

## A Guide on Narrative Production Process in Computer Animation ( 컴퓨터 애니메이션의 나레이티브 제작과정에 관한 지침 )

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### Abstract

Computer animation is the most advanced composite art to apply image, sound to the theme. Domestic technique is improved but still lacks creativity and content in the international market. In this paper, I'll notify the importance of planning and introduce narrative animation to produce their own style of animation. A successful career in the digital animation industry requires more than just technical expertise. It also demands creative mastery, a sense of wonder and boundless imagination. This unique hands-on program combines traditional, creative and technical skills and develops digital artists, not software technicians. Especially, people involved in the industry should recognize a special quality of narrative animation in today's 3D animation and game-saturated climate. Therefore, they are able to create a new form of high-quality animation. It will be expected to promote digital animation education with a new index.

### 요약

컴퓨터애니메이션은 영상, 음향, 기획, 아이디어를 활용할 수 있는 종합예술이다. 국내의 기술은 다른 나라에 비해 결코 뒤지지 않지만 창의력이나 내용면에서 아직 뒤쳐진다는 점을 감안하여 본 논문은 기술보다는 기획단계의 중요성을 고지하고 형식에 얽매이지 않는 자기만의 애니메이션을 제작할 수 있는 나레이티브 애니메이션을 소개하고자 한다. 디지털 애니메이션 산업에서 성공적인 작업은 전문적인 기술 그 이상을 요구한다. 즉, 창의적인 통제, 경이로운 감각, 무한한 상상력을 필요로 한다. 비길바 없는 이 실무의 프로그램은 전통적이고 창의적이고 정통한 기술을 아울러 가지고 소프트웨어 기술자가 아닌 디지털 아티스트를 계발해야 한다. 특히 3D 애니메이션과 게임에만 치중한 요즘 나레이티브 애니메이션의 특성을 인식하여 새로운 형식의 질 높은 애니메이션 제작이 필요하다고 본다. 따라서 본 논문은 디지털 애니메이션 교육에 지표를 제시함으로써 많은 도움을 줄 것으로 기대된다.

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## 1. Introduction

Computer animation is the use of computers to create animations. Computer animation went through so much to get where it is at today. It still continues to change rapidly today. Animation did not just happen instantly. Many people contributed to develop animation what it is today, and to make computer animation at all possible. There are many ways to create computer animation. Today's digital animation tools can help animators bring an idea out of your head and onto the screen. Like other revolutions of the last ten years—desktop publishing, desktop recording, and desktop video—you've now got the tools to make entire animated movies with nothing more than the software on your laptop. What used to take years takes days. What used to cost thousands costs next to nothing. [1] All you need is a story to tell. Motion is often used with time and its narrative quality tells a good story about the information it represents.

I'll encourage animators to experiment and mix and blend and push the software beyond what's in the "getting started" guide. It's by using variety tools—like After Effects, Flash and iStopMotion—to illustrate many of the fundamental principles of animated storytelling. I'll explore various combinations of traditional and digital design tools through a work which I created as an example. Of course, depending on one's needs, skills, time and budget, animator can create anything from a simple flying logo to the presentation equivalent of "Toy Story." But before examining the wide range of animation tools and learning how to use them, it's important

to recognize that knowing when to use animation is as essential to successful career as knowing how. [2]

I mention what the computer animation is and discuss why narrative animation is needed. I introduce the practical techniques for making meaningful digital image sequences, both in terms of content and software. They are often used to illustrate how scenes unfold, explores various ways to express themes and stories through animation. I investigate the context of using narrative animation and how to properly apply integration using the traditional and digital methods through a process of my work as well. Accordingly, we can easily create a unique animation with a meaningful content.

## 2. Narrative animation

In digital media the narratives can be transferred to spectatoreither in linear or in circular structure. This unit develops an understanding of the importance of narrative in animation. It will explore a range of existing narratives, examining "plot", structure, storyline and script development, and characterization. The value of graphics appears to be associated with the dual-coding theory (Pavio, 1979), which suggests that long-term memory retention is facilitated by a combination of verbal and visual cues. As such, animations are valuable aids in supporting the visual aspects of long-term memory. Furthermore, by combining narration and animation, dual-coding is further supported (Mayer and Anderson, 1991). [3]

Animation is the art of movement.

