Tampere University of Applied Sciences

2D Animation vs. Visual Novels

Mediums in Comparison

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Degree Programme in Media and Arts
Interactive Media

ABSTRACT

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The purpose of this thesis was to analyze the creation process of both visual novels and 2D animation, as well as to evaluate where their strong and weak points lie when it comes to telling stories. While the two are distinctly different mediums, they are both audiovisual forms of entertainment and storytelling, and that underlying connection is what inspired the idea for this thesis. A practical project was made to aid in the comparison process, which was then used as the base for interviews to see how different people felt about the experience.

While there are many advanced aspects of animation and visual novels that were not explored in this thesis, those interested in learning the basics of what goes into creating a project in either medium can use this thesis as a springboard. This thesis also includes a brief overview of digital 2D animation and some history surrounding visual novels.

The results of this thesis indicate that while there are certain factors that make it more logical to choose one medium over the other for a project, the enjoyment of a story depends on personal preference. Animations tend to be more visually captivating than visual novels but are also generally more costly and laborious to create. Because of this, visual novels are usually the better choice for long-form projects where an immersive story takes priority over flashy graphics.

Key words: animation, 2D animation, visual novel, storytelling

CONTENTS

GLOSSARY

animatic	rough version of an animation made by sequencing storyboard panels into a video format
CG	computer graphics; in visual novels, a unique illustration depicting a significant event in the story
GUI	graphical user interface; interactive visual elements for computer software such as buttons and menus
kinetic novel	a subgenre of visual novel where the plot is completely linear
layout	in animation, the process of refining rough background art in the storyboards to fit the perspective, character action and camera movement of the final shot
minigame	a short, simple game contained within a video game, whose gameplay mechanics differ from the main game
protagonist	the leading character in a story
rig	a digital armature built for and used to animate a character or object
score	original music specifically composed for a film
storyboard	a sequence of rough drawings to visualize the composition, framing and transitions in a film
thumbnail	small, rough drawing made for quickly visualizing a concept
tweening	the process of creating the images in-between keyframes
VN	visual novel; a type of narrative-driven video game

1 INTRODUCTION

Animation and visual novels (Picture 1) are both viable options when choosing a medium for storytelling. While video games in general focus more on gameplay elements than story and characters, visual novels are one exception to the rule. Despite being quite a niche genre of games outside Japan, they are an excellent choice for telling stories. Comparing visual novels to e.g. reading prose seems logical and has been done before. However, after a personal endeavour to retell the story of an animation in VN format, a comparison between these two mediums felt like an interesting concept to explore further in a thesis.

The two mediums in question are different, but they are also intertwined in many ways, which is evident from the number of visual novels to receive an anime adaptation. This pre-existing relationship inspired the author to investigate further how each medium works and what types of projects they fit best. Understanding the basics of different phases in a production is useful for anyone interested in pursuing these fields professionally, as it eases communication between different departments. Even for those with only a casual interest in the topics, learning more about them creates a deeper understanding and appreciation.

PICTURE 1. Screenshots from the cult classic visual novel Clannad (left) and its anime adaptation (right). (Key 2004 & Kyoto Animation Co., Ltd 2007)

The objective of this thesis was to break down the production stages of animations and visual novels and compare them to find their strengths and weaknesses. To do that, the creative process and history behind each medium were

researched to better understand the context around them. While the 3D animation pipeline has many similarities to the process of creating 2D animation, this thesis primarily focuses on the latter, as visual novels tend to have primarily two-dimensional graphics as well.

To further research how the two mediums compare, a practical project was made. It involved writing a script with two versions: one for an animation and one for a short visual novel. These scripts would then be used to produce the same story in two different mediums. To see how successful the project was, qualitative research methods were used. These included user testing and interviews to hear what thoughts and feelings each version of the story provoked in the participants. This thesis documents how any arising problems were solved and what the result of the project was.

2 OVERVIEW

2.1 A brief overview of digital 2D animation

The first attempt to create digital animation emulating the traditional hand-drawn style was a 1970 short called The Apteryx and the Easter Bunny (Kitching 1971), seen in Picture 2. Unlike the primarily abstract computer animations that came before, it features two characters with voice acting and personality.

PICTURE 2. Screenshot from The Apteryx and the Easter Bunny (Computer Image Corporation 1970)

The characters were first drawn on paper, sectioned into all the parts that would be moving (Picture 3). The character drawings would be scanned by a special camera, the signal from which was then fed into a computer called CAESAR for assembly and animation. While limited, this technique drastically reduced the number of drawings required. The same computer and technique were later utilized in the Navajo Coyote Tales project, which was made in collaboration with San Juan School District. (Computer Image Corporation & San Juan School District 1970s.)

PICTURE 3. Skunk character drawn on paper, with movable parts drawn separately (Computer Image Corporation & San Juan School District 1970s)

An important factor in the rise of digital animation was a program colloquially known as Flash, which started gaining popularity in the mid-to-late 1990s. Initially called FutureSplash Animator, the software would be the steppingstone to animation for many young artists, with websites like Newgrounds empowering them to share their animations to the world. The program is now known as Adobe Animate and remains the tool of choice for many digital animators, even though nowadays the range of available programs is much more comprehensive.

There are multiple different framerates for animated media depending on the project and country. Most TV animation uses either 25 or 30 frames per second, whereas in film the standard is 24fps. In 2D animation, not every single frame is a unique drawing except in short, action-heavy scenes or other special cases where the emphasis is on fast motions. A typical western animation is animated "on twos", meaning every drawing is held for two frames. The same principles followed in traditional animation apply when working digitally, such as timing, staging and solid drawing skills. Two distinct 2D styles similar to their traditional counterparts can be seen in digital work: paperless animation and digital cut-out (Toon Boom Learn n.d.).

Paperless animation is the closest to animating traditionally on paper. Every frame of animation is drawn manually, only on a graphics tablet instead of pencil on paper. There are two common techniques associated with this style of animation, digital or not: the straight-ahead and pose-to-pose methods.

With the straight-ahead technique, the animator starts from the first frame and keeps drawing frames after that until the end of the sequence. It is difficult to keep track of proportions and structure with this method but it is useful for more abstract animation and fluid subjects, such as water or smoke. When working pose-to-pose, the animator first draws the key poses, which are the most significant points in the action. Breakdown drawings are added later to refine the action, and in-between drawings to fill out and smooth the animation. This method is more predictable and structured, and it is easier to keep characters on model. However, it requires more planning than the straight-ahead approach, which can make it can feel somewhat less organic. (Toon Boom Learn n.d.).

Digital cutout animation is similar to stop motion made with models cut out from paper. Every moving part of the character is drawn separately on its own layer and rigged together to create a digital puppet, or character rig. This technique reuses a lot of assets and thus saves time compared to drawing each frame manually. (Toon Boom Learn n.d.). Rigs can be a simple hierarchy of body parts, or a complex network of bones and deform effects depending on the style and purpose of the animation, and how advanced the rigging tools are (Picture 4). Armature-based rigging shares many of the same principles in 2D as in 3D.
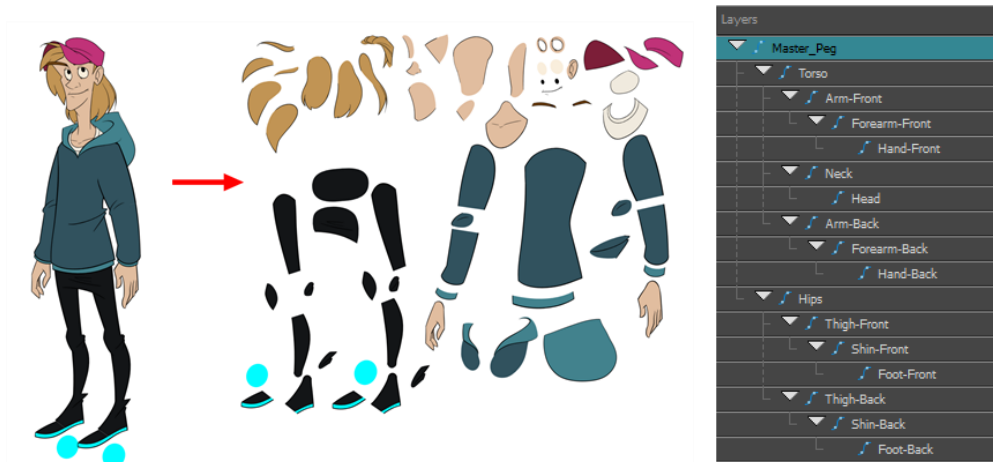
PICTURE 4. Example breakdown of the parts used to build a cut-out character rig (left) and a simple hierarchy of body parts (right). (Toon Boom Learn n.d.)

