

# Basics of creating characters, objects and backgrounds

## Introduction

Physical creation of characters, objects and backgrounds is **one of the key steps in preparation of your stop motion animation** film and also a very fun and creative one. Unless you are using pixelation as the technique, in which you use living persons (read more about different stop motion techniques in chapter Introduction into stop motion), you have to create all that you need from different materials. But the purpose of this chapter is not to quickly jump in the physical creation process. **First we want to give you more general information about planning the creation of your characters, objects and backgrounds and advise you on all the details you have to think of before you start.** In this stage it is already extremely important for you to have a story developed, character profile made and a good storyboard drawn so you will be able to plan your characters and backgrounds in detail. If you hadn't read the chapter on storytelling please do so first in order to be able to follow this chapter.



*AnimaVision in action*



- If you hadn't draw or write your **story board** yet please do so with the **focus on the wideness of the shots and all the movement** that has to happen in the shot.
- Think about all the **physical aspects of your characters and objects**. How big do you need to have them for different shots, how many and how detailed they should be, also considering the wideness of the shots, what parts you will need to move to make them alive.
- Think as well **how many different backgrounds** you will need, how big and detailed the backgrounds should be, how the backgrounds should look like.
- **Make a detailed list of all necessary elements** considering also approximate sizes or even detailed sizes in centimetres.



## Equipment and tools

This chapter is **still a part of the preparation phase of your film**. Your idea is mostly still developed 'on paper' but is at the same time getting much more detailed in order to **support your character, objects and background creation** in the way that creates a solid basis for good animation. Therefore you will need for this chapter some **pencil, color pencil, crayones, paper, board or a tablet or computer** in order to define your characters, objects and backgrounds and make them visible or share them with other participants of your film production.

## Main part

When making animated films an important part of the preparation is a well defined story with also well defined characters, objects and backgrounds and as well a defined

overall style or mood of the film. As a next step a good storyboard has to be written or drawn to give us detailed information about how many and what kind of shots we will have.

## Visible Storyboard

When creating characters, objects and backgrounds it is good to **have your storyboard somewhere near** where you can always check on what you will need. You should as well **make a written list of all characters objects and backgrounds that you will need** to create with the general idea of the sizes or even sizes strictly defined in centimetres and with defined moving parts of characters and objects.



*During stop motion workshops you can make a storyboard visible for everyone by drawing or writing every shot on a separate piece of paper and hanging it on the wall or on the board as you can see on the first picture. In the second picture you*

*see characters, objects and backgrounds that were made in advance with different movable features and also some of them in different sizes.*

*Of course you can work in a digital environment as well. Sharing your storyboard with the help of the on-line sharing tools can even support you and your group in working also when not in the same place or at the same time.*

## **General guidelines on creating characters objects and backgrounds**

Many times in making more complex stop motion animation you will have **scenes divided into more shots** that take place in the same location and at the same time. These shots will vary from wide to narrow ones (please read more about framing for film in the Camera basic chapter in the Vision part of this handbook). Different sizes of the shots will require some extra work in **building your characters, objects and backgrounds in different sizes.**

At this point it we recomend you to already go to the chapter about the camera in animation and peek a bit. As you will be able to read in the chapter about camera in animation **the lenses of cameras and the tripods or down shooters can be limited in the size** of the picture area that they can cover. That is one reason why you many times have to make characters, objects and backgrounds in different sizes based on the widens of the shots you want to make. If your characters for example are made in small sizes to look appropriate in the wide shots, you are often not able to zoom in enough to get a narrow shot of their faces or some other detail of their body parts.

The second reason is that **for the wide shots your characters usually have less movable features and your backgrounds are more versatile.** When for the narrow shots the features of characters should be much more developed and the background

can be very uniform (just in one colour even) or a spectator sees just a part of it.



