Andrzej Marczewski

**EVEN NINJA**

**MONKEYS LIKE TO PLAY**

**UNICORN EDITION**

Gamification, Game Thinking and Motivational Design

Gamified UK
I like a good story, and how I met Rainbow the Unicorn is a great one. Maybe one day, you will find out all about it. Until then, my master scrawled down some ideas on how to build stories and interactive narratives. Enjoy – or at least pretend to...
Whenever I speak to people in the circles within which I hang out, one of the things I keep hearing is story and narrative. “You have to tell your story”, “What is the narrative?”, what is the companies’ story”. To be honest, it drives me a little nuts, but that’s by the by. The fact is, these are important things to consider. That said, it got me thinking, is what is the difference between story and narrative?

Story seems to have quite a few definitions. According to the Oxford dictionary, it is:

1. an account of imaginary or real people and events told for entertainment
2. a report of an item of news in a newspaper, magazine, or broadcast
3. an account of past events in someone’s life or in the development of something
4. the commercial prospects or circumstances of a company

Whilst narrative is defined as:

1. a spoken or written account of connected events; a story.

So really, story and narrative are pretty much the same things! For me, the most important definition in the context of gamification is number 3 “an account of past events in someone’s life or in the development of something”. The way I see it, a that the story contains a start, a middle and an end. A narrative is more real time, it describes events as they are happening from the perspective of the person they are happening to. If you consider a game, the narrative would be the way events unfold as you play.
The story will include the backstory and the ongoing plot of the game. That being the case, the story could be the same for each player, whereas the narrative would potentially be unique to each one.

How does this relate to gamification? Well, on the one hand, you could say that everyone has a story, they have a history and they have things happening to them right now, their narratives. All of this goes influences who they are and who they may be in the future. In gamification, we are often looking at influencing or changing behaviour, knowing the story of each person can help inform us how best to engage with and motivate them.

You could look at it even more literally though and create a story and so a narrative for each user to engage with whilst they use your system. This could be especially useful during the on-boarding or scaffolding phases of a design. Take your users through a story, preferably one that changes based on the choices they make and how they wish to go through it. Give them what they need through completing parts of the story. Doing it this way, when done well, will have far more impact on them than giving them points for doing things. The sense of purpose that a story can give is very powerful – even if it is more a short story than an epic!

A picture may be worth a thousand words, but a good story is worth a thousand instruction manuals.
Narrative Atoms

Now that we know a bit more about what narratives are, I want to dive deeper into building narratives and stories, starting with the concept of Narrative atoms.

Narrative atoms are small units of narrative or story that can, within the context of the overall narrative, stand alone. That does not mean they need to be completely self-explanatory, just sit comfortably on their own.

Figure 1 Narrative Atoms

In a standard linear story, each atom would be placed sequentially, so their ability to stand alone is less important. However, in many games the narrative bends and twists and turns in a non-linear way.
For that to work, for a story to make sense as it jumps from A to C to G to B and back again, each section, each narrative atom must be able to hold its own without the need for every other atom to support it.

Take a scenario where a game has more than one option for what can be done after the first scene. Maybe you have a choice of going left or right.

After that, you have more choices and more, but all the while the narrative needs to keep making sense. More than that, it all needs to conclude and not leave the player (unintentionally) wondering what the hell has happened!

**Basic Narrative Structure**

At their most basic, stories have just three parts. A start, a middle and an end. In traditional media that is straightforward. There are many ideas out there on how to write stories, Joseph Campbell’s Hero’s Journey / Monomyth gets a lot of attention. I also rather like Kurt Vonnegut concept of Story Shapes.

For my purposes when designing simple stories in gamification scenarios I use two simple (and I do mean simple) variations of what I call the Soap Hero’s Journey.

The simplest version has four phases. The Calling, The Challenge, The Transformation and The Resolution. The second version adds The Twist after The Transformation. I’ll go into more detail later but suffice to say these are not much different from the simple concept of a story having a start a middle and an end!
Bonding Narrative Atoms

Back to narrative atoms. Each atom should have a start a middle and an end. This is how they can stand on their own if needed. As I say, in a linear story this is less important, however, if you are creating a branching narrative it is essential.

