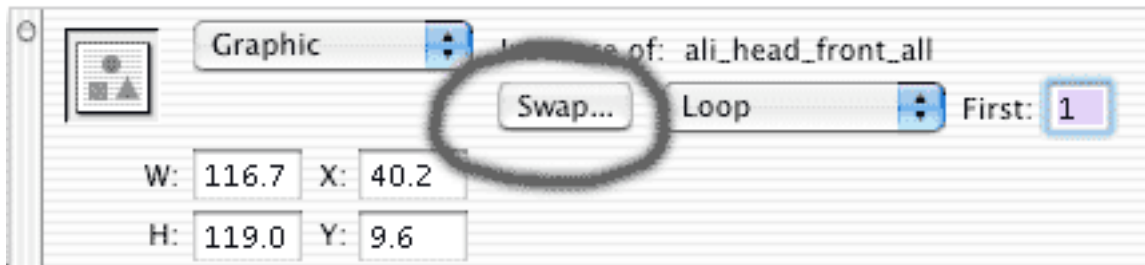


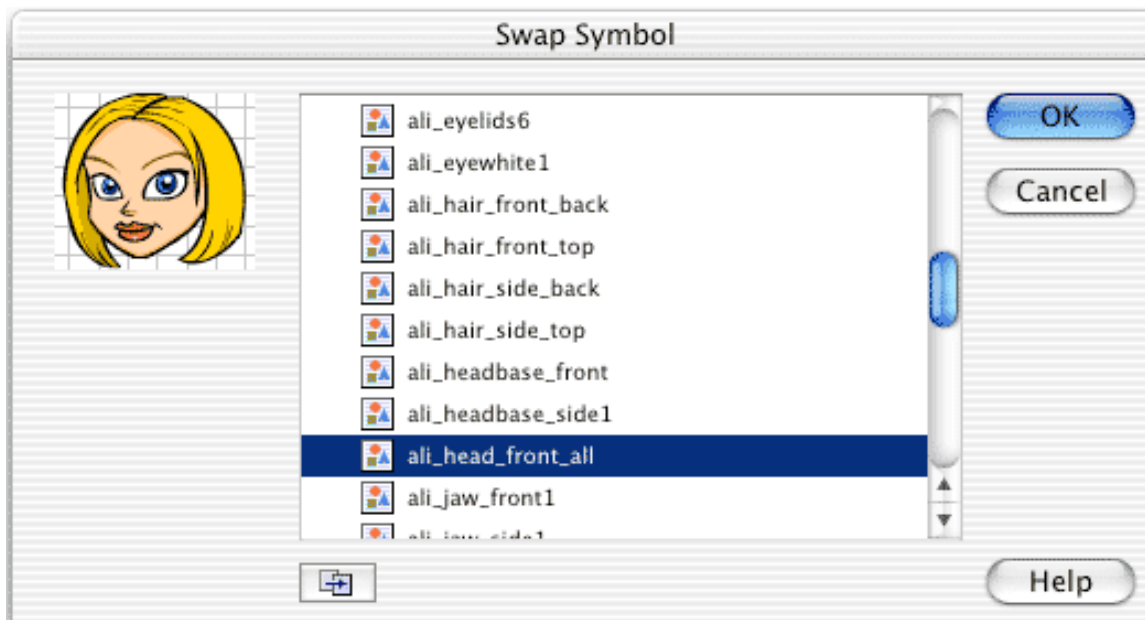
Animating Dialogue using the "Mouth Comp" method

Always use symbols There are many ways to go about animating dialogue in Flash. The most logical methods all take advantage of reusing symbols of different mouth positions. This helps cut down on file size because of the economical use of symbols, and also saves you time not having to redraw the same mouth position numerous times

One way to animate mouths is to have all of your mouth position symbols in your library. You can either drag them from the library onto the stage as you need them, or you can have one mouth position symbol already on the stage and use the "swap" function to easily replace it with the next position you need.



After pressing the "Swap" button, the "Swap" window will open where you can choose the symbol from a list that you'd like to swap.



Mouth Comp System

Another excellent method is what is often times called "Head Comps" or "Mouth Comps". This method involves putting all of the mouth positions for one character inside one symbol. Usually this is the head symbol. Each mouth position is laid sequentially, frame by frame next to each other. The reason this method is so useful, is because it ensures that no matter where your characters head is in the scene, the mouths will always be lined up correctly on the face because they are contained within the symbol. There is no need to alter mouth symbols that have been dragged from the library and need to be rotated, and rescaled to match the head.