A concept often associated with digital cut-out animation is tweening, which is short for inbetweening. Traditionally, the term refers to creating in-between frames in general, but in the digital space it is often used to refer to automatic in-between generation (Kench 2022a). For instance, instead of drawing every frame of an arm waving back and forth, in digital animation the position, rotation and scale of the original arm drawing can be animated with tweens.

Due to its vast storytelling capabilities and versatile techniques, animation is a widely used medium. Besides TV and film, animation is also utilized in marketing and other advertisements, education, presentations, and video games.

Due to the rapidly evolving artificial intelligence scene, the way animation is made and used may look different in the future. While human creativity will most likely never be replaced by machines, AI assisted animation does not seem like a far-fetched concept. Certain parts of the process can already be streamlined with the help of AI, such as quickly generating rough concept art (Stone 2023). As most of the currently available AI datasets are based on unethically sourced materials, many artists are concerned about recent developments and advocate for more ethical AI usage. One such group of artists is the Concept Art Association, who at the time of writing are running a fundraiser to promote new legislation protecting human artists (Concept Art Association 2022).

2.2   History of the visual novel

While there exists a diverse selection of visual novels nowadays, the genre has its roots in eroge, a portmanteau of erotic game. While there is no set definition for the mechanics of these games, they all include explicit erotic or sexual material in some form. Despite being very different from the now-typical gameplay style of visual novels, the 1982 title Lolita: Yakyūken, developed by PSK is considered to be one of the earliest VNs. The goal of Lolita is to win enough rounds of Yakyūken – a strip game similar to rock-paper-scissors – to undress the girl in the game one piece of clothing at a time. (Choi 2019.)

Another genre closely associated with visual novels is the dating simulator, which generally prioritizes building and maintaining statistics with the end goal of romancing one of the available love interests, with less emphasis on the story. While dating sims are technically classified as a genre of their own, the definitions fluctuate, and they are often bundled together with visual novels due to the similar presentations. One example of a very VN-like dating sim which was popular in both Japan and the West is Hatoful Boyfriend, in which the human protagonist enrolls in a prestigious pigeon-only academy (Picture 5). What makes the game quite unique and adds a touch of comedy is that all the love interests are birds.

PICTURE 5. Screenshot of the 2014 HD remake of Hatoful Boyfriend. (PigeoNation Inc. 2011 & Mediatonic 2014)

The gameplay now associated with visual novels evolved from the puzzle-oriented adventure game genre that gained popularity in Japan during the 1980s (Giant Bomb 2022). The title sometimes attributed to being the first visual novel-style adventure game is The Portopia Serial Murder Case, seen in Picture 6. Released in Japan in 1983 by Enix, the game follows two detectives trying to solve a murder case. Portopia featured many innovative mechanics, such as nonlinear gameplay, an open world, alternate endings and a dialogue tree (Stone 2015).
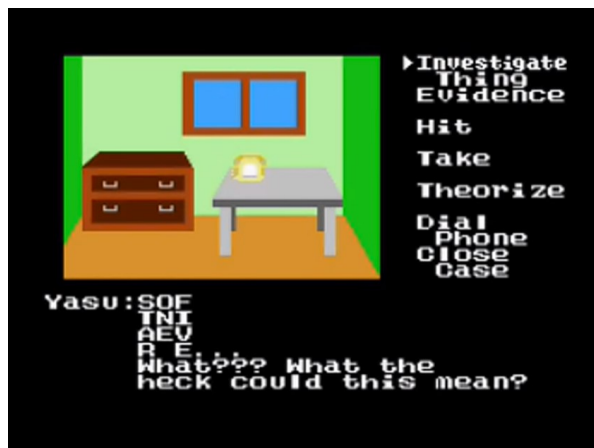
PICTURE 6. Screenshot of The Portopia Serial Murder Case with unofficial English translation by DvD Translations. (Enix 1983 & DvD Translations 2010)

Interactive stories were not invented by visual novels, however. Interactive fiction games can be traced back to the 1976 text adventure title Colossal Cave Adventure, also known as Adventure or ADVENT. Using simple text commands, the player makes choices and solves puzzles while exploring a mysterious cave in search of treasure. (IFWiki n.d.) The first Choose Your Own Adventure book also dates to 1979, preceding visual novels as a genre.

Unlike many other video game genres, visual novels tell stories primarily through text. The visuals often include static background images with character sprites laid on top. Animated cutscenes and puzzles or other game elements sometimes make an appearance as well. (Stegner 2021.) Although this definition fits many visual novels on the market, the main element is the emphasis on character development and story progression, regardless of the visual style or individual elements. While the elements of choice and branching storylines are often present, a more linear subcategory exists, typically called a kinetic visual novel. These games omit player input in favor of one pre-determined linear story.

As a genre, the visual novel is more widespread in Japan compared to Europe and the US. On the other hand, western fans often use the title visual novel as an umbrella term for various niche Japanese genres. Games otherwise considered adventure games are sometimes classified as visual novels in the West because of shared elements like an "anime" art style and heavy use of text boxes and character portraits to tell the story. (Giant Bomb 2022.)

Most visual novels are made in Japan and many of them are never localized into other languages, thus making them less accessible for international audiences. The genre also has many PC-exclusive releases, which excludes console-only gamers from playing said games. In addition, misconceptions surrounding adult-oriented visual novels may lead those less familiar with the genre to believe all the games are erotic in nature, causing them to avoid visual novels entirely. However, in recent years, the accessibility of creating visual novels has increased with the release of software such as Ren'Py, Visual Novel Maker and TyranoBuilder. Western developers, both studios and independent creators, have started to create and publish their own games, consequently introducing the genre to more players.

2.3   Interactive vs. non-interactive storytelling

Both interactive and non-interactive entertainment depend on storytelling to immerse audiences, but there are differences in how each medium tackles it. Playing a video game makes the consumer an active participant in the story, whereas with non-interactive media such as film, the events unfold in the same exact way for everyone (Backer 2011; Bycer 2013). Depending on the game, the player may even choose for the story to halt for an indefinite amount of time by e.g. focusing on side missions instead of the main quest.

Storytelling in animation is almost always linear because the cost of implementing interactivity in the story, for example in the form of branching storylines, is very high. With visual novels the storytelling can go either way; while most of said games incorporate a choice system which allows the player to interact with the story, kinetic visual novels skip that in favor of a linear storyline.

Visual novels also share similarities with other, non-interactive forms of storytelling popular in Japan, such as manga or light novels. All three rely heavily on text and visuals to tell stories and have been the inspiration to numerous anime adaptations. However, manga and light novels are not interactive like the majority of VNs, and being a digital medium grants visual novels the advantage to utilize sound to help with immersion.

A genre of storytelling referred to as interactive movies in the film industry, or cinematic games in the video game industry, falls somewhere between typical films and video games. One of the earliest examples was the 1983 arcade game Dragon's Lair (Picture 7), a collaborative effort between inventor Rick Dyer, animator Don Bluth and arcade game developer Cinematronics. Dragon's Lair utilized laserdisc technology to play an interactive animated short film, in which the player would have to press the correct button to keep the protagonist alive and advance to the next scene. (Williams 2017.) Many companies developed similar games following the success of Dragon's Lair, but the fad waned because of the high production costs and rise of home consoles in the 1990s (Fahs 2015).

PICTURE 7. Screenshot of the HD release of Dragon's Lair (Cinematronics 1983-2018)

3 PRE-PRODUCTION

3.1 Story, structure and characters

The creative process starts with an idea. One way to further develop an idea is the elevator pitch, which is a one-sentence outline of the setting, characters, conflicts, and themes (Two and a Half Studios 2020). Another important factor to consider is the scope, as it will affect the structure of the project. A project with a runtime of an hour has the potential to tell a much grander story than a single five-minute short film.

When structuring the plot, story beats are a useful tool to mark shifts in the tone and move the story forward. They are used to organize important moments in a story into an order which creates the most emotional impact. (Blazer 2019.) Although not very common nowadays, beats are sometimes written into screenplays as "BEAT" or "a beat".

The established story beats can then be used to divide the story into a three-act structure which includes a beginning meaning act one, middle or act two and end, act three. Act one focuses on setting up the characters and conflict, and in the second act the characters work towards overcoming the problem. The climax of the story is reached in the third and final act, at the end of which the story will close with a satisfying resolution. (Blazer 2019.)