The first thing you need to know in a non-linear narrative is obvious, how it will begin. This sounds simple, but you could have multiple starting points for your game’s character or characters. After that, you will certainly have many parts to the middle, some the player will see, and some the player might not on the first play through. Finally, there may well be multiple places for the story to end.

As the player will be able to navigate through the story in multiple ways, you must know how each branch fits together and how each choice the player makes can affect the outcome of their story.

This is where considering narrative atoms can help. If each atom has its own start, middle and end it is easier to jump in and out of them at will. As you knit the story together, you can pass events from each atom onto the next one, ensuring that character and plot progression or alteration is kept consistent, without having to create vast quantities of alternative narrative to account for every choice.
An Example of Simple Narrative Atoms

Start

You are in the woods. Ahead of you, there is a fork in the road. You can go left or right. What do you want to do?

- **Go Left**
  - At the fork in the forest, you take the left turn. Ahead of you is a giant monster. It reminds you of ones you used to read about as a child. This is what you had prepared for and you know what you must do. As the beast charges at you, you remember that there is a weak spot on its back, just between its shoulders. All you must do is get your sword in there.

- **You win**
  - The fight with the monster will go down in history and the scar that it has left on your cheek will only add to the legend. You can get behind the beast, finding higher ground to attack the weak spot between its shoulders. Once you are sure it was dead, you take its giant teeth as a trophy and continue on the path towards home.
How to Use Narrative to Create Deeper Experiences

- **You lose**
  - The fight with the monster will go down in history, but sadly you will be but a footnote. You can get behind the beast, finding higher ground to attack the weak spot between its shoulders, you lunge just a moment too late and are caught by the beast. The last thing you hear is the snap of your neck.

- **Go Right**
  - At the fork in the forest, you take the right turn. The sun is shining, and the birds are singing in the trees. As you walk, you pick flowers from the path and collect them in your bag. After several hours of blissful and uneventful travel, you reach home.

**Home**

After your journey, you are elated to be home. Your family is waiting to see you, your children eager to see what you have bought them from your travels.

- **If you fought the beast**
  - The fight with the monster has taken its toll and your wife is concerned about your cheek, but before she can speak about it, you produce the monster’s teeth from your bag and proudly hand them to the children.
- **If you didn’t fight the beast**
  - You turn to your wife and offer her the flowers from your bag, now tied into a beautiful bouquet. For the children, you sit them down to tell them a wonderful story of a hero who must fight a monster in the forest.
  - With your children happy and your wife just pleased to have you home, you settle in by the fire and sleep peacefully.

---

![Figure 2 Boy Meets Monster, Boy Kills Monster](image)

Each section of the story can stand up on its own, given the context. Each atom explains itself and resolves itself whilst being able to bond with the next part.
Of course, this is very simple and most non-linear narratives will require each atom to have multiple bonding points, where the story can link to other atoms whilst still making sense, passing on critical information to change key parts of the next atom.

For instance, in our little story, if you fight the monster, you could choose to allow the player to then turn back and take the path where they can pick flowers. This would add an extra bond to the monster fight atom and allow the player to experience both parts of the potential endings – giving the wife flowers and the children the teeth.

**Figure 3 Boy Meets Monster, Boy Kills Monster Again**

The key is to make sure that each atom can be as self-sufficient in the narrative as possible and that you only must pass essential information to the next atom to make the story continue to be coherent.
Learning from Games: Her Story & Gone Home

*Her Story* is the fabulous creation of Sam Barlow. You take the role of investigator, reviewing police archive video footage of a British woman accused of murder. You can access the footage in any order you like, gleaning more clues and information with every video you watch. Sometimes the videos will not make sense until you find the video that came before it, others give you all you need in just a few seconds of footage. The joy is discovering how the story fits together, jumping back and forward through the timeline. New snippets of information give you new ideas on what to search in the archive, leading to many "Ahahaa" moments.

