Co-creation as a Creative Strategy in the Pre-production of an Animation Film in a Twitch Community

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Abstract. This paper exposes the development process, through co-creation strategies, of the pre-production of an animated film, featuring Twitch.tv, a video live streaming service, as the medium platform. Widespread accessibility to new technologies facilitates communication and sharing of ideas in different areas. The Twitch.tv platform allows the display of any artwork and promotes an easier communication between users in real time and through a set of options, for example, a chat box which enables the sharing of new ideas and experiences among members of a community. Exploring this potential, in order to stimulate greater creativity and find innovative results, we propose the development of an animated film through co-creation methods as a way to find innovative processes for an animation project. A twitch channel was created and some of its users self-proposed to cooperate in the author's animation project. This experience established connections with individuals from different areas, like different fields of arts. The method was based on the dialogue between the author and the users, who expressed themselves through the author's channel chat on Twitch. The ideas launched were subsequently voted on and selected by the majority of participants, which led to pre-production final results.

Keywords: Co-creation, Twitch, Animation, Pre-production.

Introduction

Since 2018, many individuals have started using Twitch.tv to stream art and broadcast their own artistic process online, because Twitch opened new categories for streamers including Arts, according to Robertson [1]. This platform became very popular among artists due to its immersive connection with the viewers [2] and also the fact that artists could work and earn financial support while streaming. This platform allows individuals to broadcast their work environments. This enables creators to easily share creative and personal experiences in contrast to common working environments, mainly due to the ease of communication, discoverability to people of shared interests, and accessibility to online users from all over the world [3] (p.6).

Therefore, we intend to analyze how a community on Twitch can influence the flow of ideas to generate new concepts for a pre-production of an animation. The author started streaming her art regularly on Twitch before the introduction of this project to broadcast personal work, such as drawings and painting. This previous experience stimulated the interest to engage more with her viewers. The project started during the author's master's degree course where it proposed the co-creation of a pre-production for an animated film based on a narrative previously written by the author. The channel allowed for exploration of collaborative creative ideas and the origination of new ones.

The article starts by addressing the notion of co-creation and a short explanation of this definition. After that, research was done on how online communities can be influential, where we explain the similarities and differences of their procedural method in comparison to our own work. We then reference a brief explanation of Twitch and, finally, we explain and demonstrate our methods of development of the pre-production.

Brief Collaborative Processes Used in the Development of the Projects: Brief Introduction

As an artist in this generation, the pursuit for adaptation on social networks has accompanied us throughout our academic life. Since its creation, Twitch has been one of the most used platforms that allowed it's authors the ability to produce work while live broadcasting to other users online. The author, having gained a regular audience on Twitch, saw there was a collaborative aspect to live streaming, and an opportunity to engage her viewers in various co-creation processes.

This platform provides the possibility of real-time streaming, which means it allows for the ability of an individual to broadcast a live video feed of themselves and their personal artwork, while communicating with viewers live, through comments and messages via a public chat box. Social networks, such as Twitch, enable greater sociability among various individuals from all over the world, which allows for the development of real time collaborative artistic work.

In terms of procedural development, we started by studying "Design Thinking" processes, where the concept of co-creation was found. The term co-creation is separated by the prefix "co-" which "expresses the notion of company" and implies collaboration. The term "creation", being "the action of giving existence or making appear out of nothing, the act or effect of creating. (...) Creative is the process of designing, making, organizing something new, unknown, innovative (as a work, invention, production) (...)" [4].

In this definition, co-creation's prefix is associated with the concept of collaboration, but as Rill and Hamalainenit argue it can also have the designation of collectivity [5] (p.22). Co-creation is not just about working collaboratively, it also involves more communication, coordination and consensus [5] (p.23). In other words, co-creation involves multiple types of interactions from the involved parties and each interaction offers value to the process, as explained by Ramaswamy and Ozcan [6] (p. 280).

These interactions are all possible on Twitch and support the intention of the project. That is, to understand how through the Twitch platform, which provides methods of collective communication, we would be able to develop mechanisms to obtain greater coordination and consensus among all those involved.

