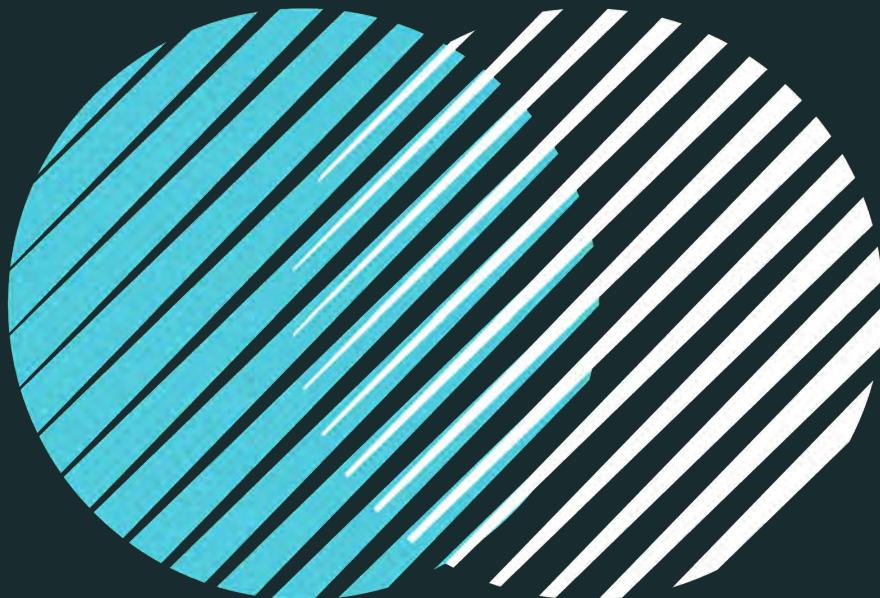


Gamification in Storytelling

Gamification strategies to engage
your audience



Dominique Wu

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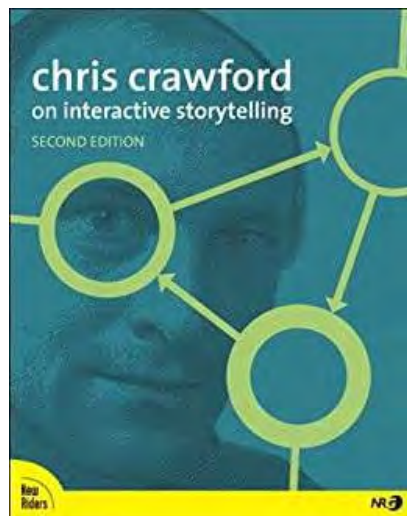
TABLE OF CONTENTS

Level 1: Interactive Storytelling	6
Level 2: A Theory of Fun for Game Design	16
Level 3: The History of Gamification	18

LEVEL 1

Interactive Storytelling

Recently I finished reading Chris Crawford's book Chris Crawford On Interactive Storytelling and found Crawford's explanation on how to emphasize storytelling really compelling.



Chris Crawford, Chris Crawford On Interactive Storytelling, 2013

Storytelling is important when it comes to relaying cultural information. Its language, culture, and the story itself are formulated together to build a linear sequence of events. Emphasizing that linear sequence is highly crucial to storytelling because readers (or listeners) aren't capable of fully understanding a story without a step by step sequence to gain the scope of its entire content.

Why are people so attracted to storytelling? I like how Crawford mentioned that humans "are the social animals that later developed complicated languages to explain our environment and things that happened in our life."

Our minds have 2 mechanisms of thinking:

<p>1. Pattern-based thinking</p>	<p>When environmental data is received and entered into short-term memory. This method causes automatic activation of the specific content of long-term memory, allowing someone to react to his or her environment and make decisions quickly.</p> <p>Pattern-based thinking is more short and instantaneous.</p>
<p>2. Sequential thinking.</p>	<p>Based on time, order, and hierarchy. A person's mind predicts the next sequence of events, especially when they see clues.</p> <p>Sequential thinking is when, for example, you notice a lion's footprints with sounds of roaring around you. Trapped in the forest, your brain would signal that a lion is nearby. You may develop a higher urgency to run if you see a shadow of an animal, thinking it may be the lion. As a result, fear of being eaten by the lion causes you to react.</p>

Crawford mentioned that “language is sequential in structure,” meaning that a word is a sequence of sounds, a sentence is a sequence of words, and a book is a sequence of sentences.