As animations and kinetic visual novels have a linear narrative, the writing process is quite straightforward. When a visual novel has a nonlinear story, though, the most common structure to use is a branching narrative (Picture 8). In it, the player is faced with choices that branch the story in different directions, leading to more choices. This structure can branch into many different endings; a style called fully branching narrative. The issue with this structure is the increasing complexity with each added choice. (Nelson 2015.)

The choices can also fold in on themselves and eventually lead to the same ending. This is known as a foldback structure, also seen in Picture 8. The drawback

of this structure is that the player may feel cheated upon realizing their actions had no real effect on the story in the end. Involving variables related to the world state makes for a more complex version of the foldback structure, in which certain choices do affect later scenes. These variables could for example define whether a character lives or dies earlier in the story. (Nelson 2015.) Regardless of the structure used, writing a visual novel with branching paths takes a lot more time and effort than writing a linear story, especially if the VN is to have hours' worth of playtime and good replay value. The decision trees can get very complex in a long VN, which can make it difficult to keep track of previous variables.
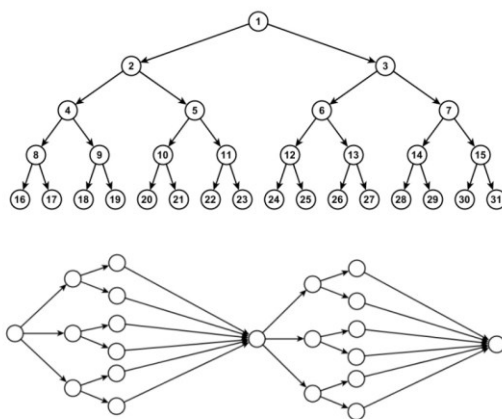

PICTURE 8. Branching and foldback structures. (Nelson 2015)

When writing a protagonist for a visual novel, a common option is a blank canvas the player can immerse themselves in. The protagonist can either have a character model, or they might never be seen. These types of games often offer the option of choosing a name and preferred pronouns for the protagonist. While rarer, sometimes the protagonist's appearance is customizable, such as in Dream Daddy: A Dad Dating Simulator, seen in Picture 9. The objective of this style of protagonist is less about making the player feel empathy for a character, and more about immersion in the story (Noyle 2006). As such, it is most often accompanied by a first-person point of view. Another option is writing a pre-established main character with a personality and agency who the player can root for, even if no customization options exist. This type of story can be in either first or third person, although visual novels written in third person are not as common. This latter style of protagonist is generally the only type seen in animation.
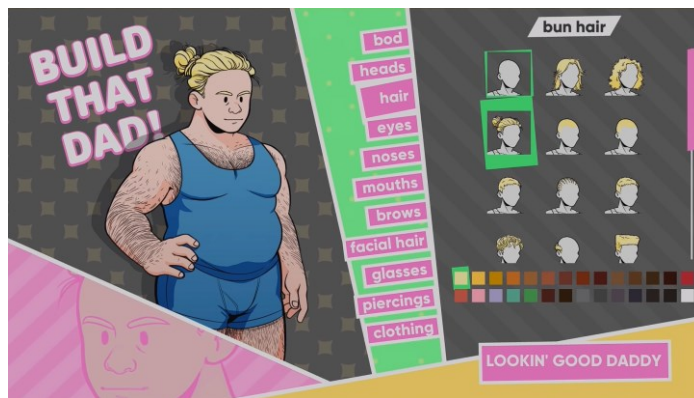
PICTURE 9. Character customization menu from Dream Daddy. (Dream Daddy: A Dad Dating Simulator 2017)

While most of the script is hidden from the viewer in an animation, the player of a visual novel can read much of it on-screen in the form of narration and character dialogue (Picture 10). This difference places more emphasis on immersive writing in a visual novel script compared to one for an animation. As most of the narrative in a visual novel is handled by on-screen text as opposed to animated visuals or gameplay mechanics, the importance of a good story is highlighted. It can be difficult to find a balance between too much and not enough description though, considering a part of the visual descriptions of characters and settings is still handled by the graphics themselves.
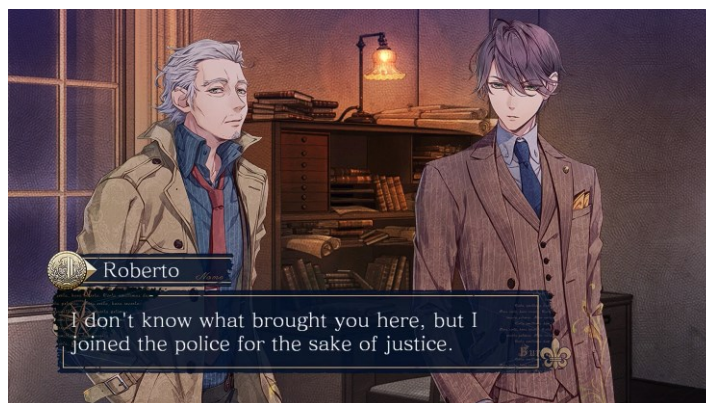
PICTURE 10. Example from Piofiore: Fated Memories: the text box displays narration and, in this case, dialogue. The character's name is seen in the namebox. (Idea Factory 2019)

3.2 Planning the visuals

The previsualization or visual development stage is an important step to define the look and feel of a project before the production begins. This includes everything from architectural or historical research to stylistic exploration and concept sketches. The visual language is defined during this process. A thriller and a comedy have very different tones and the style should reflect that. (Bacher 2012.) Exceptions exist, of course - and sometimes playing with the audience's expectations can yield interesting results.

When planning the visual style for a digital project, it is useful to consider whether the final assets will be drawn with vectors or rasters. Vector lines are based on mathematical curves and can be scaled and transformed without loss of quality, whereas pixel-based raster art will lose quality when resized (GeeksforGeeks 2022). Vectors handle solid fills and shapes well, but if the art style includes many textures or translucent objects, rasters generally work better.

In visual novels, the characters have multiple different sprites with varying poses and expressions to convey emotion. A sprite in the context of video games refers to a separate image or animation overlaid on top of an environment (Williams 2017). How many character sprites are required depends on the style and script of the game, but also the importance of the character. A minor character with little screentime only needs a few variations.

When creating characters with animation in mind, the designs are usually simpler in nature. In 2D frame-by-frame animation, the characters are drawn hundreds if not thousands of times, so simplifying is a must. Western animation takes this principle further than most Japanese anime, but even anime designs simplify details like shadow and light shapes compared to designs in visual novels (Picture 11).

PICTURE 11. Kurisu Makise's visual novel design (left) vs. anime design (right) from the Steins;Gate franchise. (Steins;Gate 2009 & Steins;Gate 2011)

Once the designs are finalized, an additional step mainly used for animated productions is creating model sheets (Picture 12). These provide reference for the proportions, construction and design of a character from different angles, thus making the design possible to reproduce reliably. Separate sheets including facial expressions and different poses can be made as well.
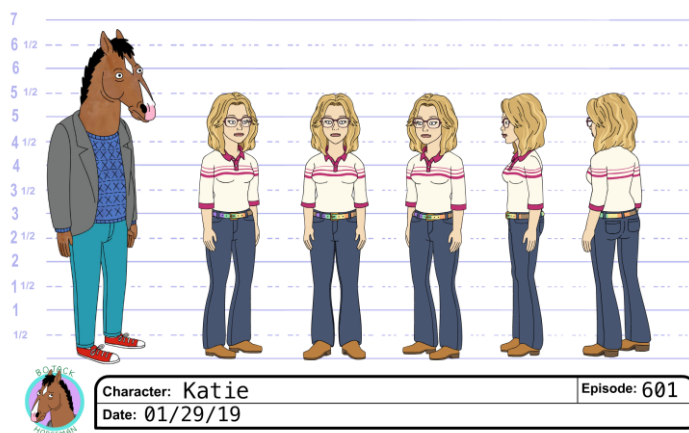
PICTURE 12. Example of a model sheet. (Bojack Horseman 2019)

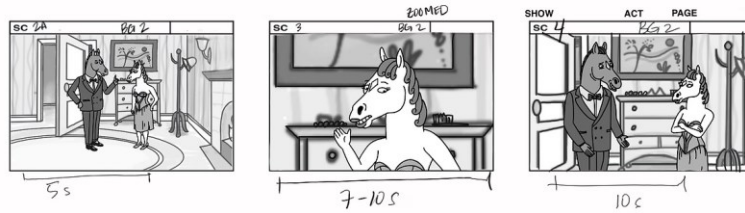Like the characters, background art in visual novels tends to be very detailed. Environments can be made the same way for both animation and visual novels, but one thing to keep in mind is the volume of background pieces required for animation. With every new camera angle, a new piece of background art is needed. In contrast, backgrounds are often used sparingly in visual novels, usually only one or two per location.

