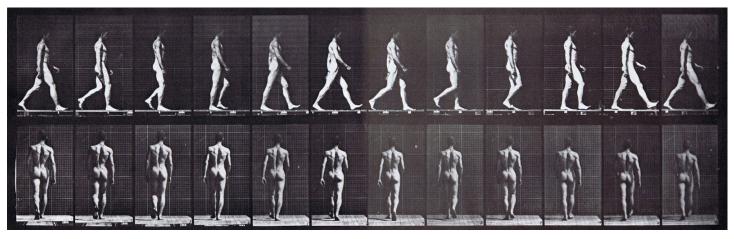
# **CHARACTER ANIMATION BOOTCAMP** WALKING WISDOM

#### RESEARCH

Animating a walk is an essential skill for the character animator, but it is also one of the most difficult to master. A complex combination of overlapping oscillations that must communicate subtle shifts in weight within the body, you really need to begin by studying walks in real life before attempting to animate a walk.

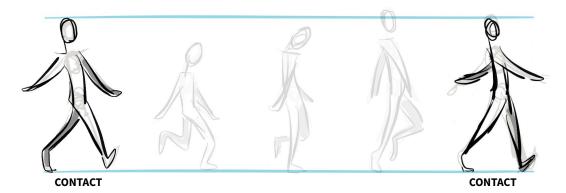
## AS WITH YOUR JUMPS, YOU CAN USE...

- <u>Video Reference</u>
- <u>Muybridge</u>
- Or, again, get your lazy butt up and take a walk!



### THUMB IT OUT

After you've studied walks in life, remember that one of our animation principles is exaggeration, so we'll be really pushing on these poses to clearly communicate with our simple characters. Also keep in mind that we're just focusing on a very basic, neutral walk. There are as many ways to walk as there are characters and emotions in the universe, so this is just a starting place. It's best to work out and understand the complex structure of a walk in a non-linear way, starting with the most extreme poses and working down to the more subtle poses in between.



We'll start with the Contact pose(s), AKA "Contact Position" or "Stride". On this pose, the legs are at their widest as a new step begins. Most of the weight is on the back foot with the ankle raised and the front foot has just made it's first "contact" with the ground heel first, thus the name "Contact". The arms are also at their widest at this point and swinging opposite to the legs, and the torso is often bent back slightly.

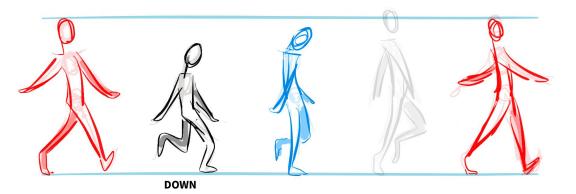




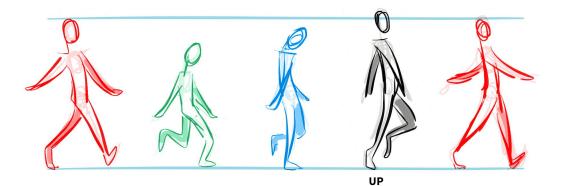


PASSING

In between the two Contact Positions is the Passing Position. In this pose the foot that made contact with the ground in the previous Contact Position has now taken the weight of the body and the body is now over the leg. The leg that was stretched out behind is now swinging forward and "passing" the other leg to start the next step. Arms are at the sides as they are in between swinging from one extreme to another, and the torso is often bent forward a bit.



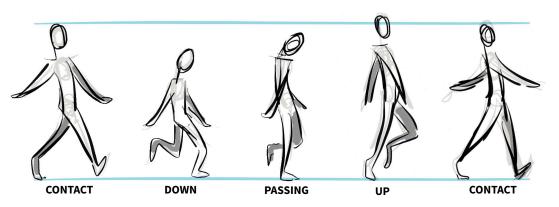
Between the first Contact and Passing Positions we need to show the body's weight passing from the back foot to the front, so in this critical pose the foot is flat on the ground, knees are bent, and the character is at it's lowest point in the entire movement. This position is often called the "Down" or the "Recoil" or the "Squash". The rest of the body is just continuing to smoothly tween from Contact to Passing.



Between the Passing Position and the second Contact, we need to show the weight of the body being pushed up and forward as it gets ready to transfer to the next foot coming forward. So the back leg is fully extended with heel up and the figure is now at the highest point in the walk. This pose is sometimes called the "Up", "High", or "Stretch". The rest of the body is simply transitioning smoothly from Passing to Contact.



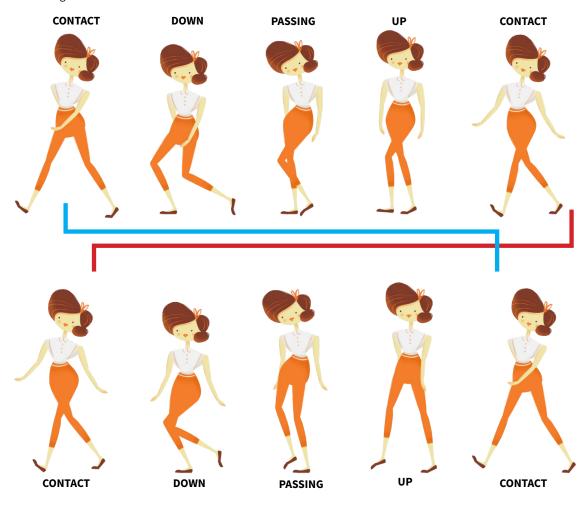




This same pattern is repeated with the opposite legs and arms to create the second step of a complete walk cycle.

## DOLLY'S TURN

As interpreted by a rigged puppet, in this case Dolly, our poses for a complete walk cycle might look something like this...



Don't forget your basic posing considerations! Strong lines of action, silhouettes, good balance, etc!