Crawford's 4 Storytelling Must-Haves

1. Protagonist
2. Conflict
3. Struggle
4. Resolution

Crawford's 7 Elements For A Good Story

1. People

Stories highlight narratives about people, not objects. That's what makes them so engaging and relatable. Even if a story refers to humans in an indirect, or symbolic, way. I think it's safe to assume that we all have heard of Disney's “Winnie-the-Pooh,” where the main character is Pooh Bear or Pooh for short. We are all aware that it's clearly not human. But despite it being a fictional character, children grow fond of Pooh because of its human-likeness where Pooh evokes various emotions.

2. Conflict

Crawford noted that “stories are about conflict, most commonly social conflict. Violent conflict is for simple stories.” Social and violent conflicts are different. While we can generally say that all conflict generates from a story, certain conflicts provide a better, more engaging context. Social conflicts carry on from the beginning to the end of a story. However, violent conflicts are only highlighted as a cameo scene within a story sequence. It only works as a part of the story’s resolution.

3. Puzzles

If your story lies within the Mystery genre, then puzzles can play a large role to help make it better. You can utilize puzzles by approaching this element with strong character interactions. Again with our first element in highlighting people, emphasizing interactions between characters is at the heart of great storytelling. Instead of focusing on the logical, or scientific facts, the greatest stories provide challenges personal or social in nature.

4. Choices

Storylines can be heightened when the protagonist needs to make a big decision in a dire situation. The sequence of a story can become even more interesting from a single key choice that the protagonist makes. Smaller choices, on the other hand, are building the characters in the story. The iconic sci-fi action film, *The Matrix*, is the perfect example if you remember Neo’s key decision to sacrifice himself. That one choice makes a compelling story.

5. Spectacle

This element isn’t particularly necessary, but it’s one of those “nice-to-haves.” A “spectacle” is referred to when people’s eyes are refreshed. This is when someone feels like they gained a new outlook or experience. For example,

the films Star Wars, Jurassic Park, and The Matrix brought new visual effects to the world and became iconic symbols in Hollywood history.

6. Spatial Thinking

We need to think about spatial when we create characters inside the story. For instance, two characters won't fight if they are not close together. Stories take place on stages, not maps.

7. Interactivity

Crawford defines "interactivity" like,

"A cyclic process between two or more active agents in which each agent alternately listens, thinks, and speaks – a conversation of sorts."

In the interactive game world, players want to call the shots themselves. Decision-making is important to them. There are some games where players can become the hero within the game if they make good decisions throughout the whole game. And vice versa. If players choose to make bad decisions, they end up being the enemy of the kingdom.

In games, all the decisions add up towards the end-game. A player's free-will may be just a facade since they are still within the guidance and control of a well-designed game. When the player wants to get familiar with the game world, the best way is to search for specific "gossips" (referencing the popular board game Clues) around him. For example, if the player saw blood on the floor, other players, or game avatars, nearby might provide clues like, "I heard some noise yesterday". Another gossip could go like, "Someone came out from the door last night. He seemed in a hurry and ignored me when I greeted him." By interacting like this, the player could begin

conducting the whole story and gain a better understanding of the situation, its culture, and the other characters around him.

“The greatest obstacle to the advancement of interactive storytelling is the difficulty of verb thinking.”

— Chris Crawford

After reading the quote above, I wondered, “how can verbs be useful to good storytelling?” And found that having a clear approach to verbiage is actually really important to storytelling as well.