During pre-production, the rough background sketches are cleaned up into layouts (Picture 13). In this process, the artist will determine the final perspective of the piece and draw the clean lines that will be painted later. In the case of animation, making sure the background layouts fit the character action and camera moves established in the storyboards is important. (Lowtwait 2014).
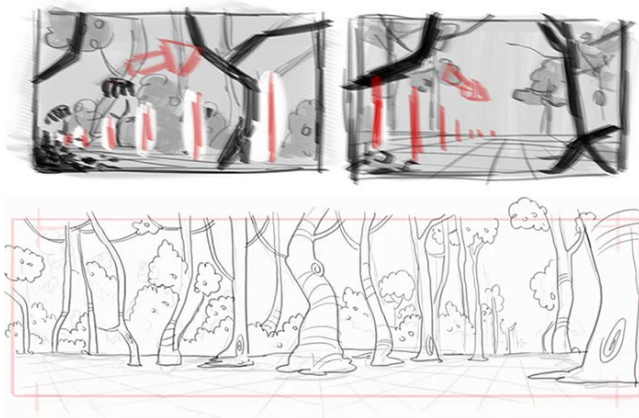
PICTURE 13. Thumbnails (top) to cleaned layout drawing (bottom). (Jeaks & Tetali n.d.)

Storyboarding is the step of pre-production where animation deviates from visual novels. Storyboards are a visualization of how the script will play out and include details such as composition, framing and transitions (Picture 14). They should read clearly and quickly, but they are not meant to be polished pieces of artwork. Before drawing the final storyboards, small, rough sketches are drawn during a process called thumbnailing. These thumbnails help experiment with many different ideas to see how the story will flow and which types of framing best fit each shot. (Blazer 2019.)

PICTURE 14. Example of a storyboard page. (Bojack Horseman n.d.)

An animatic is a continuation of the storyboard. In it, the storyboard sketches are sequenced into video format, usually combining them with music, voice acting and sound effects. This makes it possible to preview the timing of the final animation. (Business of Animation n.d.) Most western animation pipelines include voice acting in the animatic, so rough sound design will be made during the preproduction. In Japan, the animation is generally finished first and audio recorded towards the end of the process and matched to the timing (QuoteTheAnime 2022).

4   PRODUCTION

4.1   Assets

After all the designs have been finalized in the previous stage, it is time to create the final assets. For environments, there are many ways to turn a layout sketch into a finished background painting, and the background painting process is mostly the same for both mediums. The most common way to create backgrounds is to draw them from scratch, but there are other methods to consider.

By modeling a 3D environment and using that as a base, an artist can save time as the perspective and lighting setup have already been decided in the 3D scene. After the 3D scene is finished, it is rendered as an image file and imported to an image editing software for additional detail painting and touch-ups (Picture 15). Another option is transforming photographs into illustrations using color correction and filters. (Creative Freaks 2021). The photograph method is limited, as depending on the context of the story, it might be impossible for an artist to find and photograph suitable locations. Because of the difficulty of acquiring enough high-quality images of environments, this technique is rarely used in animation where locations are shown from many different angles.
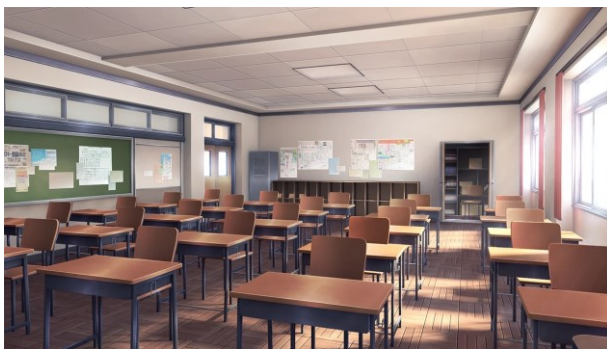
PICTURE 15. Finished visual novel background. (Doki Doki Literature Club Plus! 2021)

At this stage in an animated production, the characters and effects will be animated in the software of choice using the animatic as a guide. The animation process varies between different techniques, but the principles are always the same. If the assets include props or special effects, they will also be animated at

this stage. Certain visual effects may be added in the post-production phase when all the animation is already finished, but sometimes a shot requires manually animated effects such as explosions, liquids or elements like smoke or fire.

Animating frame-by-frame involves more drawing than cut-out animation, but the process is more straightforward. Building functional character rigs for cut-out takes time in the start, but they save time in the long term as the assets can be reused. In digital cut-out, in-between frames are also generated automatically, meaning the animator only needs to create key poses. For longer animations such as series, using the same pre-built assets throughout the production helps keep the style consistent.

Although not very common, visual novels sometimes feature animated sequences and even moving character sprites. While any animation software can be used, one well suited for animating character models in a visual novel is Live2D. The focus of Live2D is on moving illustrations utilizing cut-out principles. The character is separated into different body parts, which are then imported to Live2D and rigged (Live2D Inc. n.d.). The smooth motion achievable with the advanced deformation tools creates a dynamic faux 3D effect. Some visual novel engines feature native support for Live2D models, making the implementation a straightforward process.

Another common feature in visual novels is unique full-screen illustrations known as CGs (Picture 16). These images are used to depict important events in the story in more detail than just the default sprites and backgrounds, and often include complex perspective and dynamic posing.


PICTURE 16. Example of a CG. (Doki Doki Literature Club Plus! 2021)

4.2 Major differences in the production stage

As visual novels are interactive, during the production they must be programmed. Depending on the engine used to create them, this step may or may not involve the skill to write code. One of the most popular engines, Ren'Py, is based on a programming language called Python and requires the developer to write the code. In contrast, programs such as Visual Novel Maker and TyranoBuilder feature drag-and-drop systems, allowing the game to be made without knowledge of programming. Writing code from scratch provides more flexibility but is difficult to do without prior experience. Regardless of the engine chosen, a visual novel – like all games – requires playtesting throughout the process to catch and fix any potential bugs as early as possible.

Another design aspect not featured in animations is the graphical user interface or GUI, an example of which can be seen in Picture 17. At first glance, many visual novels have simple interfaces to match the simplistic gameplay. The major parts are the text box where narration and dialogue appear, and the choice menus. Depending on the game, some other buttons, or statistics such as time of day might also be visible. Engines made specifically for VN creation typically include all the basic GUI elements but creating custom graphics and layouts for them can help the game stand out and give it a stronger sense of identity. The most important aspect of GUI is that it provides the player with all the vital information, but not too much as to cause an information overload (Kramarzewski & De Nucci 2018).
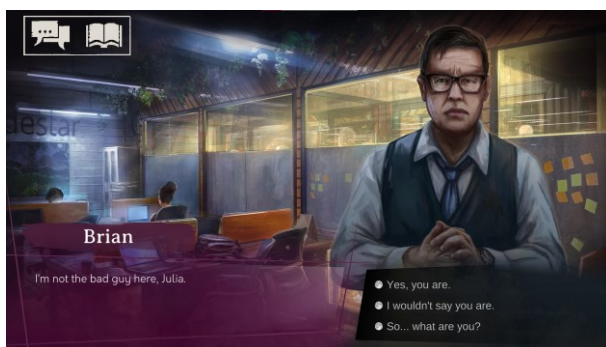
PICTURE 17. Example of Visual novel UI: text box, choice menu and buttons for the text log and a dictionary. (Vampire: The Masquerade - Shadows of New York 2020)

Different gameplay elements like puzzles or other minigames can also have a separate graphical interface from the main story parts (Picture 18). For example, Doki Doki Literature Club and its remastered Plus version include a minigame in which words are chosen for a poem. Each love interest favors certain words, therefore the ones chosen affect which character the protagonist will get closer to.

PICTURE 18. The main GUI of DDLC+ on the left and the poem minigame GUI on the right. (Doki Doki Literature Club Plus! 2021)

Regarding the production pipeline, certain steps are in a different order for animations and visual novels. Many things considered post-production in animation, such as sound design, editing and compositing, are all done during the production phase in visual novels. The post-production stage of VNs, like games in general, usually involves the steps needed after the game is finished and released to the public.

5 POST-PRODUCTION

5.1 Post-production in animation

Sound design is an integral part of any animation. Good audio tells a story and gives a film its voice, whether that includes voice acting or not. The music or *score* is generally what drives a film without dialogue (Beauchamp 2013). In addition to music, sound effects and foley are utilized to enhance the visuals. The people in charge of creating ambient sound effects like footsteps or creaking doors are called foley artists. Their work involves using different physical props to record believable sounds for the visuals. (Maio 2020.) An example of foley work is seen in Picture 19. These foley sounds are often enhanced with digital effects and combined with sound effects created digitally. If an animation has voice acting, in western productions the dialogue is generally recorded during the pre-production phase to establish the timing for the animatic.