It is important to emphasize that the user-suggested ideas are influenced by certain biases: not only by the knowledge and experience of each specific participant, but also by the streamer's personal tastes and considerations, as well as the capabilities and limitations of the artist.

The Case of Derpy Hooves and Sonic

From the animated series "My Little Pony", *Derpy Hooves* was a polarizing character, while it was adored by many fans, many others criticized certain aspects. The exaggerated characterization of *Derpy Hooves*' eyes (Fig. 1), voice and actions caught the attention of fans who quickly started discussions on various online platforms. For many fans, the character represented an offense to individuals with mental disabilities. The controversies that arose from these online discussions persuaded the creators of "My Little Pony" to change and reintroduce the character with less exaggerated characteristics.

These radical changes were appreciated by some fans and scorned by others. Yet, this is a vivid example of the public directly influencing the evolution of a character in the media. As mentioned by Meyers, "Derpy is a very clear illustration of the power of collective creativity. Derpy was not created by any one individual or even by a small creative team; she is the product of the collective creative capacity of the fan community. This sort of collective creativity is a new phenomenon that the internet has allowed for" [7] (p. 33).



Fig. 1 Derpy Hooves' illustration.

Most recently, another example of the discontent of fans toward the characterization of aesthetics of "Sonic The Hedgehog" (2020) in his first trailer for the 3D feature film. As shown by Whitten, many fans were critical of the first trailer that was launched online. Through Twitter posts and Youtube videos, the fans mocked and also redesigned the character which prompted the company to improve the looks of this iconic character [8].

Both examples show how powerful comments and criticism can influence creators, in ways that the audience seems to be valued by their opinions and action through social media. The amount of different social intersections, experiences and values that online media provides can be shared over the internet and build infinite new variances in generating ideas. Fan groups on the internet can be very diverse, as Jenkins et al defend "(...) with values and assumptions that fragment along axes of class, age, gender, race, sexuality, and nationality, to name just a few" [9] (p. 54).

In our point of view, the growth of the character *Derpy Hooves* has gained merit and popularity through ways in which My Little Pony's producers integrated the community driven proposals that arose via online forums. Also the character Sonic was improved due to online debates and inputs. Fans could now feel a sense of ownership through their thoughts and actions. However, it can also lead to discontent from the creators, where they feel almost obligated to implement the public demands. They can also be beneficial because companies can also take into account different points of view that can be crucial to the final products.

With those ideas in mind, the examples of the character "Derpy Hooves" and "Sonic" had already been developed by the show creators before the public added their inputs. What we sought for this article was to create new ideas for characters based on new ideas and see how they develop through real-time inputs from crowd-sourced input. As we go further, even a new story was created with the help of inputs from chatters on Twitch, thumbnails, concepts and storyboard.

The formula for developing our own project was focused on the volatility of chat discussions in a Twitch community. The varying experiences of the chatters provides the ability to bring together diverse communities and initiate new and exciting connections. Koster argues that a strategy of greater creativity implies changing contexts, people, groups, cultures, subcultures, among others, that is, taking a simple idea out of context and changing its process "(...) is actually your biggest tool for creativity" [10] (17"31').

In the next chapter, we will analyze how this platform helped in these demands as an instrument for creative exploration.

Strategy and Method used on Twitch to Develop a Pre-production Animated Film

Every channel on Twitch has the same user experience. While watching a channel's stream, a viewer will see a video window in the middle of the browser. The video broadcast can be completely customized by the streamer. On the right side of the browser, there is a chatting window which allows for the sending and viewing of messages in chat. Everyone that creates an account on Twitch can chat in other user's streams and broadcast their own streams. The streamer can interact directly with the chatting users in real time by responding to their chat messages with a microphone and a video feed of themselves.

Next, we are going to explore the collaborative processes that were chosen and some examples of the results of these processes.

First step - How it started

Due to the fact that there was a story already written by the author, the project started by developing ideas for characters to fit this narrative.