Verb Thinking

Above all, try to think about what “things” do, and not what they are. In verb thinking, you can create a lively story using verb/action thinking — describing things in their verb term rather than the things itself.

For example:

(Noun → Verb)

- Goods → Services
- Particles → Waves
- Assets → Operations
- Data → Processing

When we play games, we perform more actions as opposed to other activities like reading books. Using verbs initiates the players to be more motivated to be ready to continue moving. This psychological approach is what Crawford emphasizes to utilize in storytelling. Verb-thinking opens the floor for players to become more motivated.

1. Constipated Stories

When a storyline is fixed and the player has to level up by following the game's guide to reaching the final ending. A lot of good games have only one storyline and require the players to level up to reach the end.

2. Multiple Endings

Endings are dependent on what choices the player makes in the game. The video game "Heavy Rain" is a good example of multiple endings.

3. Branching Trees

Several events may or may not happen depending on the player's choices. An example will be "The Banner Saga" – a role-playing game that features an interactive story that changes depending on players' decisions.

4. Open-ended stories

These are non-linear stories, meaning that their endings are open worlds or a sandbox. A good example will be Red Dead Redemption.

5. Fully player-driven stories

Players can look around the game without finishing a certain mission or follow a certain storyline. A great example is "The Sims".

Crawford's 5-Factor Model On Building Character Personalities:

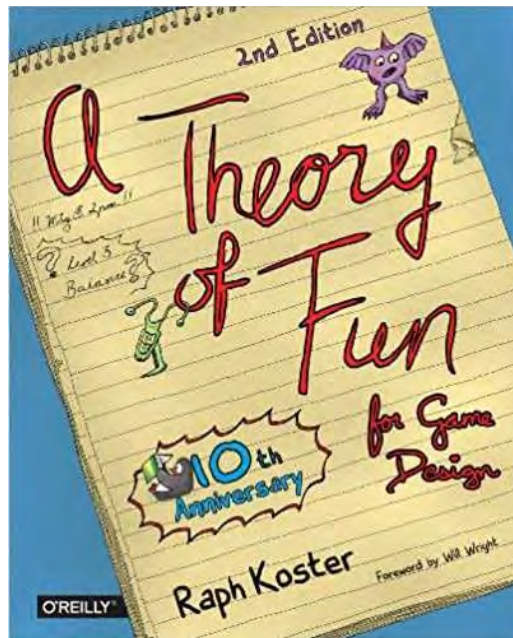
1. **Open:** Curious and Creative
2. **Conscientious:** Organized, Disciplined, Dependable
3. **Extraverted:** Gregarious and Sociable
4. **Agreeable:** Sympathetic, Cooperative, Helpful
5. **Neurotic:** Emotionally unstable, Anxious, Poor impulse control.

In overview, Crawford incorporates a lot of creative ways to point out different methods of creating interactive storytellings: pattern-based thinking, sequential thinking, key must-haves to storytelling, and his most popular character personalities. I found that by implementing these helpful tips will benefit any story we are trying to develop for an audience. Even starting from a simple change in words like focusing on “the verb” to tell a story. It will make the interactive story dynamic and fun.

LEVEL 2

A Theory of Fun for Game Design

Highly acclaimed as the Creative Director behind the Star Wars Galaxies, Raphael “Raph” Koster is a professional in the game market and is widely recognized as a world-class game designer and speaker. Raph’s book, *A Theory of Fun for Game Design*, is a classic that is implemented in game design programs at universities worldwide.



