Work in progress:
This Is How We Animate At home

Work In Progress.
En mi casa se anima así.

In this paper, we will review the creative process of animation and the different systems or tools available to keep it going. The choice of method will depend on the characteristics of the project and the specific features of a media in which time plays a fundamental role.

En este artículo veremos el proceso creativo en la animación y los diferentes sistemas de trabajo o herramientas que tenemos a la hora de afrontarlo en función de cada proyecto y de las características propias de un medio en que el tiempo es parte fundamental del mismo.

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It is essential to understand that animation requires an arduous process that may vary depending on the desired result. Where should we begin? This daunting question has a very straightforward answer: from the beginning. If we start an illustration with one or more sketches; in animation, due to its more complex nature, we require of a broader framework; we are not only designing the graphic elements to animate, we are also creating movement from still images.

There are two fundamental elements to create movement: timing and spacing; in other words, timing refers to how long the action takes and spacing refers to where an object is at each frame of the animation. Timing relates also to rhythm, the same happens with movement and music, which are perceived similarly. When we listen to a song, we can almost unconsciously follow the beat with our body; likewise, it is possible to perceive a similar cadence in an animated object. An animation does not work well if it does not have an adequate rhythm - or, at least, it is not as good as it should be.

Timing is usually easy to understand but the notion of spacing is a bit more complicated. Indeed, this is an element that does not come naturally and needs to be learned, internalising it takes longer.

As with all artistic expressions, animation is a path where you never stop learning. It does not matter how much time you spend on it, you will always be nearer the beginning than the end. With the exception of a few geniuses, everybody else has to come to terms with the fact that it is necessary to work hard to get small wins; being an artist is not easy and it can lead to frustration. This feeling is always going to be with us, it is an inherent element of the creative process, and we need to learn to live with it.

When we learn an artistic ability, we tend to focus on methods and particular skills, and we forget how to live with that frustration. In animation, it is very important to enjoy the process, because every step is process. Animating is slow and strenuous; we can devote a whole working day to one animation and have hardly anything to show at the end. Therefore, patience and love for the trade are essential.

**Animation as a process**

When it comes to creating an animation, it is necessary to distinguish between the work process, that is, the steps taken between the initial idea and the final animation, and the animation process in itself, that is, the creation of movement from still images.

In 1981, Disney Golden Age animators, Frank Thomas and Ollie Johnston, published “The Illusion of Life”. This book introduces for the first time the 12 basic principles of animation, that is, the elements to keep in mind while animating. One of these principles is **straight ahead**, as opposed to **pose to pose**. More than a principle in itself, this describes the two most frequent work flows in animation.

Straight ahead animation starts with the first drawing of a character and works drawing to drawing to the end of the scene. This is quite similar to when as kids we did animations by drawing in the corners of the pages of our schoolbooks and rapidly flipped them over with our finger to see the outcome.
This animation technique is more organic and improvised, which makes it fresher; however, it also gives us less control over the outcome. When we animate with this technique, the character may change size during the action or it may happen that we depart from the original model. In other words, the character in the last frame might have changed so much that it rather looks like the distant cousin of the character we had drawn in the first frame.

There are also other problems. Let us imagine that our character is going to take a leap over a precipice. The leap will describe a parabola. However, it may happen that, because the frames are made one by one, our character starts descending too soon and ends up falling in the precipice instead of reaching victorious the other side. If after drawing 200 frames, we realise that the parabola is incorrect and we need to go back, we might have to throw away 100 frames and remake all that part. And, let us face it, animation is expensive in both time and work. It requires too much of an effort to discard frames we have already worked on. Hence, pose to pose animation comes to our rescue.

Pose to pose animation brings changes to the working method: the task of the animator becomes that of defining key poses. In the example where the character is going to leap over a precipice, we would make three drawings: the character just about to jump, the character at the maximum height of the parabola and the character just landed on the other side. We check that the three poses are correct and fill in the gaps with further poses. Then, we can go back through the scene several times until we are fully satisfied with the result. This technique involves the planning of the scene; in other words, we decide where it starts, where it ends and what happens in between. Little by little, the poses link with the certainty that if the base is correct, the end result will be satisfactory.