How it works

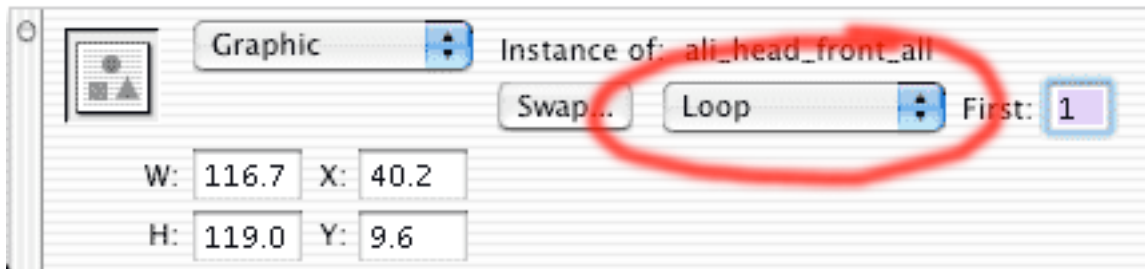
Once this symbol is placed on the stage, you might notice that all of the mouths are constantly running in a loop when you view your movie. This is because the default setting in Flash sets symbols properties to "Loop". Click on the head symbol so that it's properties are active in the property box. Then, from the drop down menu, choose "Single Frame" instead of "Loop". In the box to the right you will notice that it will say "First: 1". This means that the symbol is no longer looping through all of the keyframes within the symbol, but has stopped on frame 1. Now you are in control of what keyframe is being shown at any given time. Now is a good time to make sure you know what mouth positions are on which frame within the symbol. It's a good idea to have a list of what position is on what keyframe already written down on a piece of paper for reference.

Timeline

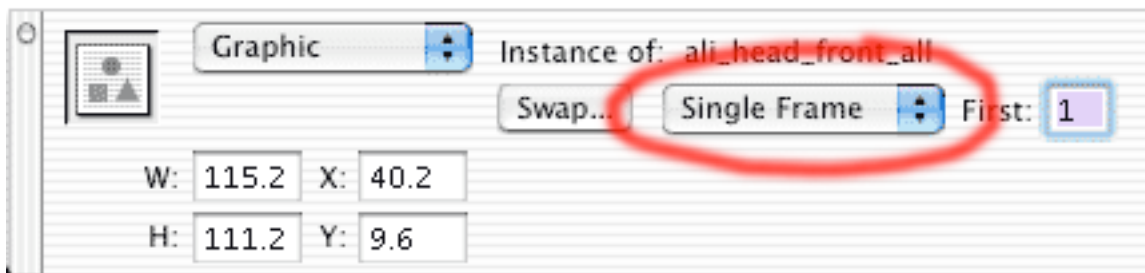
	1	5
top hair	•	•
l brow	•	•
r brow	•	•
eye blink	•	•
l eye	•	•
r eye	•	•
nose	•	•
mouth	••••••••••	••••••••••
jaw	••••••••••	••••••••••
head	•	•
back hair	•	•

Scene 1 ali_head_front_all





After clicking on the head symbol, change it's properties from "Loop" to "Single Frame" to keep all of the frames from playing continuously.



This is the keyframe order that Cartoon Solutions' Mouth Comp symbols are laid out in:

- Frame 1: M,B and P (Closed mouth)
- Frame 2: AH (Open mouth)
- Frame 3: EEE, or EH
- Frame 4: CONSONANTS (example: R, D, N, S etc)
- Frame 5: OH, W
- Frame 6: TH, L
- Frame 7: F, V

Setting Keyframes To change the mouth position, first enter a new keyframe (F6) in the timeline where you want the mouth to change. Click on the head symbol to make it active in the property box, and then type in the number of the key frame you want to display. It's that easy!

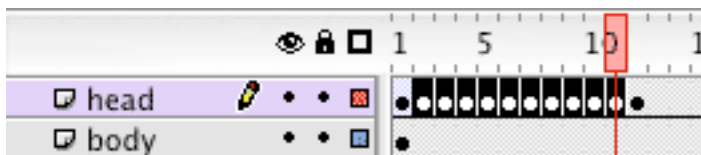
Animation Process One of the best ways to utilize this system is to first animate the head symbol for all of the action needed in the scene. Once the animation is done, you can go in and change the properties to display the proper mouth for the dialogue. If mouth positions need to be changed while the head has been motion tweened, it is best to select the entire section that has been tweened and put keyframes on every single frame. Do this by highlighting the motion tweened section and then hitting (F6).



Keyframe the motion tweened area to enable mouth sync.



Select the tweened area by dragging over it.



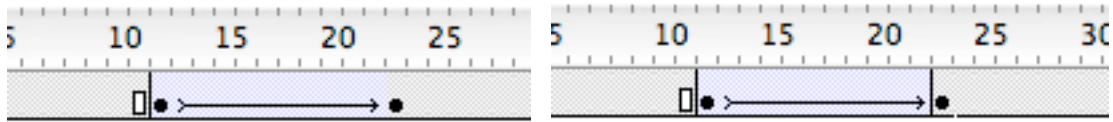
With the area selected hit (F6) to keyframe the motion tweened area.