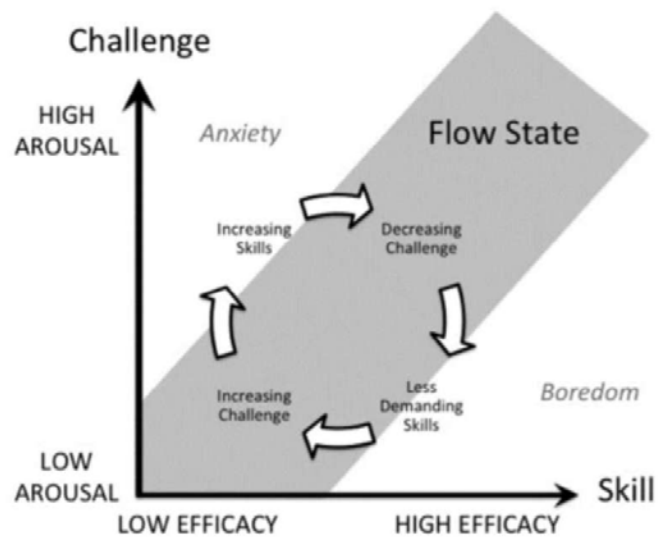
Koster, Raph. *A Theory of Fun for Game Design*. O'Reilly Media, 2014.

I was intrigued by this novel’s friendly tone as I learned more about the psychological approach to designing games. This article will highlight the main points of Raph’s book, so I hope you enjoy this short and sweet read.

Introducing Raph’s Three Definitions of Fun:

1. *Fun* is all about our brains feeling good – the release of endorphins into our system.
2. *Fun* is just another word for learning. Our brain is seeking new data to refresh the experience. If a game can keep updating data while maintaining the existing experience pattern our brain will be satisfied and we will feel *fun*.
3. *Fun* is the act of mastering a problem mentally.

The “Flow State” often occurs when players are in the mode of having fun, meaning that the game isn’t too hard or too easy. Players strive for the flow state because the easy games can appear dull and hard games can cause players to build anxiety due to their difficulty. Both extremes will trigger players to feel they are unable to continue the game.



Koster, Raph. [A Theory of Fun for Game Design](#). OReilly Media, 2014

I believe our society today is growing to accept that games can be used as an effective educational tool. For those still in speculation whether this is true or not, I'd like to open a discussion. What exactly do games teach us then? Coming from someone who is a player herself, I find that games help me survive by becoming a problem solver in the real world more so than my

previous self before I played games. At a more high-level example, Olympic games encourage us to embrace competition, such as running even just 0.01 seconds faster, aiming at an archery target with keen focus, and taking any necessary precautions to avoid danger. Similar to what our ancestors (i.e. cavemen) have done to protect themselves, like hunting animals for food, we also strive to do what we can to solve our own problems by identifying how we can overcome our limitations.

Games help simplify the overall process and quantify the result. A classic example is chess games where they are most commonly referred to represent military strategies. Chess is considered an abstract way to display strategy with no physical dangers involved, eliminating the unnecessary violence that often occurs in combat.

Early video games have 3 basic paradigms that were notably mentioned in A Theory of Fun for Game Design:

3 Basic Paradigms of Games	Game Example
1. "Get to the other side" games	Donkey Kong requires the player to fight and/or avoid all the obstacles to go to the other side in order to win the game.
2. "Visit every location" games	Pac-Man encourages players to visit every location inside the mini-game by eating dotted trails and avoiding ghosts from spreading in every location within the game.
3. "Time limits" games	Super Mario places a time limit to help players focus on the main mission to reach the final goal instead of trying to explore the game world.

Game designers usually become inspired by existing game concepts and add their own flair with new elements to work on their own game concepts. Raph states that a key difference between game and reality is that "a game is highly abstract by an element's unnecessary tasks."

Games quantify and systemize our life, create a pattern and skill sets for players to learn and grow.

Lastly, here are 5 examples of elements for successful games:

1. Preparation	This includes tutorials for players to practice, or weaken the enemy for players to get the odds to win. Even reveal some weak points of an enemy so the player can be better prepared.
2. Spatial Game World Design	A game is on the stage. It has 3D space around different buildings, landscapes, and characters that are involved in the game.
3. Game Mechanic that Brings Fun	A solid game mechanic that keeps players playing the game repeatedly is crucial to a successful game.
4. Challenges with Instant Feedback	People usually compare game and learning through a series of challenges with instant feedback to help the player/learner to get better results.
5. Learn New Abilities after Each Challenge	By mastering solving the problems, players get new abilities which allow them to tackle different problems.

