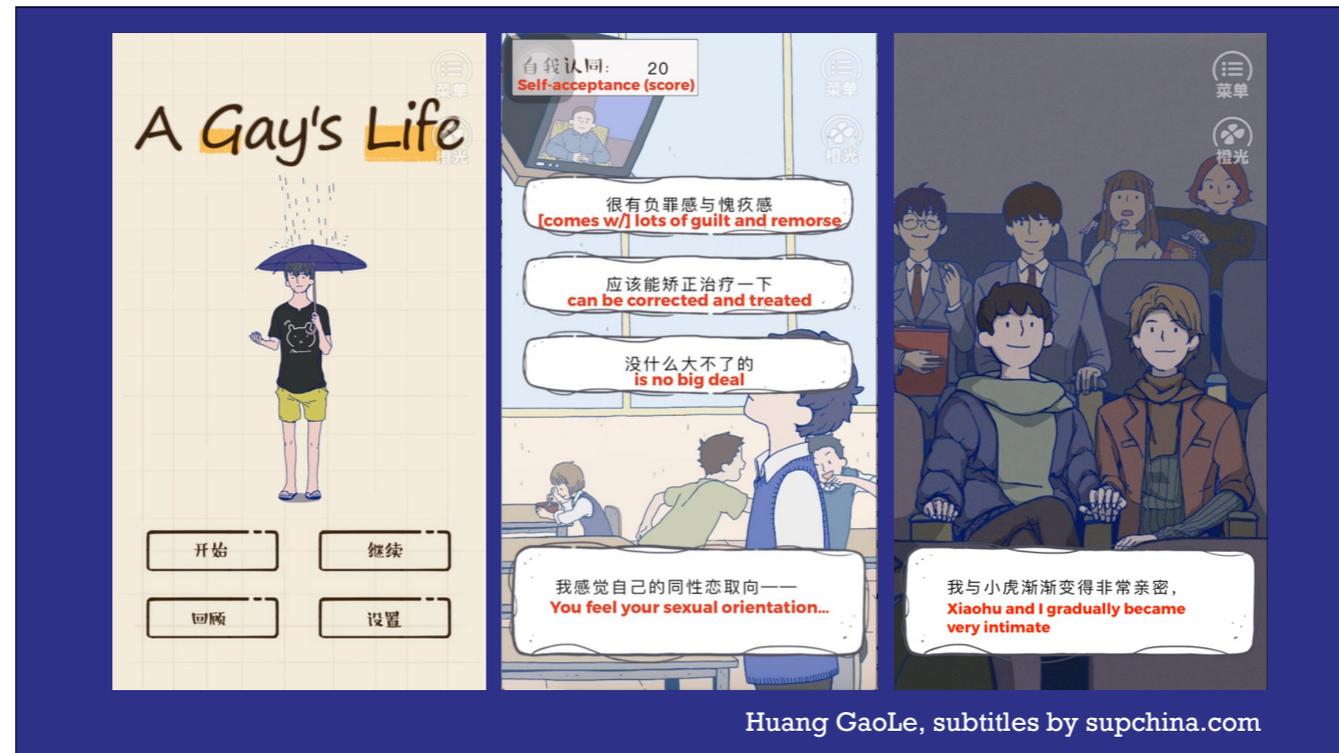
When we brought a demo of the game to PAX Australia, we realised that couples would want to play the game together, which isn't something we intended. We heard from at least one couple who broke up at least partially because of playing Florence together.

We heard from plenty of people who played Florence soon after a breakup. That sounds pretty painful to me, but we've heard that it helps the healing process.

Quite a few parents told us they shared the game with their children. I always thought of the game as a nostalgic look back at first love, I hadn't really thought about what effect it would have on people who haven't yet been in a romantic relationship.

Many people told us they played Florence on the plane or on public transport. They usually share this because they are telling us the game made them cry in public.

I couldn't help but notice that many of these stories of crying came from men. Maybe this is wishful thinking, but my takeaway from that is that many men are more than open to having emotional experiences in games, and sharing them.



But Florence has started to make an impact without people needing to attend to my workshop.

This is A Gay's Life, a free web game made by Huang GaoLe, a 27 year old developer from China.

A Gay's Life borrows heavily from Florence's art style and mechanics, but tells its own story - that of a man discovering his sexuality against the backdrop of Chinese family and social dynamics, based on Huang's own experiences.

Unlike Florence, it introduces the element of choice and makes heavy use of text. It's only available in Chinese, and has been played more 1.6 million times.

This is the greatest impact I could have hoped for - for someone with less privilege and resources than us, to be able to benefit from our work, and use it to tell their own story.

use these narrative techniques  
as much as you like

I don't feel particularly possessive over any of the techniques or insights I've discussed today.

If there's anything in Florence that you feel is useful for you in your work, please feel free to borrow, adapt, or steal it. Right now, games could use a wider variety of stories from a wider range of creators, and we couldn't be happier if Florence helps people achieve that.

thanks!

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