PICTURE 19. Foley artists Alyson Moore and Chris Moriana using a rain boot and a watering can to simulate the sound of rain falling on a hat. (Great Big Story 2017)

After the assets are finished, they are imported to an editing program. The characters and effects are combined with the background elements and adjusted as necessary in a process called compositing (Business of Animation n.d.). Correcting the colors and contrasts of each scene ensures they are stylistically coherent and no element sticks out from the rest. During this stage, any possible camera movements and transitions are also finalized. Effects that were not animated manually can be added during this phase, for example shadows, light effects or

blurs. Once all the scenes are done with compositing, they are edited together with the soundtrack and rendered, usually into a movie file. This file can be uploaded to any video hosting site, with YouTube and Vimeo being the most popular choices among online animators.

While crowdfunded indie animations are often shared on sites like Youtube as well, typically ideas for commercial animations are pitched to networks such as Cartoon Network or streaming sites like Netflix. A pitch can even be a finished pilot – a sample episode made for a potential series – to convince a network to order a full season (Kench 2022b). Besides licensing fees from streaming services, animation studios also make a profit through digital downloads and physical DVDs, as well as selling merchandise.

5.2 Post-production in visual novels

Post-production in visual novels, and games in general, is mostly about maintenance. Before the final release, the game must be playtested thoroughly to confirm the features and mechanics work as intended. Should any elements cause problems during the testing phase, they are fixed or redesigned. After the release of the game, a developer should gauge audience reception to see if any bugs were present in the initial release. Bug fixes and updates are crucial to achieve user base growth and retention. (Pulse College n.d.)

There are many platforms for online distribution, both for free and commercial products. Arguably the most common platform for hosting paid games is Steam, which offers a selection of tens of thousands of games (Ciesla 2019.) The typical page layout of a released game on Steam is seen in Picture 20. If the budget allows for it, it is recommended to also create a custom website dedicated to the game project, as this will make it appear more professional. However, for many independent developers the website of choice is Itch.io (Picture 21). Unlike Steam, hosting a game on Itch.io is free, making it ideal for those not aiming to make a profit.

PICTURE 20. Vampire: The Masquerade - Shadows of New York as it appears on the Steam page. (Valve Corporation 2023)
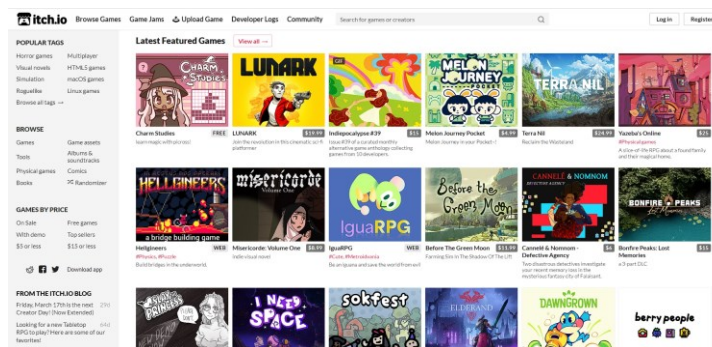
PICTURE 21. Itch.io front page. (Itch corp 2023)

While marketing should ideally be done throughout the developing process to raise and retain the interest of potential players, it is especially important to announce the release of the finished game. There are active forums dedicated to visual novels where developers can chat with fans and other creatives alike, as well as share their creations. One of the biggest and most accessible ones is the subreddit r/visualnovels, which is home to over half a million members (Picture 22).
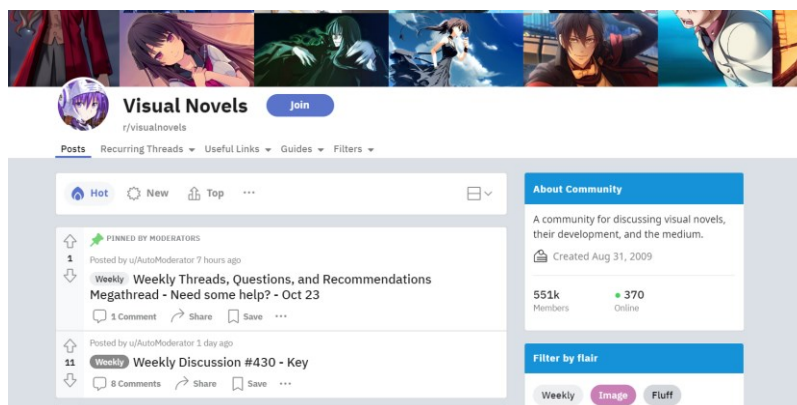
PICTURE 22. The r/visualnovels forum on Reddit (Reddit Inc. 2022)

Commercial visual novels can be self-published by the developers or distributed by game publishers. Steam includes many translated digital releases, and both digital and physical VNs – translated or not – can be found on various online sites. Some popular options include DLsite and DMM for untranslated works, and MangaGamer and Jast USA for English translations (EVN Chronicles 2018). Amazon Japan also stocks some visual novels, but products can rarely be shipped outside Japan. Some popular visual novels are released as physical copies on consoles like PlayStation or Switch, such as Steins;Gate or Doki Doki Literature Club, and can be purchased at relevant stores within and outside Japan. The Visual Novel Database (VNDB) hosts an extensive list of released and upcoming visual novels and purchasing information, if available.

6 RESOURCES

6.1 Scope and goal of the project

The scope of a project refers to the perceived complexity and size of a project. It includes factors like run time and how many assets and other resources are required. The scope should be one of the first things addressed when planning a project, as it will affect everything else further along the process. (Kramarzewski & De Nucci 2018.) The budget, timeline, size of the team and target audience of the project will determine how big the scope can realistically be. Animation especially is quite time-consuming, which is why proper planning is crucial. Cutting shots and scenes from a finished project is a waste of money and time.

If there is only one creator and they do not plan on making everything by themselves, costs for hiring other creatives must be accounted for when planning the budget. Artists for visual assets, voice actors and, mainly for visual novels, translators are all potential costs to consider. While visual novels do not always need voice actors, any animation including dialogue will need a dedicated voice cast.

For non-commercial endeavors such as school projects, it is sometimes possible to find talent willing to work for free, but if the project will generate income, all team members should be compensated. For small-scale indie projects, a popular method of gathering funds is crowdfunding, meaning the project is funded by many individual people instead of big investors. Reward-focused sites like Kickstarter and Indiegogo make it possible for game developers and animators, among many other types of creators, to pitch their projects to the world (Two and a Half Studios 2020). An example of a successful Kickstarter campaign is The Legend of Vox Machina (Picture 23), a project based on the web series Critical Role, in which a group of voice actors plays a tabletop game called Dungeons & Dragons. With an original goal of 750,000 USD to create one animated special, the campaign was ultimately backed with over 11 million USD and sprouted an animated series, which was renewed for second and third seasons by Amazon (Francisco 2022).

PICTURE 23. Screenshots from the first episode of season 1 of TLoVM. (Auman & Critical Role Productions 2022)

It is also possible to find and use pre-made assets published under creative commons or other similar licenses. This can include, among many other things, music and sound effects, background art and 3D models. As these types of assets are not customized, it may be difficult to create a stylistically cohesive project relying on only them.

6.2   Software and skills

Plenty of different software exist today, some of them free and even open source, meaning both animation and visual novels can be created with a small budget. By utilizing free software, the only monetary expenses are a computer and a drawing tablet.

6.2.1   Scriptwriting

A story starts from a script, which should be formatted to match industry standards. Professionals often swear by the software Final Draft, which can be bought with a one-time payment. For those who prefer a subscription model, WriterDuet offers different versions of varying price points with a basic model for free. Another program offering a limited free option alongside a paid one is Fade In, which adds a watermark and disables real time online collaboration in the free version (GCC Productions Inc. n.d).

One program that is free without restrictions is Kit Scenarist. Besides the word processing and research collection capabilities, it also offers script statistics, such as number of lines per character. Most available scriptwriting programs include

the necessary features an independent writer needs. Provided the option for PDF export exists, many aspects about the different software are more about preference than necessity.