*The background, table tennis table, rackets and a ball were in this case constructed in two different sizes in order to be able to shoot a wide and a narrow shot. This is because one of the above mentioned reasons as we were not able to approach the scene made for the wide shot close enough with our lens to shoot also the narrow shot.*

*We recommend you to simulate or even make a test setting of your animation setup including the camera that you plan to use for your film before you start creating. For this please follow the advices in the chapter about the camera. That will help you create all the necessary elements even more precisely.*

## **General preparation of characters**

When creating a story you always put a **special emphasis on your characters**. They are your stars that carry the story forward. There can be one or more main characters and beside main characters other side characters can appear that have

less important roles but are important for understanding the story or understanding the setting.

Already when building a story, character profiles and overall style of the film, **you should put a lot of thought into how your characters should look like.** You should define their physical appearance (height, hair, body type, clothes...) and as well their character and mood that reflects in their physical appearance.

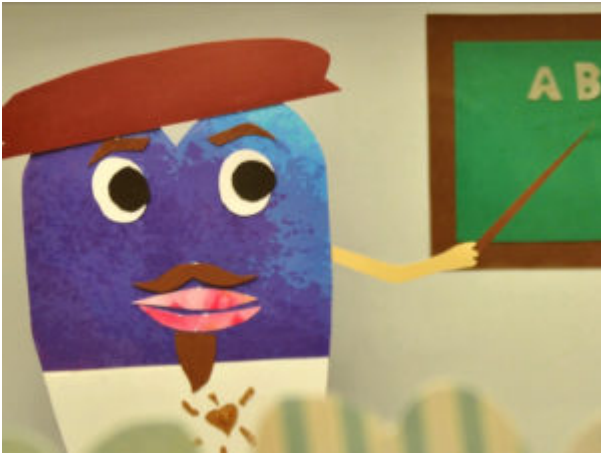
Characters that play a main role in your stop motion film are mainly made in the way that they are able to move and have one or more **different movable body parts** (arms, legs, fingers, mouth, eyes..).

**The most complex made character is usually the main character or the main characters** if there are more of them that play an important role. Characters that are just in the background or play some less important role can be made with less movable parts.

It is also good for the main character or characters to have some **exposed characteristic** that the spectator can immediately distinguish him or her from other characters.

Characters can have moving

- Head
- Arms (also in different joints) and sometimes also fingers
- Legs (also in different joints)
- Eyes and eyebrows
- Mouth
- ....



*The fictional character in the first picture is made in cut-out technique and has various movable features, he can move his eyes (eyeballs), eyebrows, mouth, arm and a stick. We had to make all the movable parts separately. All these parts are connected to his body with removable glue pads (see more about connecting body parts with glue pads in the chapter Creating characters in 2d). The character in the second picture is made of plasticine. Plasticine by itself as a material already allows you to do a lot of different movements. You only have to create additional forms like eyes and mouth mostly when animating the face expressions.*

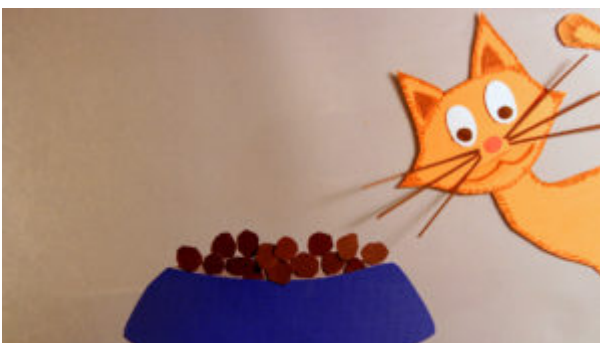
The characters can move **one of its parts at a time** or **they can move more of their parts simultaneously**. The second option makes them visually much more natural and alive since all living beings when performing different movements move more of their features at the same time. Think about a simple action like drinking coffee. When drinking coffee a person usually moves at the same time as her or his hands, lips and eyes. He or she doesn't perform each action separately.

*Video: Moving more features at the same time (from Kotikapne, LIJAMedia – SI). As you can see in the video the character is moving at the same time his lips, eyes, eyebrows and a hand with a stick. This way the movement appears more natural and humanlike in comparison in moving one feature at the time.*

## **Creating character for narrow and wide shots**

If you have a complex film and characters in different sizes, that is many times necessary due to different reasons that we already mentioned above, **the characters that are used in narrow shots can require much more details and moving parts than characters used in wide shots.**

Characters for wide shots can have less details in face, but (depending on a shot whether they are moving or standing still) they may need some movable arms or legs. The characters in narrow shots usually require movable eyes (eyeballs and eyelids), movable mouth or even some other changeable detail.