The second is a well-loved game, *Gone Home* from The Fullbright Company, which is a brilliant lesson in narrative design. Like Her Story, Gone Home tells the story in small atoms - fragments of what happened in the house you are exploring. Each scrap of paper, audio recording or newspaper clipping adds something to the story.

Both experiences, whilst seemingly disjointed, eventually build up a deep and fascinating narrative. Each atom may not seem to be relevant but may combine with another atom to unlock a key plot element or answer to a puzzle. In each case, you do not necessarily have to see everything to complete the game, but to gain full understanding, it does help! You also don't have to see everything in chronological order, but it can help.
The lesson is that using narrative atoms can help you create incredibly deep narrative experiences that don't have to follow any path, giving people an opportunity to discover the whole picture in their own unique way!

**Meaningful Choice**

*Heavy Rain.* That was the name of the game that first made me understand that meaningful choices could take a game to new levels of immersiveness.

If you have never heard of it, Heavy Rain was a PS3 exclusive in 2010 from game makers Quantic Dream. You played the roles of several people through a convoluted mystery. There was the father who had lost his son, the private eye, the reporter and the FBI agent all linked to the mysterious Origami Killer. As the story unfolded, you had to decide how each character acted, how they handled conversations and what choices they made.

What made this so special was that choices all had consequences. Make the wrong one, and a character could die. Your choices dictated what parts of the story you saw and how it ended. Every decision was critical to how your game played out. In fact, in an interview David Cage, the director of the game, said that he wanted people to only ever play the game once. That way their experience would be unique. When they discussed it with others, they would then find out there were whole sections of the game that they had never seen – so each person’s playthrough would be unique to them.
More recently games like Walking Dead and The Wolf Among Us from TellTale Games have taken this approach to choices within their games. Each choice you make feels like there is weight behind it, they feel like they have consequences.

My experience is that people like to feel their choices have meaning, they also like to feel that they have choices in the first place. When you look at my User Types or the RAMP framework, Autonomy is one of the key motivators – especially for the Free Spirit type. That does not mean they are the only ones who are motivated by some level of autonomy. If we feel that we have no freedom to move, to choose and be in control of our own destiny – we feel constrained and disengaged from the experience.

When creating your gamified or game-based solution you should try to build meaningful choices in. The ideal is that choices change the outcomes of the experience, but even if they just feel as though they have meaning that can be enough.

If you have a game-like solution, allow users to choose their own way to play the game. Let them solve problems in multiple ways. In narratives, allow them to choose how to answer questions or where they go next in the narrative (that’s why I love choose your own adventure style narratives!). In pure gamification, allow users to choose what they do next. If it is a learning experience, let them make their own decisions about what they learn next.
If that level of freedom is not possible, then you should, at least, make it *feel* like there are choices and that they affect outcomes. The trick there is to make sure they can’t go back and repeat their actions – thus discovering their original choice did not affect the outcome after all. I have seen this in a lot of games. It feels like you are making decisions that change how the game will play, but then on replays, it turns out that the game would always funnel you down to the same conclusion no matter how you played!

**Narrative Choice Architecture in Gamification**

Combining the concepts of narrative atoms and meaningful choice, we begin to explore narrative choice architecture, where each choice makes a real difference or at least appears to. Here I discuss a few different approaches.

When you sit down with a book, you start at the start and then read every page until you get to the end (unless it is a choose your own adventure...). The only choice the reader gets is whether to start the book and read it all the way through or not.

![Figure 4 Simple Architecture](image)

Games allow you to do more than that for the player. Games allow you to give the player much higher levels of autonomy or agency.
For a sandbox game, like Minecraft, this is quite simple – the player has total freedom as there is no actual end game. There are still choices to be made, but they are not driven by story. How big will my house be, do I dig for gold, do I make a roller coaster? Rather than designing a choice architecture, you just give the player the tools to support them.

However, games with some form of narrative can be made much more interesting by allowing some level of agency beyond the simple “start at the start and end at the end” idea.

**Fake Choice Architecture**

One option that you see is to give players “fake” options or choices. They get the choice to turn left or right at a junction, but really both paths will eventually lead to the same ending. They may experience different events taking the left rather than the right, but the end goal is the same, as we discussed in our *Boy Meets Monster* example earlier.