Writing a screenplay can be done for both an animation and a visual novel. However, there seems to be no standard formatting for writing a visual novel draft. Some writers find it easier to block out the game in a flowchart format to have a clear view of the structure (Picture 24), while others prefer a simple text editing software or spreadsheet to plan the narration and dialogue. As all the text will be transferred to the visual novel engine of choice eventually, the script can even be written in the engine itself.
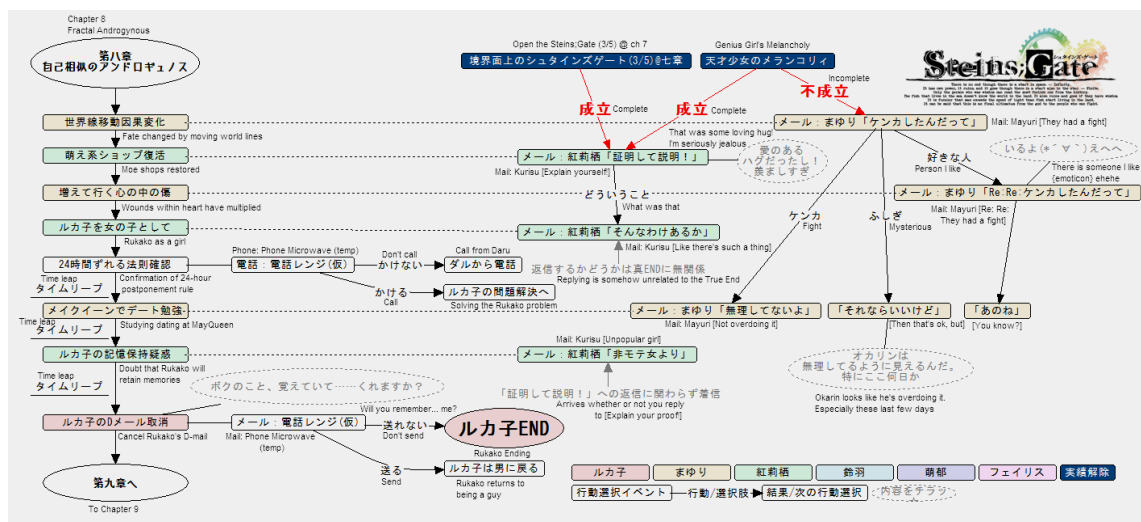
PICTURE 24. Excerpt from a flowchart depicting the structure of the Steins;Gate VN. (Steins;Gate 2009)

6.2.2 Visual design and animation

As both mediums are quite visual in nature, illustrative skills are a must, as well as good understanding of design principles. Adobe Photoshop is the tool of choice for many digital artists but rivaling software such as Clip Studio Paint and even the free and open-source Krita provide all the necessary features for concept art and other illustrative work. Many more suitable programs exist; generally speaking, the most important features are a layer system and support for transparent PNG export.

When it comes to digital animation, industry standard Toon Boom Harmony may be the most versatile and powerful program to use (Picture 25). It offers three different editions at three different price points, and students are eligible for discounted prices. The subscription cost is still quite steep for non-students, and because of the plethora of features, so is the learning curve. The two less expensive versions, Essentials and Advanced, are geared towards paperless animation and simple cut-out, while Premium offers more advanced tools for cut-out animation and compositing (Toon Boom Inc. 2022).
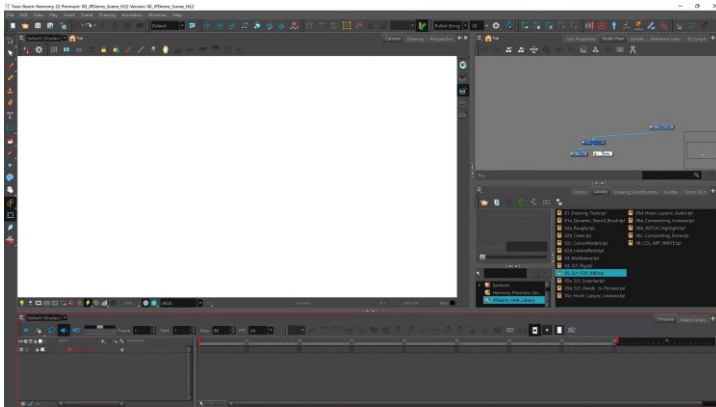
PICTURE 25. User interface of Harmony 22 Premium. (Toon Boom 2022)

One program created with the traditional animator in mind is the French TVPaint, which also comes in two editions: Standard and Professional. As it is tailored for creating paperless frame-by-frame animation, there are no advanced features for rigging characters for cut-out animation. The cost of the standard version is in the hundreds, even with a student discount, but it is a one-time purchase instead of a subscription. The professional license costs roughly double the amount.

A free and open-source software for all types of digital animation is OpenToonz, which is based on the Toonz software used by Studio Ghibli for some of their inking and coloring work (DWANGO Co. n.d.). Like Toon Boom, it supports both raster and vector layers, and can be used to create rather complex character rigs for a cut-out style. A sibling program to OpenToonz exists under the name Tahoma2D. The two software contain largely the same features, but Tahoma2D was branched from OpenToonz with the intention of creating a sleeker design and more user-friendly interface.

The previously mentioned Live2D (Picture 26) is great for animating character sprites for visual novels, making moving illustrations or creating any experimental animation where the goal is smoothness. Live2D offers both a free and paid version, with the free version having certain limits per project file; layers, deformer effects, output size and many other features are limited.
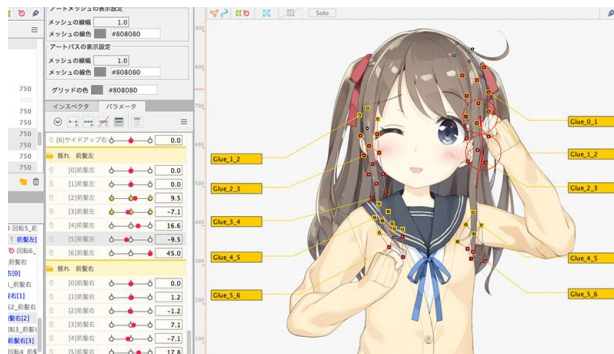
PICTURE 26. Screenshot of the Live2D interface (Live2D Inc. n.d.)

For animation editing and compositing, arguably the most common option is combining Premiere Pro and After Effects. As both are part of the Adobe Creative Cloud, moving projects between the two software is seamless. There are also programs which combine both editing and compositing capabilities. One example is DaVinci Resolve, which is available both as a free version with some limitations, and as a paid Studio edition. While Adobe products are only available via a subscription model, DaVinci Resolve Studio is a one-time payment.

6.2.3 Visual novels

Visual novel engines also come in different varieties to suit different needs. For those inclined to or at least interested in learning basic programming, the python-based Ren'Py is a reputable choice. It offers everything a developer needs to create a visual novel without the need to program everything from scratch, as Ren'Py projects include a basic structure for the menus and user interface. Because the code is customizable, it is possible to program different types of minigames to accompany the usual gameplay of clicking through text to advance. Ren'Py is also completely free of charge, even for commercial projects. One of the most popular games created with this engine is the 2017 horror title Doki Doki Literature Club by Team Salvato, whose remastered "Plus" version saw a release

on PC as well as consoles (Team Salvato 2021). Ren'Py is available in 20 languages, but English is the default.

Visual novel software not requiring programming skills include, for example, TyranoBuilder and Visual Novel Maker (Picture 27). Both choices feature drag-and-drop style interfaces and are suitable for creating simpler visual novels. While they both offer support for scripting for advanced users, it is possible to create games solely relying on their drag-and-drop systems. TyranoBuilder and Visual Novel Maker are both paid software and are bought as a one-time purchase, with the latter being slightly more expensive. The TyranoBuilder software is only available in English and Japanese, while Visual Novel Maker supports nine languages in total.
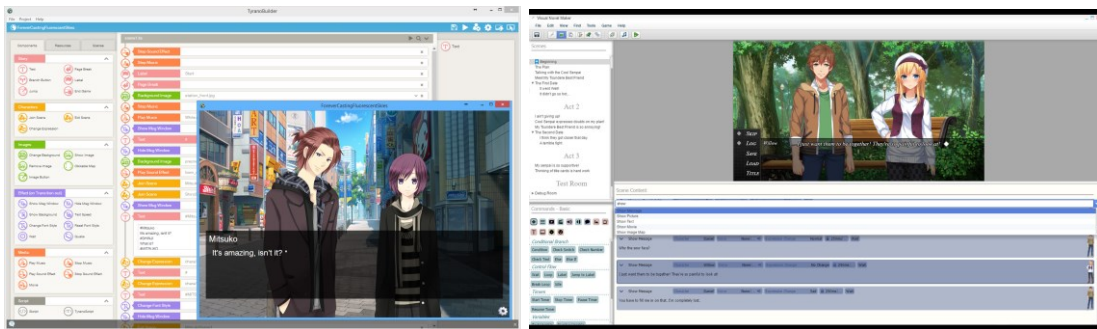
PICTURE 27. TyranoBuilder (left) and Visual Novel Maker (right) (STRIKE-WORKS 2015 & Degica Co., Ltd 2017)

It is also possible to build visual novels in game engines like Unity or Unreal Engine, and there exist downloadable extensions of different price points to make the programming easier. Creating a visual novel in a general game engine gives more freedom for advanced game mechanics and animations, but for a basic VN it can feel like overkill. Documentation for the plugins is also sometimes scarce, which may be an issue for less experienced developers.