Animations are moving models that depict scenes, events, virtual procedures, and explicit cross-sections. There are a range of traditional styles, including stop motion, cut paper, abstract and cartoon animation. Also, it needs how a product works with detailed precision. This concentrates on two vital stages of the creative use of motion graphics in multimedia. Primarily, the traditional skills of taking a theme or idea and thinking around it, researching it, developing an insight concerning it and developing a narrative to embody this and illustrate it. Secondly, there are the modern skills of planning and creating a meaningful time-based visual narrative with current multimedia applications. [4]

First, we need to understand the traditional animation. Animation means, literally, to breathe life into some thing. Animation offers a medium of story telling and visual entertainment which can bring pleasure and information to people of all ages everywhere in the world. Keep it simple. Make sure animators focus on their design first. The design should be very basic. That's really animation design, on a whole. Simplicity is the key. Let's take a look at a simple animation technique with which animator might already be familiar: linear motion. The most basic effect that one can create is movement from one point to another. Many steps had to take place, first to make moving images possible, and then developing techniques for creating animations. Macromedia Flash, Adobe After Effects, narrative construction, animation, cutting, motion design and composition are all considered and employed. [5]

Furthermore, narrative animation can

bring up some interesting issues at making their own animation. They can go on and on about the uniqueness of rhythm, textures, colors, and tones. These evoke emotions of their audiences. For example, when audience members see narrative animation, they empathize with life or they can sympathize seeping through the frames. It simply makes evoke emotions. Spectators can take it easy and stop over thinking, just feel. Reaching a deeper feeling is attempting to reflect the way the brain works. People are narrative animals. Emphasis is placed on narrative, character and content development.

### 3.Process

Animators need to transform their ideas from sketches into reality. Create and maneuver to life all of the unique characters and environments in their mind into a computer animated vision with an attitude! As a Computer Animator, one will learn about perspective along with animation techniques using a variety of media from pen and paper to industry dominant software packages. Animators will enhance their skills in storyboarding, production, and self promotion. Never lose sight of the importance of striking a balance between the interface and the animations they are attempting to produce. This paper will provide animators with the necessary tools they might need to animate your artistic visions and enter this exciting field. Animators can find to provide ample opportunities for collaboration, inspiration, growth, and exploration. There is no limit to the imagination. People used to ask to solve problems in which creativity is often

the decisive factor to success. In fact, this creativity is more present in some pupils than in others and it is not taken into account by the animation or simulation programs. The mutual collaboration and discussion among people while using the software could be a solution for this.

### 3.1 Plan

Animators need a worksheet to plan the details of an animation including goals, audience, character, setting, plot, and technologies needed. A plan has to be included in several stages, idea, outline, treatment and storyboard: Idea can be summed up by its title, or a brief description. Even derived ideas will need to be restructured and given an outline, which the key points, beginning/middle/end are defined, and the situations, styling and staging are developed around these. Rough sketches are done at this stage. The keypoints are linked by a storyline. The rough sketches are developed, action and dialogue are separated and the creative and production problems are given due consideration. These can sometimes be strengthened by design, effects, or sound track, which are then indicated in the script.

As previously stated, I'll start out with my own work to help readers understand this process as an example. First, worksheet to plan is as follows: My story idea for plot is about dream. I got a idea from Jorge Luis Borges's poem, Dream. Sometimes it is very helped to get inspired by great writer or artist to bring up with a meaningful theme. Basic idea is what the dream is and

if it's good or not. Sometimes when people wake up, they feel so bad. Which is real life or dream. Sometimes dream is realistic. Goals reflect on 9/11 terrorism-World Trade Center. There are meaning of duality--what's the reality or not, and whether the character is dead or just in dream. Audience can be anyone but adult. The intelligent use of animation can revive an audience's attention. Character is one man who can be dead or in dreams. Setting is absolutely New York City.

#### 3.1.1 Storyboard

It's a component part of narrative structure. The treatment of the storyboard is visualized. This unit helps explain the benefits of using storyboards when conceptualizing an initial idea. A storyboard captures the basic structure of a design. It is an expression of everything that will be contained within a design. It is important to note that this is not a finished part a storyboard is an intermediate stage that preserves your initial ideas for you to reference. Storyboards have traditionally been a pencil and paper representation of the screens and sequences that will be present in a movie or design accompanied by a script explaining the dialogue that will take place with the user. Meaningful animations require storyboarding of the information. [6]

My story is that a man goes to the office in the morning as ordinary day like any other days. Audiences may see the views such as subway, buildings and streets which he always passes by. And also there is newspaper which indicates the today's date. Everything seems to be as usual, but

he notices something wrong because that it's not as usual like abandoned church which was not used to be. He got to office, but the place where the place, World Trade Center used to be, is gone. And he finds his own name at the Ground Zero. He trace backward but it ends by the first scene. Again, the next day is just another ordinary day, repeat the scene and focus on the newspaper, which is same.

### **3.2Product**

Digital animation is what animators get when they wiggle their fingers. Simply put; it is electronically generated movement of anything on your computer screen. Traditionally, there are different levels of digital animation. First of all, I apply simple transitions and path animations (text), at the most fundamental level. It starts with text, poem 'dream', and then title. The next levels are special effects, which include all manner of distortions, and color effects applied to photos, and speed, which include all manner of forwards and backwards applied to frames as well. It's easy to use to control keyframe manually. It is usually a combination of gauging the appropriateness of the animation and timing it well. In any case, animators are less likely to go astray when using animation if they strive to use it tastefully and intelligently - and if you first think seriously about why you want to use it. Is it because you can? Or because it is the best way to communicate what you want to say? Animators' answer should lean toward the latter.