![Figure 5 Simple Fake Choice](image-url)
This sort of architecture works well in games that are only designed to be played once or where the gameplay is more important than the narrative. An example that comes to mind is that of older first-person shooters. You could choose where to go on some maps or what your path was, but you always ended up in the same place. However, the choice had weight and meaning as it altered the tactics you would use each time you ran through the level.

There is nothing wrong with this sort of architecture if you can make the choices feel that they are meaningful and have significance to the game. You can also get very complex, with multiple twists and turns before you come to the inevitable conclusion.
A game that makes good use of this would be Tell Tale’s Walking Dead. Every choice you make alters the way the game will play. Who will live, who will die, how people react to you. However, the conclusion is always just about the same. You may have fewer people left and there may be some strained relationships, but the end of the game is the same each time.

**Real Choice Architecture**

The alternative to the fake choice architecture is real choice architecture. Here the player's actions have real significance to how the game will play. A simple example would be the player back at the junction in boy meets monster. They can go left or right. Either choice in this architecture gives a totally different outcome for the player. The choice they make has real meaning to the rest of the game.

![Figure 7 Simple Real Choice](image)

The significance can be less obvious than that of course. If you think about RPG games and how you can interact with non-playable characters (NPCs).
Very often the choices you make in your dialog will determine how the NPC will react to you not just in that conversation, but later in the game. A simple choice to be aggressive could turn a whole faction against you, altering the whole balance of the game. Suddenly seemingly simple interaction become deeply meaningful to the game.

Figure 8 Complex Real Choice

Heavy Rain was a great example of this more complex choice architecture. There were many endings that could only be seen if you made specific sets of choices along the way.

**Choice Architecture and Gamification**

In gamification, it appears the choice architecture is straightforward. You need users to perform certain tasks, for which there will be some sort of reward. However, it doesn’t need to be that simple. You can design the user journey so that they can make choices along the way.
The outcome is likely going to need to be the same for each user, but if it is a gamified system, the likelihood is they will only experience it once anyway! Add things in that are just for fun, but like a video game side mission, are totally optional.

Create simple narratives and stories that are affected by certain decisions but make them have some effect on the outcome. I remember taking a “gamified” course. At the start, you chose your team and along the way you had the option to collect certain items. It seemed great, until the end – at which point it turned out that none of the choices you made had any influence on the outcome at all. All it had to do was unlock a simple message or change the last image, but no – nothing. I have no idea what the course was teaching, all I remember is the outrage I felt at being tricked into doing more than was essential because it felt like my choices may have some importance!

“Choices do not need to lead to alternative endings, just alternative experiences.”
The Soap Hero’s Journey

Now that we have an idea of how to construct the individual moments of the narrative, we need to have some idea of how it will all come together in a real story. I mentioned the simple narrative model I often use, the soap hero’s journey. I use this because it is easy to remember and is also the core of most short storytelling arcs – such as soap operas.

Figure 9 The Soap Hero’s Journey
**Introduction**

- **The Call**
  - The event that triggers the characters to start the journey
  - Plot
- **The Challenge**
  - Conflicts, difficulties, tasks that the characters must overcome.
- **The Transformation**
  - The change that happens to the characters as they learn to overcome the obstacles
- **The Twist (optional)**
  - Often before the full resolution, there is a twist that forces the hero to practice their new skills or re-evaluate something they have learned during the transformation.
- **The Resolution**
  - How all the characters finally overcome or rationalise the challenges.
  - Uses all their new knowledge.

This is nice and simple and works well with the concept of narrative atoms, keeping each atom of the story simple. This is how soaps like EastEnders do it, keeping each episode a short, self-contained story, whilst still having character progression and plot progression that can feed into the next episode. That way, those who have not seen the soap before can pick it up easily, whilst those that have been watching for years can enjoy it at a deeper level.
Below is a silly example of an EastEnders plot put into the Soap Hero’s Journey.

- **The Call**
  - Cat Moon has run away, but Alfie doesn’t know why.
  - He must find her.