Regardless of the engine chosen, a solid understanding of story structure is crucial for a visual novel to have good flow. The importance of organizational skills is also highlighted more the bigger the project is, as all the different files add up fast. This applies to animations as well.

7 CREATING THE PROJECT

7.1 Animation

The project process started with an idea. This story would include an established protagonist instead of the blank slate sometimes seen in visual novels. This made it easier to ensure the story worked in both formats. As mentioned before in the theory portion, animations without a defined protagonist are rare and difficult to make. Scripts for the animation and visual novel were planned and written simultaneously to ensure there would be enough opportunity to implement a few choices in the game. While visual novels work best with multiple characters whose dialogue and personalities bounce off each other, it was deemed most logical to only focus on one major character for this project. The animation was never planned to have voice acting, and although it is possible to have multiple characters emote with each other with visual cues and sound effects only, it might have seemed too cartoony when compared to the VN.

Once there was a rough concept to work with, it was time for concept art. The story would be set in a forest and the protagonist would be a witch residing in a small, cozy cottage. The story would also feature an owl who needed a design as well. Both a horned owl and a barn owl were considered, with barn owl being the final choice. Some of the initial sketches are seen in Picture 28. Ultimately, the project came to be called *The Story of Sanelma*.

PICTURE 28. Concept sketches for Sanelma's cottage and the owl character.

The witch character was eventually named Sanelma. While on the lookout for a missing ingredient, she stumbles upon an owl she later befriends and names Lux. As seen in the character sheets (Picture 29), the project was originally planned to be fully colored. This later changed to grayscale for both the animation and visual novel for time-saving purposes.

PICTURE 29. Finished character sheets for Sanelma and Lux.

The storyboards started as simple thumbnails on sticky notes that were later cleaned up in TVPaint (Picture 30). A rudimentary animatic was also made directly in TVPaint, and the rough background sketches from the storyboards were cleaned up in Clip Studio Paint to have some detail and value variation. Eventually, the animatic and other assets were exported for editing and sound design in Premiere Pro, as well some compositing work in After Effects.

PICTURE 30. Rough thumbnails on sticky notes.

For the animation, the initial plan was to use cut-out animation with some frame-by-frame where necessary. While I generally prefer the organic look of manually drawn frames, the schedule of this project would not have allowed that. Sanelma's design also incorporates patterns – polka dots on the pinafore and

stripes on her socks – which would have taken too long to animate by hand. In total, there were 55 shots including either character animation, effect animation or both. Even with limited animation using rigs and recycling as many assets as possible, it would not have been possible to fully animate all of them in a reasonable time. Ultimately, the animation was left in the animatic stage to ensure the project would be finished in time. For the sake of consistency, the visual novel part of this project would also be rendered in grayscale.

The sound effects and other audio used in the project were all published under creative commons licenses. The most liberal license is CC0, which essentially absolves the work from copyright and allows it to be used freely, even in projects where crediting the author is not possible. The assets published under CCBY require attribution to the creator and a mention of the license but are usable in most projects. While there are other, more restrictive licenses, only audio files released under these two were chosen for this project.

7.2   Visual novel

As the story was planned to suit both an animation and a VN from the start, there were no notable issues in the writing phase. The major differences in the visual novel version were the choices and inclusion of dialogue for Sanelma. Three choices were included in the game, all of which were slightly different for variety. There is one regular choice, a choice that requires all options to be clicked before the story proceeds, and the last choice includes a timer. While having to click all choices before proceeding is not very useful from a gameplay perspective, it felt suitable for this short game to better convey the passage of time. The software of choice for the VN was Ren'Py, as the author already had previous experience working with it.

Many of the assets from the animation were reused, but as the visual novel included scenes not seen in the animation, some backgrounds had to be altered or new ones added. The sound design likewise borrows much from the animation, but some scenes needed additional sounds. The character sprites for Sanelma and Lux were drawn specifically for the VN and include more detail and polish than the graphics in the animation, with Sanelma's pinafore now featuring the

polka dots. Some simple customizations were also made to the default graphical user interface; the fonts were replaced, and a new textbox created, for example. A screenshot of the game can be seen in Picture 31 below.

PICTURE 31. Screenshot from the visual novel, showcasing the textbox and one of the character sprites.

The hosting website of choice for the visual novel was itch.io. Both a down-loadable file and a browser-based online version were published, though the web version unfortunately suffered from bugs that the author was not experienced enough with programming to fix. It was nonetheless a complete, playable game. Links to both the visual novel and the animation can be found in appendix 1.

7.3   Interviews

Once the project was finished, both versions were published online in preparation for the study portion. A qualitative approach to the research seemed better suited for this project than quantitative methods, as the personal thoughts and feelings of people were the point of interest over analyzing numerical data.

Five people were interviewed personally. They were first asked to play through the game, then watch the animation, and finally answer questions about the experience. The reasoning for this order was that viewing the animation first would spoil the experience of making choices in the game. The interviews also included two general questions about animations and visual novels as methods of story-telling, but those were considered optional as not all participants had previous

experience with both. The transcripts of the interviews can be seen in appendix 2.

In addition to the interviews, a survey with the same questions was created on Google Forms and shared publicly, to which five anonymous people submitted answers. Although online surveys are generally seen as less reliable data than interviews, the answers closely mirrored those given in the interviews. A spread-sheet containing the survey results is included in appendix 1.

When asked about the strengths of animation as a medium, some commonalities among the answers include the rich visual storytelling, as well as how exaggeration and stylization help convey things not possible in forms of entertainment such as live action. Multiple answers noted that the weak points lie in the cost and workload involved, and the difficulty to portray a character's internal monologue.

Many of the subjects agreed that the ability to use imagination when playing visual novels was one of the strengths of the medium, along with the ability to experience the story at the player's desired pace. It was also noted that visual novels require less resources than animation, which makes them better-suited for telling long-form stories. However, many also felt that the visuals often feel less engaging, which can in turn make the experience less entertaining than watching an animation.

For the project itself, there was no clear winner in which version was better. Both versions received critique and compliments, and while more people preferred the animation, the visual novel also had its share of favorers.

Those who preferred the animated version said the story was easier to follow and the setting and Sanelma's emotions were conveyed better. It was also mentioned that her personality was highlighted more than in the VN. Those in favor of the visual novel felt it was more immersive because of the interactivity, and while the visuals were scarcer, they seemed more polished than the animation. The VN also included more context surrounding the events and the protagonist's motivations, such as the reason why Sanelma was looking for the bug, which was appreciated by the interviewees.

The choices included in the visual novel received some criticism, however. One of the choices had no real impact on the story, which a few respondents did not appreciate. The inclusion of "wrong" endings and a "true" one also caused irritation, as some respondents felt they were punished despite choosing the options that seemed most logical to them.

Some of the critiques brought up in the interviews only apply to this particular project and not to each medium as a whole. The lack of context and the character's thoughts in the animation, for example, can be fixed with voice acting if the budget allows for it. As for the visuals, had the animation been finished properly, it would be graphically closer to the level of polish seen in the visual novel; only the amount of detail would be lower to compensate for the number of assets required.

8 CONCLUSIONS AND DISCUSSION

In general, animated projects involve more costs and a heavier workload than visual novels. However, animation is a medium capable of engaging the audience with rich visual storytelling which embodies the principle of "show, don't tell". Because of this, action-heavy scenes may work better in animated form compared to visual novels. While visual novels are often not as graphically engaging in comparison, they are ideal for telling long stories that would require too many resources in animated form. The engagement can also be boosted with well-planned choices that impact the story in meaningful ways, and potentially minigames or puzzles. As an audience member, it is ultimately personal preference which method of storytelling is preferable. As a creator, the available resources and target audience will impact which medium to choose for a project.