I personally like this quote in the book:

The challenge game designers face is, "How do we create games that do not have one right answer?"

In the end, a good game usually teaches us to be open-minded and empathize with each other. In games, there are plenty of different combinations, paths, and interactions being made. Each person playing the same game will come out of it with slightly different, personal experiences. Ultimately, games prove that there is always a way to solve the current situation. And it doesn't have to be completely boring or unreachable. Games teach us to look at what we currently have with a fresh perspective. For example, some detective games and escape room games do require us to use tools in creative ways. By coming

up with various methods, games can arouse creativity for new solutions to our real life. Without actually losing the player's life or any physical property loss, playing games can let us seek patterns and experiment with different possibilities to solve puzzles.

LEVEL 3

The History of Gamification

Before modern industrialization was established, businesses experimented with many ways to market and ignite customer loyalty. Decades later, companies are still searching for the best method to produce better results for their brands by re-establishing behaviors in purchasing, user engagement, and gamification.

The term “gamification” is the implementation of both game-design and its principles in circumstances outside of games. Gamification is utilized to stir human’s native desires to socialize, learn, master, compete, achieve, express, raise status, and more. It is the best way to improve user engagement, organizational productivity, flow, learning, crowdsourcing, exercise, rehabilitation, etc...

For the first time, gamification was widely accepted in 2010 when the word was referred to as applying social and reward elements into the software.

Now how in the world did gamification become so popular? What is the history behind it?

Gamification Timeline

1824 – Kriegspiel

Kriegsspiel represents a wargame genre that was developed by the 19th-century Prussian army. It displayed powerful battlefield tactics to its officers, or players, playing the game.



Source: [Image of a S&H Stamp](#)

1896 – S&H Green Stamps

S&H Stamps was a trading stamps brand that grew popular in the United States from the early 1930s to the late 1980s. Founders Sperry & Hutchinson first partnered with U.S. retailers in 1896. Their biggest retailers were supermarkets, gasoline filling stations, and stores. Their stamps needed to be first issued in denominations of 1, 10, and 50 points, and then perforated with a gummed reverse. With the stamps collected, shoppers can moisten the reserve and mount them in collectors' books provided by S&H at no extra cost. Each collector's book had 24 pages where one page required 50 points to fill, which totaled to 1,200 points for the entire book. Once filled, these books were used as exchanges for premium goods like houseware from the Green Stamps store. All premium goods had specific values that reflect their worth by the number of completed stamp books. Easily, these books became a marketing selling point for retailers to reward loyal customers.



Source: [Image of a S&H Stamp](#)

1908 – The Boy and Girl Scout movement

The largest scouting organization and one of the largest youth organizations in the United States are Boys Scouts for America and Girl Scouts of the United States America. The Boy Scouts have about 2.3 million youth participants and about one million adult volunteers, whereas the Girl Scouts also have about 2.5 million young female members and 750 adult volunteers. Being a scout has proven to be highly beneficial in terms of teaching children about morals, honor, and survival. Scouts could earn badges for becoming skillful in certain activities.

Source: [Image of a Boy Scout](#)

1973 – The Game of Work

Known as the Grandfather of Gamification, Charles Coonradt shared his experience and thoughts on gamification with a book called The Game of Work. Interestingly, many Fortune 500 companies praise Charles' The Game of Work, noting that it is an enjoyable read and their businesses saw noticeable increases in productivity. He showed them how to gamify workplaces by defining goals, tracking scores, and providing consistent feedback.

[Buy on Amazon](#)

1978 – The Birth of Social Video Games

MUD1 – MUD (Multi-User Dungeon) is recognized as the very first virtual world game to have existed. It was designed by creators Roy Trubshaw and Richard Bartle at the University of Essex in England. Roy and Richard sparked a fire into the social online gaming world of what can be possible. And although the game's interface doesn't look quite impressive to current society, the combined game elements of interactive fiction, role-playing, and dial-up access to a shared computer have inspired many popular multiplayer games today.



