



CHARACTER ANIMATION BOOTCAMP

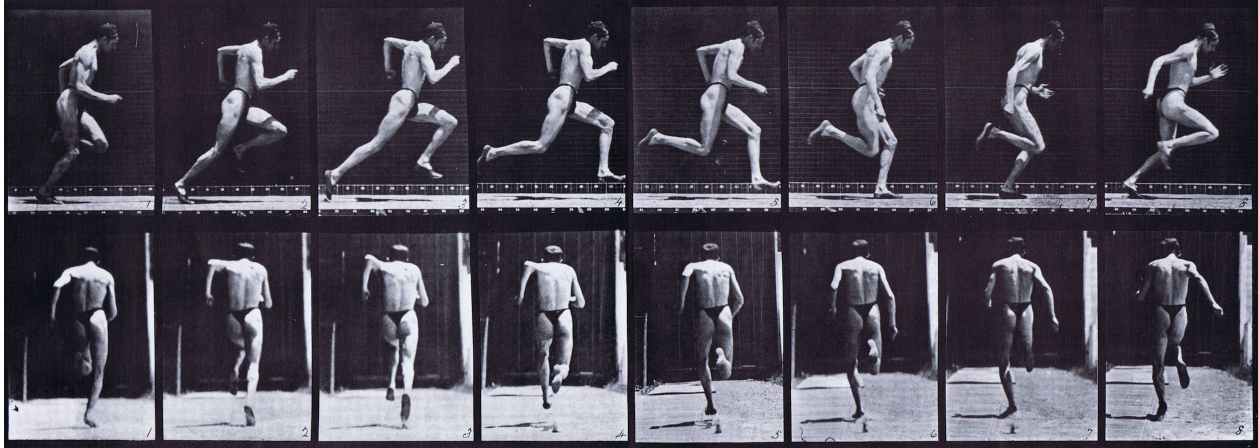
RUNNING KEYS

RESEARCH

Animating a run, much like animating a walk, always begins with research.

AS WITH YOUR JUMPS, YOU CAN USE...

- [Video Reference](#)
- [Muybridge](#)
- You ! Get up and run around!



RUNNING THUMBS

A run, especially an exaggerated one for 2D characters, is a lot like a forward or long jump that alternates from foot to foot, sort of half-walk-half-jump. In more realistic runs, the jump element is much more subtle and the torso stays leaned forward, head down, as you can see in the Muybridge example above - but note that the jump is still happening in there!

For the run in today's lesson we're going to exaggerate the jump elements as well as the head and torso movement to suit our more stylized characters. Our key poses are going to follow the same basic structure of a jump, with bits of a walk cycle sort of blended in.



PASSING / DOWN / SQUASH

PASSING / DOWN / SQUASH

We're going to start with what would be the passing position in a walk, and would be the anticipation and/or the recoil of a jump. In this case, it is both the anticipation of the next jump of the run AND the recoil from the previous jump. If we look at this like a bouncing ball, it's also a "squash" pose. The figure's on one foot with the other leg and foot passing by as in a walk. Knees are bent, torso and head are compressed forward, arms are held up high near the chest and are getting ready too "pump" out to help with the jump. Usually fists are clenched.



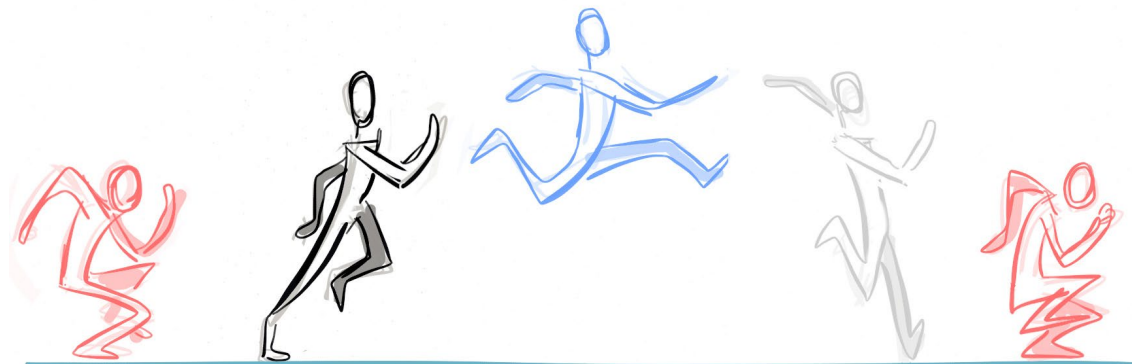
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STRIDE / UP

In between those poses we have what in a walk would be the Contact Position, AKA the Stride Position, but now it's not making contact at all because the character is up in the air. The torso is arched back, head up (less so in a more realistic run) creating a reversal of the torso and head from the Passing keys, and the arms and legs are spread out wide forward and backward opposite of one another.



PUSH / STRETCH

In between the passing and the stride poses we have the critical pose where the leg on the ground pushes the character up and forward, the other leg continues to swing through, and the arm on the pushing side usually thrusts up and forward to help the momentum. The torso is often just smoothly transitioning to the next pose or straightening a bit to help with the sense of thrust. This and the next pose are vital for creating a sense of weight in your character's run. Note the very strong diagonal line of action in this pose.



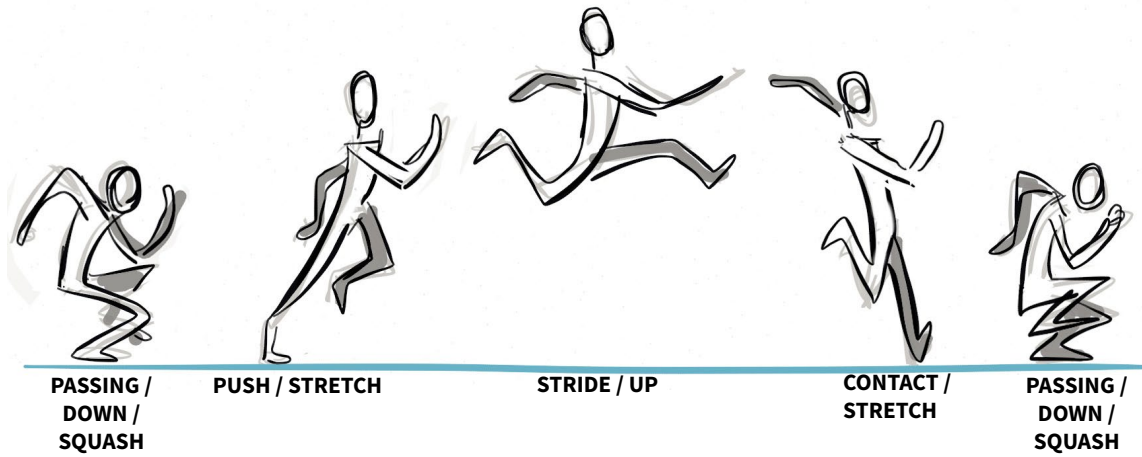
CONTACT / STRETCH

In a run, the "Contact/Stretch" pose is very similar to the "Contact" pose in the jump, except just one leg straightens out to catch the character's weight as they come down. This pose is critical for showing the affect of gravity on the character. Note again the strong diagonal line of action, a reversal of the pushing/stretching pose.



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The cycle then repeats for the other step with arms and legs opposing.

DOLLY'S TURN

As interpreted by our charming Dolly puppet, our run key poses might look something like this...