Richard Williams in his book "Animator Survival Kit", generally referred to as the Bible of animation, suggests a third method by using a combination of straight ahead and pose to pose. It consists of defining the key poses first and then filling in the gaps working drawing to drawing, to the end of the sequence. In this way, we retain the control of the pose to pose method and the spontaneity and freshness of straight ahead.

This is how we animate at home.

When it comes to starting a new animation project, the approach I take vary depending on whether it is commissioned work or a personal production. I am going to examine three of my latest projects and will explain how I conducted the work process in each case.

When I animate a film series or a short film, there is usually a pre-established process, which starts with an animatic. This is a rough animated version of the final production that provides the opportunity to test its duration and what will happen grosso modo. In these cases, I am responsible for the animation of a determined number of scenes or shots; it is teamwork and requires a high degree of coordination and organisation as it involves many people.

Although the script and animatic may narrow everything down, the creative side is in charge of...
defining the characters' behaviour. Animators need to let them act under their own criterion in order to make the scene interesting and visually attractive. The job consists of suggesting ideas and executing them in the best possible way.

To work on those scenes, it is very important to conduct some preliminary research, to compile references in the form of video footage, other works of animation or even real-life. Thanks to the internet, it is quite easy to find videos about anything; we only need to go on Youtube. Another frequent option is that of filming your own references, that is, to record yourself acting out like the character in your animation and see what and how you did it; this will make your work feel more real and tangible. There are many details of which we are not aware of and are very easy to perceive in a recording, unconscious gesture that we would omit if we worked from memory.

That being done, we have all the necessary information to start animating. To have a good basis is very important to prevent future headaches. The more you work at the beginning, the less you work at the end.

In my projects as a freelancer, the scope of creative freedom increases. When I work on my own on a project, this is usually a small piece. There, I can suggest ideas, characters or a particular animation style to suit the assignment, schedule and budget. In such cases, I start designing the characters and an animatic from the client's initial idea. In animation, it is frequent to use storyboards, but, in my own experience, clients usually perceive and understand more easily an animatic. This allows me to go through a succession of stages that are easier and cheaper to correct in their beginnings. To make changes in the animatic is quick; to change a definite scene can be a nightmare. Besides, as I have already discussed, animation is expensive.

It is when the client approves the animatic that I start working on the animation following a similar process to the one already explained.

In my personal projects, I logically have more freedom and am able to improvise and experiment with the working method. I usually undertake these projects as learning systems. I think they are necessary to develop ideas and find those happy accidents that I will apply to my following assignments. One of my favourite projects was to create a series of animated loops over a two years period, approximately one per week. Every Friday, I would upload to my social media the animation I had created that week; the only condition I imposed on myself was that it had to reproduce on a continuous loop. I finally did 112 pieces, and more than the end result, what was interesting was the learning that occurred during the process.

In this case, the working method consisted of opening a 1080 x 1080-pixel file, quite frequently start drawing a character, and then loop the action, mostly walking cycles. Other times, I would go back to the characters I had drawn in my sketchbooks. I normally carry one on me; I like them to be of the cheap type so I do not feel intimidated to doodle on them. I do not know if it is common, but if the quality of the sketchbook is too good, I feel under the pressure to get it right, so I end up not drawing anything. These books are a great source of ideas and characters, which frequently come up without thinking, during empty moments or waits.

Once I have chosen the character, I start with the animation. Sometimes it all starts with no clear idea of what I am going to do, and with the freedom to start again if I am not satisfied. To find the rhythm I mentioned before, I animate geometrical forms with very simple actions. For example, if the character were jumping, I would animate with a circle performing the jumping movement, and then I would draw the character around it.

During the process, it is not rare to discard an animation or start all over again half way through the job. There were occasions in which, because of my improvised approach, I found myself in a dead end, but I did have my animated loop eventually. Even when the process is pure improvisation, it is possible to find shortcuts and tools that will be useful in the future, and that add up to my animator's repertoire.

In any case, animation is a broad discipline and animators should be eager to learn and discover new things with each new project despite its freedoms and limitations. The feeling with each animation is that of starting from scratch. Some time ago, I read that an experienced animator revealed he felt like an imposter whenever he started a new project; he had the feeling that he was a fraud and everybody was going to find out. I suppose that the butterflies in the stomach never go away in artistic professions where you can never stop learning. This is certainly the case in animation.
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