Source: [wiki image](#)

```
Telnet british-legends.com
Initialised.
Multi-User Dungeon - MUD1 Version 3E(19)

      You are invited to check out Section 9,
      our discussion forum for MUD players.

      Please direct your browser to:
      http://www.british-legends.com/Forums/S9.htm

*****

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* MUD2.COM is where you'll find the next generation *
* version of MUD1/British Legends. Another creation *
* of Richard Bartle, MUD2 offers many extras, *
* including smart mobiles, new areas, and more. *
* Best of all, it's free. Why not try it today? *
*****

Origin of version: Fri Jan 19 22:26:12 2018
Welcome! By what name shall I call you?
*
```

Source: [Wiki](#)

1981 — The world's first frequent flier program- AAdvantage

AAdvantage is the frequent-flyer program of American Airlines. It allows members to accumulate miles in order to redeem tickets, upgrade service class, or obtain free or discounted car rentals, hotel stays, and merchandise.



Source: [Image](#)

1983 Holiday Inn

Hotel chain Holiday Inn launches their first loyalty program campaign.

1990 Gaming becomes Popular

A new generation of gamers begin to rise as the annual surveys show that 30% of households own an NES (Nintendo Entertainment System).

1999 The Power of Fun gets Recognized

Society gradually understands how powerful the concept of 'fun' is even in non-gaming contexts. Professor of Psychology at University of Glasgow Stephen W. Draper releases his study on why user enjoyment needs to be a major requirement in software design.

2002 Coining Gamification

British-born computer programmer and Father of Gamification, Nick Pelling (born 1964) coins the term 'Gamification' to help us define the

2005 The first modern Gamification platform is created

Also known as one of the first gamification pioneers, Rajat Paharia created Bunchball, a platform designed to boost engagement on websites by adding a layer of game mechanics. It would be another 3 years before they adopt the term 'gamification'.

2007 Gamification at home

Web developer and game designer Kevan Davis launched Chore Wars. Its purpose is to incentivize the act of doing chores by transforming the boring nature into a game. With a fantasy role-playing approach, Chore Wars gains approval amongst all age groups.

2009 Gamification in Learning

Schools in the U.S.A. begin to accept students, starting with a 6th class, into a game-based learning environment.

2009 Gamification in Apps

The app Foursquare was launched, allowing users to search and discover new places. It started with being more of a social platform with strong examples of gamification like awarding users with badges and other achievements.

2010 Coining Gamify

Nathan Lands coins the term 'Gamify', drawing towards a more active way of describing gamification mechanics into non-game situations.

2010 Gamification in User Engagement

DevHub builds a points system to their website, resulting in an increase in their user engagement by 70%.

2010 Business Booms in Gamification

Company Gamification Co. holds their first Gamification Summit in San Francisco, CA.

2012 Rising Interest in Gamification

Nearly 45,000 students enroll in Professor Kevin Werbach's online gamification course on the online learning platform called Coursera.

2012 Gamification takes the World

Analysts at Gartner.com predicted 70% of global organizations will have at least 1 gamified application by 2014.

2013 Gamification Goes Above Expectations

61% of surveyed CEOs and other senior executives say they take daily game breaks at work.

2014 Slowballing Customer Satisfaction

9/10 companies reported that their gamification efforts are successful.

2016 Gamification Valued

Gamification surveyed to be a profitable \$2.8 billion industry.

2018 Gamification Continues to Grow

Gamification's market value continues to increase at a value of \$5.5 billion.

Through history, we know that gamification started with "war simulation" ideas to marketing "loyalty programs." Embracing game mechanics into non-game settings were proven to be useful and productive. It inspires and

motivates people to do something that doesn't look appealing to do it.

Gamification (if done right) can improve productivity, increase motivation, encourage creativity, strengthen communication processes, favor employee engagement, introduce innovative dynamics, develop specific skills, and elevate a better corporate image.

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