There was a need to make it official and easily available to everyone that entered the channel, therefore there was a video on Youtube that explained the whole project and how the individuals could participate. This announcement encouraged the chatters to help in creating the ideas and details for the characters. Each day during the week, the streamer would stream for 4 hours dedicated to working on the project. Therefore, every single idea from the chatters would be saved for the author to start developing those ideas during streams.

As previously stated, chat was the most important tool. With that in mind, we started by saving some suggestions in Google Forms that people could access through chat. The chat had integrated commands that allowed the followers to read the instructions about the project and make all links easily accessible for them to enter the Google Forms.

One example of a process that was used to generate ideas that was submitted on Google Forms is creative prompts. In order to stimulate the users to write more information about the characters that they imagined, Google Forms' documents had writing prompts, such as: "1. Please tell us your name and if you want your name/nick to appear in the animation"; "2. Do you have some ideas for me to start working on?", and "3. Write down some names of artists to reference that might help to make your idea come true". The example of the first idea submitted to Google Forms answered these questions, respectively, "1. Anonymous"; "2. Flower face" and "3. Flower Face from Balbyshev".

During the streams, the streamer would lead brainstorming sessions which included digitally sketching illustrations for the agreed-upon ideas. These ideas would evolve and take shape over each stream which reflects the dynamic nature of the co-creation process when engaging online communities.

Continuing from the "Flower Face" example, while the streamer was developing a draft of a face, she asked the chatters for examples of flowers that they wanted to see in this character's representation. Initially, several joined and mentioned some of the flowers they liked the most and, as a result, it was decided to start the first sketch with those ideas altogether, as seen in Fig. 3, which was heavily influenced by the painting that was suggested previously.



Fig. 2 Flower Face., 2017, Balbyshev, O, Oils in canvas, 35X25 cm.



Fig. 3 First sketch created based on the inputs from chat.

The suggestions continued to develop, and we built three complementary sketches. The following inspirations involved the incorporation of a carnivorous plant, where we replaced the lips with a carnivorous plant, as seen in Fig. 4, which influenced Fig. 5. During discussions in the chat, chatters described the largest carnivorous plant in the world, Nepenthes Rajah Vines, which served as the motto for the third drawing. But, as opposed to Fig. 4, in Fig. 5 only the texture and not the shape of it was incorporated.

After the changes on the lips, it was decided to test other features on the rest of the head, like the nose and hair. Since the lips in the second and third image looked like they came from a horror movie, a chatter proposed recreating the nails from the iconic figure from "Hellraiser" (1987). Likewise came the proposal for the nose, based on the shape of the character *Lord Voldemort*, from the "Harry Potter" movies.

Finally, one more flower reference was added that had been taken directly from Fig. 3. This time, a chatter proposed to place one of the flowers from the first sketch in the upper part of the head, which resulted in Fig. 6.



Fig. 4 Second sketch.



Fig. 5 Third sketch.



Altogether, there were eleven proposals that were submitted. One of them was not addressed because it was a non-serious comment with no valuable content and one of the proposals was merged to another one because they had the same type of ideas and were published by the same chatter. In Fig. 2 are the results of every sketch developed based on those inputs published on Google Forms.

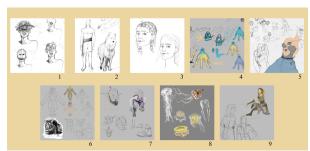


Fig. 7 Sketches arranged chronologically.

Next, the results of the illustrations were published on Google Forms and Instagram where individuals could vote on their most favorite sketches, of which, the most voted ones were selected. The winning sketches were number 1, 4 and 8 on Fig. 7. Coincidentally, those three sketches had exactly the same number of votes as we can see in Fig. 8.



Fig. 8 Final countdown (the sketches that won had exactly 18 votes each).

After the votes took place, the final designs for the characters were finally approved and designed by the streamer. The streamer would then lead a discussion and there were multiple chatters expressing their ideas for the details of the characters. They would brainstorm with each other and with the streamer on the best ideas for the project. The streamer would record, moderate, and ultimately decide on the merit of these ideas.