It is easy to underestimate how much time and resources a project will require without very precise planning. Despite a weekly schedule and a separate spreadsheet cataloging every scene and shot in the animation, the scope of the thesis project was ultimately unattainable. As a result, the project had to be downscaled drastically. This mainly affected the animation, which ended up being a greyscale animatic to compensate for the over four minutes of runtime. It was nonetheless a learning experience to stick to a schedule for such a long time.

The animatic took roughly 18 weeks from start to finish, though the working hours were somewhat irregular and not every day was spent on the project. This time also included planning and writing both versions of the story, as well as wasted hours spent on a character rig and animations that never made it into actual use. In contrast, the visual novel was created in roughly three weeks, as most of the pre-production was completed while working on the animatic, and many background assets and sound files from the animatic could be reused.

In retrospect, there are many things that could have been done differently for a more polished product. The animation could potentially have been shorter and had some of the more difficult shots cut to have more time to focus on the quality of the visuals. Sanelma's design could also have been simplified to get rid of the

patterns from the start since they were omitted from the animation anyway, but all in all the project achieved what it was supposed to.

The interviews went mostly as expected. While the animation was rougher than intended, many of the test subjects still preferred it over the visual novel part of the project. Referring back to the interviews and survey results, this was due to the streamlined and easy to follow story, and Sanelma's emotions being conveyed more visually. What the VN had in its favor was more context surrounding the events of the story, as well as Sanelma's internal monologue being on display.

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APPENDICES

Appendix 1. Finished project materials

Visual Novel

https://kartsuli.itch.io/the-story-of-sanelma

Animatic

https://www.youtube.com/watch?v=AeKZWk8jpFo

Survey Results

https://docs.google.com/spreadsheets/d/1Yrl7LrCeu1e3AAur4-weyR3FhMG_aowj/edit?usp=shar-ing&ouid=100286992960623835859&rtpof=true&sd=true

Appendix 2. Transcripts of the interviews

All interviewees were of Finnish background.

Interviewee 1: Essi, 27

If you have previous experience with watching or creating animations, what do you believe are the strengths and/or weaknesses of the medium?
The message of a story can be conveyed in a powerful way with animation. It can also be very easy to follow compared to e.g. reading a book. The visual nature of it and all the fancy effects tell things unable to be said with just text.

Weaknesses are how expensive and laborious animations are to make, I suppose.

If you have previous experience with playing or creating visual novels, what do you believe are the strengths and/or weaknesses of the medium?
No previous experience in playing visual novels. I suspect it might be more difficult to focus on VNs as they don't have the same level of stimuli as animations do.

Which version of the story did you prefer (animatic or visual novel)? Why?
The animation was better somehow. It had more visual information and facial expressions, which made it easier to follow the story. The animated version showed more things about the scenery, the world, etc.

How did your experience differ between the two versions (immersion, emotional impact, etc.)?
Sanelma felt much more relatable in the animation, and the owl's death was more touching in that version as well. In the VN her motive to find the bug was clear while in the animation it was not, but in a way I preferred the fact it was left unsaid in the animation. Sanelma was also somehow cuter and more sympathetic in the animated version.

What do you believe were the strengths and/or weaknesses of each version of the story?

The animation showed instead of telling, which made things feel more believable, e.g. when Sanelma befriended the owl. I also noticed wanting to rush through the visual novel because I was waiting for something to happen.

Interviewee 2: Janika, 27

If you have previous experience with watching or creating animations, what do you believe are the strengths and/or weaknesses of the medium?

The strength of animation is the ability exaggerate things, which is especially clear when comparing to live action media.

If you have previous experience with playing or creating visual novels, what do you believe are the strengths and/or weaknesses of the medium?

Like books, visual novels give more space for imagination as not everything is shown. On the other hand, the endless clicking can feel tedious. If there is no ability to save and the game crashes, it is a pain to get back to the previous point.

Which version of the story did you prefer (animatic or visual novel)? Why?

No preference.

How did your experience differ between the two versions (immersion, emotional impact, etc.)?

The visual novel felt more immersive. The chase scene, for example, felt more pressing in the visual novel compared to the animation.

What do you believe were the strengths and/or weaknesses of each version of the story?

Appreciated the fact that you could see much more of the scenes in the animatic, especially the walk and run cycles. The multiple paths in the visual novel provided more content to explore.

Interviewee 3: Kata, 26

If you have previous experience with watching or creating animations, what do you believe are the strengths and/or weaknesses of the medium?

The strength of animation is the opportunity for multifaceted visual storytelling. Movements and gestures can be exaggerated when necessary, and the characters can be moved in ways not normally possible in real life. Objects and characters can be stylized in an almost unlimited number of ways, enriching the visual storytelling in animation.

Weaknesses in animation are the workload and cost. Animating is expensive and laborious, which seems to be the reason many potential animated stories are left untold. Many great ideas never leave the drawing board because studios deem them either too expensive or too laborious. Animated series are also too often either cut short (The Owl House) or cancelled in the middle for financial reasons (Inside Job).

If you have previous experience with playing or creating visual novels, what do you believe are the strengths and/or weaknesses of the medium?

Visual novels offer the unique opportunity to immerse a viewer in the story by turning them into a player. Although the player's part in a VN is usually just clicking a few buttons or making simple choices, it gives the player the chance to be a part of the story. With VNs, it's also possible to tell visually pleasing stories without the cost and workload required for animation.

However, the simplicity of visual novels is also a weakness. The slow pace of the storytelling and often static character sprites can bore a player fast. The lack of animated or even fully drawn visuals can also numb an otherwise well written story.

Which version of the story did you prefer (animatic or visual novel)? Why?

The animatic was my favorite, but it wasn't an easy choice. The visual novel was lovely as well, but the animatic let the personality of the character shine more, which is why I preferred that version.

How did your experience differ between the two versions (immersion, emotional impact, etc.)?

Both experiences were positive. The animatic showed more of the character's personality and provided the scenes with intensity and comedy with the angles and the character's movements. The storytelling was completely visual which was pleasant, but left certain things from the VN untold in the animatic, such as the reason Sanelma needed the bug.

What do you believe were the strengths and/or weaknesses of each version of the story?

The animatic told a story with strong visuals, which conveyed the character's personality and emotional impact of the scenes well. It was pleasant to watch and the story was easy to understand. The internal monologue of the character was not conveyed to the audience, though.

The visual novel gave the opportunity to affect the story and experience it from a different perspective. The visuals were stiffer and far scarcer, which diminished the effect the scenes had on the player. On the other hand, the visuals were much more polished compared to the animatic. The VN also gave insight on the character's internal monologue.

Interviewee 4: Maarit, 54

If you have previous experience with watching or creating animations, what do you believe are the strengths and/or weaknesses of the medium?

One strength of animation is how well suited it is for teaching lessons to kids through stories.

If you have previous experience with playing or creating visual novels, what do you believe are the strengths and/or weaknesses of the medium?

No previous experience with visual novels.

Which version of the story did you prefer (animatic or visual novel)? Why?

Preferred the visual novel because of the immersion created by the interactivity. Felt the ending was clearer in the animation, though.

How did your experience differ between the two versions (immersion, emotional impact, etc.)?

Not that much difference. Liked how the animation was more streamlined without the dialogue, yet the story was still understandable.

What do you believe were the strengths and/or weaknesses of each version of the story?

The plot flowed organically in both versions. In the VN, the bar indicating the time limit on one of the questions felt unclear on the first run, resulting in a bad ending at first.

Interviewee 5: Ossi, 22

If you have previous experience with watching or creating animations, what do you believe are the strengths and/or weaknesses of the medium?

A weakness in visual storytelling in general is that the audience cannot use their imagination. On the other hand, it can be easier to understand what is happening when storytelling utilizes visuals. It also adds depth to the story and characters because it is possible to use voice, walking style and other behavioral patterns to highlight a character's personality.

If you have previous experience with playing or creating visual novels, what do you believe are the strengths and/or weaknesses of the medium?

A strength of visual novels is that they combine a video game experience with the experience of reading a book. The story feels more immersive when you can interact with it.

Which version of the story did you prefer (animatic or visual novel)? Why?

No preference. Both renditions had their strong points.

How did your experience differ between the two versions (immersion, emotional impact, etc.)?

The animation was easier to follow, but the visual novel version of the story felt more immersive. For example, the chase sequence in the VN managed to maintain the thrilling atmosphere for a longer time.

What do you believe were the strengths and/or weaknesses of each version of the story?

The interactivity and more context surrounding the events provided in the VN were nice. The animation on the other hand was easier to follow since it didn't require you to focus on reading the story.

A weakness was the absence of lore and context in the animation compared to the VN, such as the fact that Sanelma needed the bug to impress her coven.