You may be wondering why you should keyframe the entire tweened section when you may only need to change the mouth once within the action and not on every frame. The reason for this is so that if your tweened movement has been eased in or out, the timing doesn't get thrown off. The additional keyframe will change your easing in or out to just be contained in part of the tweened motion instead of the whole motion like you intended. So it's a good practice to keyframe the entire section for safe measure.

*****IMPORTANT NOTE WHEN TWEENING SYMBOLS THAT USE THE COMP SYSTEM*****

There are two different ways that you can choose to motion tween your symbols. One is by using the menu at the top of the program and selecting "Insert" and then choosing "create motion tween". DO NOT USE THIS METHOD ON SYMBOLS THAT USE THE NUMBERED COMP SYSTEM! Instead motion tween your symbol by using the Properties box at the bottom of the screen. As you click on the timeline between the symbols you want to tween, in the properties box from the "tween" option choose "motion". If you don't do it this way you will most likely have problems. The problem being that you can set numerous keyframes for a symbol specifying which frame it should display. But often times if you go back and edit or change the number on a keyframe earlier in the timeline, it will change all of the other instances of that keyframed symbol to display the same numbered frame, thus ruining your animation. It's odd that both ways of choosing to tween something don't act the same under the same

circumstance. One way to know if something has been tweened using the "insert" way, is that the keyframe will look different on the timeline. The key frame will not have a black line next to the keyframe dot.

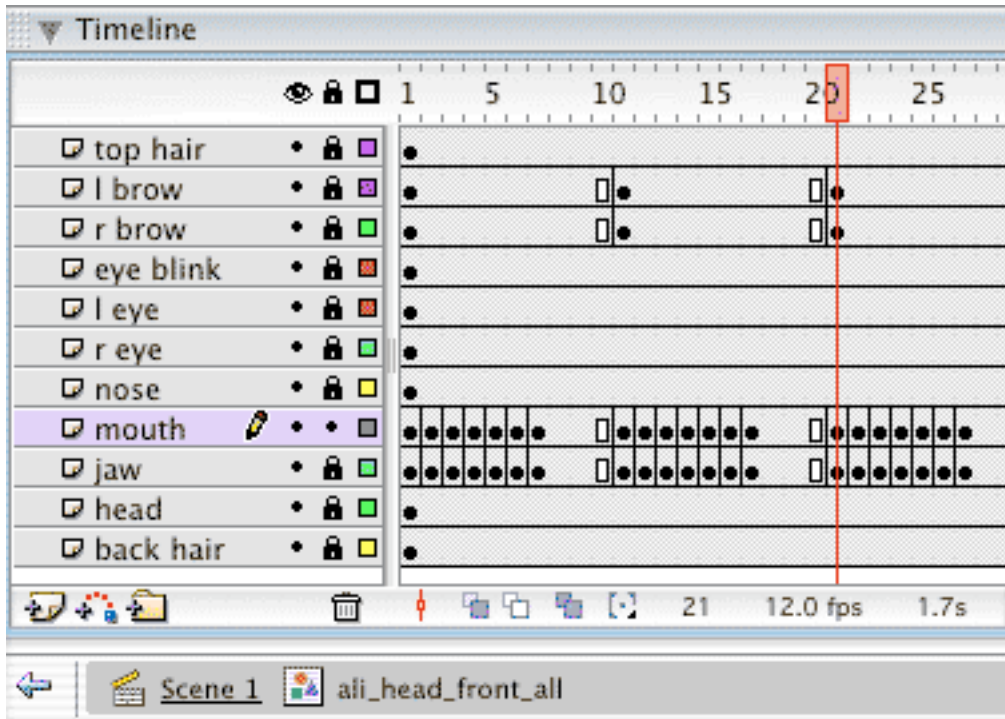


NO!!!

Yes!

Customization

Now that you understand the system, you can modify and customize it however you like. Different expressions with the mouth positions can be added further down the timeline within the same head symbol. Using the same method, your head symbol could contain a surprised look and mouth positions where the mouth is drawn to look frightened. The key to keeping the usability is to make sure that the mouth positions are still on the same frame number, just further along the timeline. So the M,B,P/closed mouth which is on frame 1, is also 10 frames further down the timeline on frame 11. Another expression could be found starting 20 frames later and the same mouth position will be found at frame 21.



Limitations and ways to get around them The limitation of using this method is that if your character is holding out one sound for a long time while speaking, you can't easily motion tween that particular mouth position to smoothly move across the face since it is locked in the head symbol. One solution is to contain an animated portion of that mouth position animating within the head symbol, at an assigned location within the head symbols timeline, that you can call upon. Another solution would be to take the animation on the stage and to copy the frames on the layer

that the head animation is on, and paste them in a new layer above. You can then break apart the head symbol and just leave the mouth as the only symbol on that layer which you are now free to animate and move however you like. Just remember that the head symbol on the layer below is still displaying the mouth as well. You can have a keyframe within the head symbol that leaves off the mouth art that you can set the keyframe to while the mouth is displayed on the layer above.

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