Second step - Strategy for creating Character Design and Concepts

During the strategy phase, the chatters started to create new backgrounds and stories for the winning characters. In co-creation processes, it is important to look at the various ways of how the chatters give inputs and how they can be beneficial to the work itself. With that in mind, even though we already had a story, the interest of the chatters changed the course of the project and led to a creation of a new and more exciting story. Due to the interest developed by the community, ideas started to flow that were more relatable to the characteristics of the characters.

With only the three winning sketches in mind, the next step was to develop a story. However, this was a very difficult step to conquer because this implies that the chatters have knowledge about the story in order to give better feedback. The inconsistencies of the chatter's knowledge led to many disconnected ideas. This is one reason why the new story was developed and also why it became more interesting.

The second phase started by getting more details of the characters. All of the decisions were done only by brainstorming and voting, so there was no story or background to sustain those choices, and we developed the first line up that is shown on Fig. 9.



Fig. 9 First Line Up of the three winning characters.

Next, we decided to study the creative process of Satoshi Kon. During the development of the movie Paprika (2006), Kon states that usually he starts with some sketches and illustrations and the story will grow around them and it is constantly in mutation during every phase of the pre-production of an animation film [11] (0m38).

The method seemed to follow our needs. Influenced by his work, we proceed to create definite backgrounds for each character, solely based on their appearance. The website "37 Questions to ask your character" [12] allowed us to create a lot of interesting traits of the three characters.

Out of all those questions, there was a particular one that helped us to start developing the story, "What is your earliest memory?" Due to this particular project, this question was interpreted differently; the answer to this question would be more related to the memories right before all the characters met each other and how they met. This question was essential to create a meeting point for all of them, which led to developing a few ideas for thumbnails of their meeting point. Fig. 10 are two of the final thumbnails chosen to represent this moment. The one on the left shows a flower at the top of a cliff with the Jellyfish looking up at the flower. The one on the right shows the flower getting attacked by the alien.



Fig. 10 First Line Up of the three winning characters.

This moment was important to start developing proposals for the environment, which led to the development of trees, a lighthouse, and some simplified concepts for underwater.

All that was left was to develop a story to explain what happened previously, during, and after those two thumbnails on Fig. 10.

In a very simple way, what those thumbnails show is, first, that the Jellyfish is very far away from the flower at the top of the cliff. Second, the flower does not have its entire body yet and, third, the alien is attacking the flower. Even though these frames are simple, all of those scenarios would have to be explained in the story with nuance.

We start by asking questions about this scene and what could cause it. One of the questions was "Why would an underwater animal ever want to meet a character that is outside of water, and especially one that shows no communication or emotional response?". This meant that we would have to study the background to make a genuine, yet strange interaction occur.

We started addressing this question with the help of some props. The props helped to give a more complete background to the Jellyfish (Fig. 11). For example, to make it look older, we implemented a cane that would help it move around under the ocean. The second one was a pocket watch that symbolized that it was going through an emotional romantic crisis. The emotional romantic crisis would help to explain why this character to to look for strange connections outside of the ocean. The third prop was a piñata which is the Jellyfish's home under the ocean, which helps to represent a very eccentric character.



Fig. 11 Jellyfish's mood board.

After the development of those props, those thumbnails, and questions would influence us to start developing more thumbnails of more scenes. We began to illustrate the storyboard that followed the story of the Jellyfish.

The story starts with a Jellyfish that is lonely and feels empty and sad which causes him to drop the pocket watch. Then the Jellyfish meets a very lonely flower at the top of a cliff, which he feels like he shares a connection with. A chatter wanted to add more information on this particular scene which was to create a series of events starting with the Jellyfish throwing away his pocket watch and ending with the pocket watch opening when it hits the sea floor, at the same moment when the Jellyfish rises above the ocean and encounters the flower, like it shows on Fig. 12 an example of that moment.



Fig. 12 Moment on the storyboard where the Jellyfish meets the flower at the same that that it is reveal what's inside of the pocket watch

This was an example of how the flow of creative ideas happened in the chat during the online stream. The rest of the story continued with the same process where one idea in chat would lead to more questions that would have to be answered in order to make some sense of the flow of the story. This serendipitous style of writing the story allowed for many creative ideas to emerge through collaboration.