*The orange cat is made in two sizes. The cat in the narrow shot is made bigger and has movable eyes and mouth when the cat in the wide shot doesn't. The cat created for the wide shot was too small in order to make for her movable eyes and*



*mouth but is just the right size for the wide shot.*

If you are creating the same characters in different sizes for different shots you also have to **put some attention to size ratios**. The ratio between characters in different shots should be the same whether you make all of them in small versions for wide shots or bigger versions for narrow shots.

Many film scenarios also require detailed shots of body parts. They are usually created completely separately from whole bodies or faces of our characters.



*The hands in picture one and in picture two were created completely separately from the whole character in order to be able to animate the shot.*

## **Visual continuity of characters**

When creating our character in different sizes you also have to think about the visual continuity. That means that

**characters created for different shots should look the same even if simplified.** You should use the same materials, colours, and create them in similar shapes in small, middle or big versions. This is especially important if there are more persons creating a single character in different versions. It can happen quite fast that characters in different sizes don't look as the same person anymore. Therefore it is good to **create prototype characters first** with defined sizes and materials for different shots or put only one person in charge for creating all of them.

## **Different types of characters**

As we mentioned a couple of times in this handbook, stop motion animation is a wonderful technique that gives you a lot of possibilities to make alive not only **human figures** or **animals**, but also ordinary **objects** or **imaginative figures**. Something that in real life is just a part of inanimate nature or even doesn't exist can instantly become alive and dance and jump around, talk, sing, get angry or fall in love.

When using objects or imaginative forms as your main characters you can **just move them around as they are** or **personify them with giving them human or animal features** like legs, arms, tail, eyes, ears, wings...





*In the first picture the main character is the red ball that can move its hands and eyelids. In the second picture the main characters are made from plasticine in an imaginative forma and are able to move around and move their lips.*

It is only **up to your imagination** and as well time and production circumstances to decide how your main characters will look like.

## **General preparation of objects**

Objects (that are not functioning as characters but mainly as objects) **can play an important role** in your film. They can be used as **accessories** of the main character or other characters or can be part of the **background** (but not attached to it). They can be non movable or simple with only one or two movable features, but as well more complex if necessary.





*In the first picture there is a car as an object that is moving through the frame, you can move it the way it is or improve the movement by animating the movement of the wheels as well. In the second picture you can see an accessory – the bag of french fries – that main characters the elephants can hold and move around.*

There are many ways in what objects can move or have movable features and they depend on the story and overall style of your film and on the decision on how detailed the animation should be. **Objects can move by itself as shown above like a car, bicycle, a ship or a character can move them.** You can also have objects that **can have some movable features** like the tree with movable branches, clouds in the sky, water that is moving...

When you have more objects or objects have more movable features you can have only one part of the object or one object moving at one time in your shot or **the shot can be more complex with a lot of movement.**

The use of different objects and its movements can **help you explain the story better** and make it **visually more appealing and alive.** It can as well help you **establish the shot** so the spectator can get a good grasp of the location before the real action starts to happen. That takes you at least 12 frames depending on the complexity of the shot (read more about timing in the chapter about animating). Although the shot is still like a mountain vedute or a house in the distance, **small**

**movements give the spectator the feeling of liveliness** that the she or he wouldn't have if the shot was completely still without any movements.



*In the first picture two leaves are falling from the tree and are the only movable parts in the scene. In the second picture there are more objects that are part of the scene and can move or have movable features. One of the apples and the cup of tea that the character is holding in his hands are not attached to the background and are able to fall. Also the water is softly moving in the fontane. The leaves falling and the water moving in the fountain give the spectator enough time to perceive all the details in the shot, before some real action happens.*

*Video: Establishing the shot (from Kotikapne, LIJAMedia-SI).  
Example of the establishing the shot with the leaf falling from the tree described above.*

## Continuity of objects

Also with objects you have to be **careful of the continuity** **If the same object appears in more shots of different sizes**. The same object should be created with the use of the the same or similar materials, colours, and shapes with more or less movable features. (You can also read more about continuity of movement and props in the Vision chapter Film structure).