- **The Challenge**
  - First, he must find out where she has gone.
  - Then he must find her.
  - He must find out why she left.
  - Finally, he must bring her home.

- **The Transformation**
  - He finds out from her friend that she ran away to Spain because he was too controlling.
  - Realises he must change how he feels about her past and grow up about it.

- **The Twist**
  - Gets to Spain and discovers it was all a lie, she was still in Walford!

- **The Resolution / Redemption**
  - Finds Cat.
  - Apologises to her and tells her he loves her.
  - Convinces her he has changed.
  - Brings her home and discovers she is pregnant.
  - Duff Duffs...

As you can see from the ending there, this narrative atom can neatly bond onto the next episode!
Combining the concepts of Narrative Atoms and a simple story structure like the Soap Hero’s Journey, you can build strong narratives that can bend and twist to your heart's content. Just keep on top of character and plot development between atoms, and you will be fine!

**Keeping It Real in Fantasy Worlds**

Whilst we are on the subject of narrative, it makes sense to think a little more about the workings of fantasy worlds. Richard Bartle once raised an interesting point about certain fantasy-based shows and games after watching *Game of Thrones*. His complaint was that even in fantasy worlds, there need to be rules and those rules need to be stuck to.

Anything that is not explained by the new rules of the fantasy world should then default to the rules of the real world. One example he gave was that of Sam in *Game of Thrones*. Despite a very active lifestyle in GoT, he doesn’t lose as much weight as you might expect if it were the real world, and there is no explanation for why that may be.

You can understand and accept the existence of magic and dragons, because the narrative introduces them early on – so they are established as part of the rules of the world. However, lack of weight loss in Sam’s instance seems to be very unlikely as no rules have been introduced that would explain how weight loss works differently in the world of Westeros.
It is like standing at a pedestrian crossing and upon pressing the button, all the cars turn in to cabbages.

There is no reason for this to happen, no explanation in the rules of our world that would lead you to believe that this could happen, so it would stand out to you as being a bit odd!

This brings me to play and gamification.

As I have introduced earlier, play has fluid *meta-rules*. However, the big “no no” in play, especially amongst children, is introducing a new rule that is unexpected or does not make sense within the context of the current game.

Playing “Rock, Paper, Scissors” and choosing a bazooka is a sure-fire way to get tears from a young child! That is not to say that you can’t play like that. My kids play “Rock, Paper, Anything” and you get some truly odd arguments over whether Harry Potter could beat a space tank…. However, this is fine, because they set the expectation that anything goes at the start – not half way through.
World Building in Gamification

In gamification, we don’t spend enough time considering the worlds we create because we don’t see them as worlds in that sense. Often, they are just pictures and narratives that link content together. We forget that the narrative alone creates a world for the user to engage with and that world needs to be consistent and have rules just like any other virtual or fantasy world does!

The first few screens set the expectation for the rest of the experience. If you start with all singing all dancing graphics, the user will expect those throughout. If the narrative talks about being a mild-mannered account in an office much like the player’s own, they won’t be expecting a magical warlock to suddenly appear. That is not to say that you can’t do that, but the rest of the narrative needs to explain it and reset the expectations of the player.

The Unintended Consequences of Minor Details!

When creating a gamified solution, spend time thinking about the rules of any worlds you are creating. If you are creating a theme, what would the expected rules be? If you have a medieval them, your players would not expect or accept aeroplanes being in the narrative. If the players are trapped in a building, they would not expect there to be a well in the middle of the 5th floor.
You need to be consistent and mindful of the expectations you set early on and how they will affect the player’s experience. The best case is that unexplainable events will seem odd, the worst is that it will break them out of any immersive state you have managed to induce!

Don’t waste all that effort by tripping yourself up on the unintended consequences of seemingly minor details!

There is a great a trope of storytelling linked to minor details called Chekov’s Gun.

Anton Chekov, a Russian playwright, stated that if an element of the story is not necessary, remove it. He said;

“One must never place a loaded rifle on the stage if it isn't going to go off. It's wrong to make promises you don't mean to keep.”

Keep it simple people!