Keep in mind that many software applications can create animation from more

than one category. The best way to learn how to use animation is to do it. Used wisely, digital animation can open up a whole new world of creative possibilities that can add life and zest. Besides, creating animation is fun, and when animators have fun creating, it comes across to your audience.

#### **3.2.1Clayanimation**

Clay has long been respected as the medium of choice for relief and sculptural portraiture, and has been used throughout history in many varieties of functional ware. Its plasticity and versatility are increasingly appreciated in works that transcend traditional boundaries. Working with modeling clay (Plasticine) is the perfect way to get started in animation. As a material it is cheap, flexible and instantly ready to use. Within minutes of opening the pack, animators can be animating; camera, space, and clay. Take a piece of clay and roll it round in their hands to warm it up. Now, they have their clay, their idea, a camera and a desire to animate their vision. I only make the figures out of clay and photograph them and the editing and animation of those images and everything else happens inside the computer. I created a room where the character with same cloth is. He looks around the room and turns on TV. He lies on the sofa and seems to reflect on past by showing the first part. Is he dead or in dreams? Properly used animations through potential questions can help maintain audience attention.

#### **3.2.2Stopmotion&Flash**

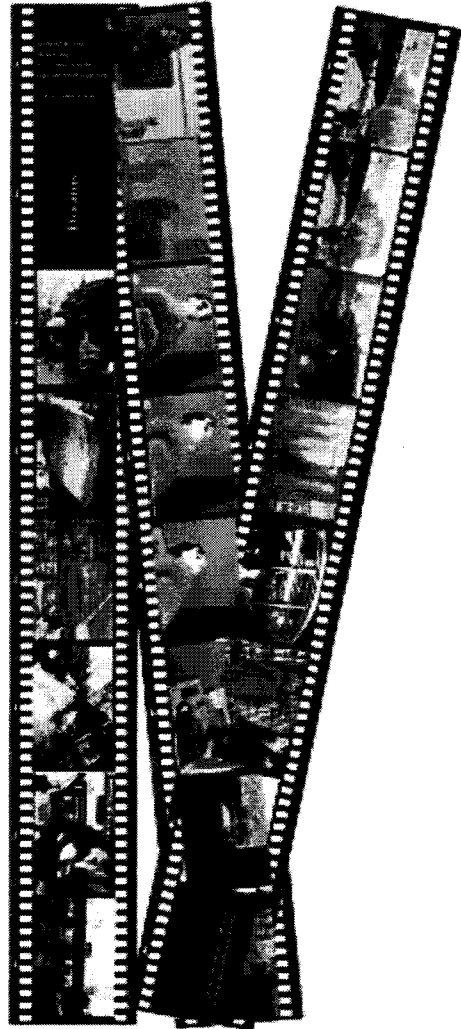
First, animators try to plan their shots so that a green screen won't be necessary. Storyboard sketches and digital snapshots can help them figure out the proper light, camera angle, and composition, so that compositing will be easier once they've shot their footage. For iStopMotion program, they use "cut" and "paste" to add frames to their movie. Their iStopMotion documents are actually Quicktime movies. They can open those in the Quicktime player to test the timing of their movie. They use the web cam and iStopMotion to set up your shots, with onion-skinning, etc. I created an animated character in flash, and put him in the first scene, which gives a cartoon looking effect, and then overlapped. The end scene shows Jorge Luis Borges's poem, 'Dream'.

### 3.3 Edit

Animators can add titles easily to their animation, drag and drop frame editing, reverse frame sequences, and repeat frames. Take Stopmotion Picture Series easily: Select a Video Input Device from list box, click the "Snap" button and choose a folder to save the pictures into.

Adobe After Effects is desktop software used by the video, film and multimedia industries for animation, compositing and special effects. Adobe After Effects is a powerful software tool for visual effects and motions graphics. Animators can use After Effects' tools to create dynamic designs for broadcast, web, CD-ROM and film. It helps them create compelling motion graphics and blockbuster visual effects with efficiency, precision, and

infinite variety. To summarize, I easily created 3 series by using simple transitions and path animation, clay animation, and flash animation through combination of the traditional and modern methods. [Fig.1]



[Fig.1] The narrative animation, which I created as an example  
[그림 1] 예를 들기 위해 본인이 제작한 나레이티브 애니메이션

## 4. Conclusion

Good Animation comes from Good Design. In the paper, I've discussed how to create narrative animation effectively but simple and how to develop the narrative, character, and content. Especially, it indicated how to simply create a unique product by controlling traditional and modern methods and how to combine meaningful content and technical skills through a process of my work. When animation and narration are both used, the animation and narration should coincide meaningfully. At this point in time, It is expected that computer animation industry rapidly continues to look forward as government and a local autonomous entity recognize importance of computer animation with full of potential. I believe how important to hold in high regard, just not with the emphasis on entertaining, and makes them unique. But keeps it simple; it's the easiest to use, but animators can gain the most valuable effect in their own style.

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