We will explain more about physical creation of characters and objects for the different techniques in next chapters.

## General preparation of backgrounds

Background is usually **a part of your stop motion scene that is fixed and not movable**, background can be a space, sky, nature, city, room, some imaginable place but also just a blank space, whatever you need to explain the location of your film.

When animating you usually **fix it in one position** and are very careful that it doesn't move even a bit in order to give **stability to your stop motion animation**. It is very important to fix the background in the place that the fixing is not visible in your picture.

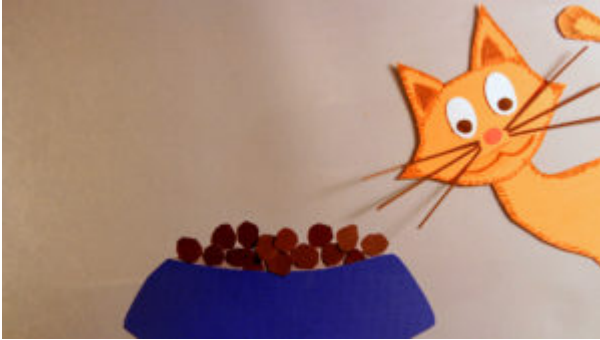




*In the first picture you can see that the animators attached the paper background on the edges to the table with the gaffa tape, on the second picture there was a cork board used as the background and fixed with the white tape to the table so it didn't move while animating. Your background can as well be an infinity paper that is fixed on the wall as you can see in picture three.*

If your film is taking place in more locations, you as well have to **create backgrounds for all these locations**. Preparing the list of backgrounds that you will need and in sizes that you will need will also be a part of your preparation process.

**Backgrounds** also sometimes have to be **made in different sizes for filming a scene that is divided in more shots**. The opposite to creating characters that are more detailed for narrow shots and more simple for wide shots, the backgrounds can be more simple for narrow shots and more versatile for wide shots.



*As an example we can again take the animation with the orange cat. In the first shot that is wide the background is very versatile when in the narrow shot that takes place in the same location at the same time with the same characters the background is simplified and, we took just one colour from the background, colour gray. In the opposition the cat in the wide shot is simplified and the cat in the narrow shot has more detailed and movable features.*

## **Visual continuity of backgrounds**

When creating your backgrounds in different sizes you also have to **think about the visual continuity** similar as with characters and objects. That means that you should use the same materials, colours, and create them similar in small, middle or big versions, but you can simplify them a bit as described in the example above where we used for the narrow shot only one color from the versatile background of the wide shot.

We will explain more about physical creation of backgrounds for the different techniques in next chapters.



# Common mistakes

As this chapter is still a part of the preparation phase of your film there is basically **only one main mistake you should avoid. And this is not defining all what you need** for making your animation well enough and/or not sharing it with your crew clearly enough.

# Exercises

It is always a **good way of learning when already working directly on some project.** But as an exercise **you can as well take a simple action** like drinking coffee at the coffee shop, try to divide it into two or more shots and **think or even write down or sketch what are all the elements that you would need to create to animate it.**

Will you need more characters and different sizes of each character? What movable feature should the characters have (also in different sizes)? Will you need to create some bodyparts separately? What are the objects that you will need to create? Only a coffee cup or some other objects as well? How will the background look like in a wide shot and in a more narrow shot? Can you use the same background or two different?

# Related topics and links

Storytelling and storyboard / Creating characters, objects and backgrounds in 2D /Basics of camerawork in animation / Principles of animation

# Methodology

When working in a group the useful method for this stage of film planning is to **have a clear visualization of your storyboard** whether written or drawn, physical or digital and go shot by shot and define and write down what are all the

elements that you need to create (characters, objects and backgrounds)for each one of them.

## **Terminology**

Framing for film, character, object, background, continuity, establishing the shot