Final step - Character design

Like we have mentioned before, the development of the story and characters were in constant change. Throughout the whole project we continuously added and removed details to the story and characters to ensure consistency was maintained.

After finalizing the story, we finally recreated the final line up for the characters, which showed more of their feelings and traits as we can see on Fig. 13.



Fig. 13 Moment on the storyboard where the Jellyfish meets the flower at the same that that it is reveal what's inside of the pocket watch.

After all that, we also closed the mood board for all the characters. Previously, we already referenced the Jellyfish where we explain how the character grow during this process, and to finish it, it's going to be shown the mood board of the other two characters and a brief explanation of their own narrative or personalities.

Flower face (Fig. 14) is a character that starts by being friendly but eventually shifts to becoming meaner. In the lineup on Fig. 13 for example, the petals of the flower are rounder, but in contrast the mood board has a few moments where they also look pointy. The meanness of the character was stylized by triangular shapes. Even though some of the silhouettes are very similar, she is a character that can morph her body easily. The humanoid shape was influenced by her previous memories where she had some contact with humans that visited the island where she lived. In order to simplify the complexity of the sketches developed right in the first phase, during the streams we decided to simplify the character and make the flower her whole head instead and reduce the complexity of the petals. The dirt around her is part of the ground where she used to live and now, she carries it everywhere.



Fig. 14 Jellyfish's mood board.

Contrary to Flower Face, Blue Alien did not go through a lot of changes and continue to have similar shapes until the end of the project. However, it was also one of the most difficult ones to integrate in the story. At the end, we decided that it was a parasite that fell from space and had previously possessed the corpse of an astronaut. Therefore, we decided to design illustrations for the astronaut, such as its face and its hand. Because the Alien was a parasite, we decided that the alien took the hand of the astronaut with it to be able to move around more effectively on earth.



Fig. 15 Jellyfish's mood board.

Conclusion

In our point of view, this project showed us how important it is to look at the various ways of how the chatters give inputs and how they can influence and be beneficial to the creator's work. In many cases, even though it is a co-creation work, the process needed a mentor that would take responsibility to integrate the ideas into actual final illustrations or processes. For example, the only reason why we decided to change methods and write a brand-new story was only because chatters were creating new points of view and ideas connected to the characters. It was obvious that the story previously written by the author didn't quite integrate those characters and the chatters influenced this change, which the author adopted as the new story, even though they didn't express this directly.

This project also showed us how an idea can grow to become something bigger than the original input. In the beginning, as we could see from the example of Flower face, the submission was not very informative or a complete idea, but as soon as the real-time inputs started, the concepts began to become more interesting. The ideas changed due to public opinion, individual experiences, and personal preferences. This not only added value to the process, but also the chatters felt included in the project, even self-proclaimed "non artistic" people. We also believe that this project promoted uncommon encounters, including individuals with different backgrounds and levels of interest, that is why the project was so exciting and difficult to predict.

However, it is important to address that, in comparison to the examples of *Derpy Hooves* and *Sonic*, the sample size of chatters is not as big. This allowed the author to be more attentive to the inputs given and better understand chat's point of view. This also meant that less points of view were expressed, making it a much less public collab than those two examples. The intimate relationship between the author and the chatters allowed for more long-form discussions. This can be a beneficial thing or a negative thing because the ideas become very personal, which leads to the issue of inclusivity because it is difficult to make everyone feel integrated.

However, we agree with Catmull, president of Pixar, when he argues the importance of relying more on people rather than ideas [13] (p. 52). Some of the chatters showed us some related projects that were also based on crowd sourced ideas. The connections that arise from the communication in chat stems from the volatility that the platform allows. During brainstorm conversations, every time that a new idea came in chat, another chatter would engage and add to that idea, in opposition to when the author asked the chatters to write an idea on Google Forms. As we can see later on in the project, the Google Forms method was never used again because the engagement between the chatters brought better and more interesting connections.

To conclude, the presented work is only a part of a bigger project that includes other work processes, where we reference, more concisely, the ways in which the story was created. This can be accessed online [?].

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