

Walk Cycle Variations



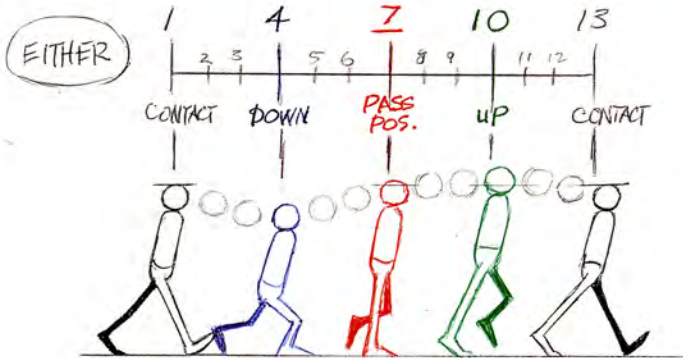
Animation Survival Kit by Richard Williams

SET THE TEMPO

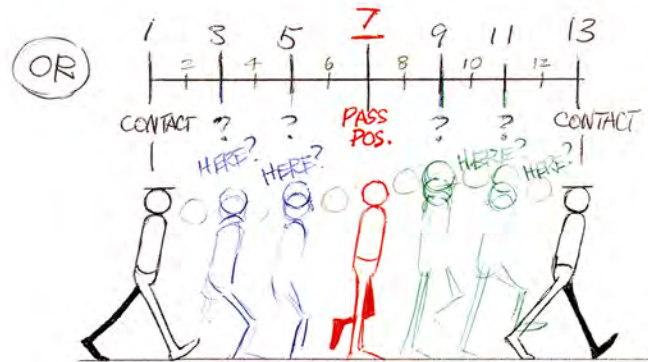
The **FIRST** THING TO DO IN A WALK IS SET A BEAT.

GENERALLY PEOPLE WALK ON 12'S - MARCH TIME (HALF A SECOND PER STEP
TWO STEPS PER SECOND.)

BUT LAZY ANIMATORS DON'T LIKE TO DO IT ON 12'S.
IT'S HARD TO DIVIDE UP. YOU HAVE TO USE 'THIRDS' - THINK PARTLY IN THIRDS.

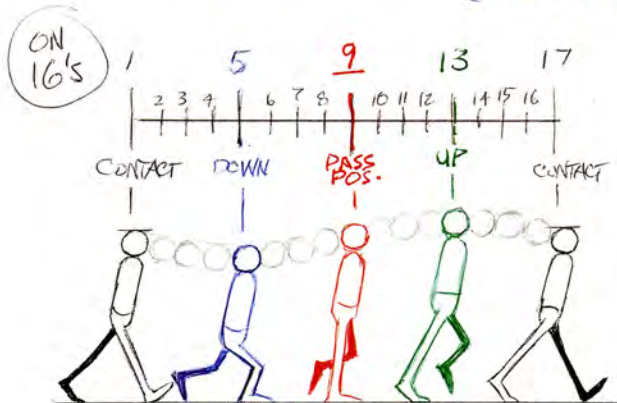


THE IN BETWEEN'S ARE GOING TO BE ON THIRDS.

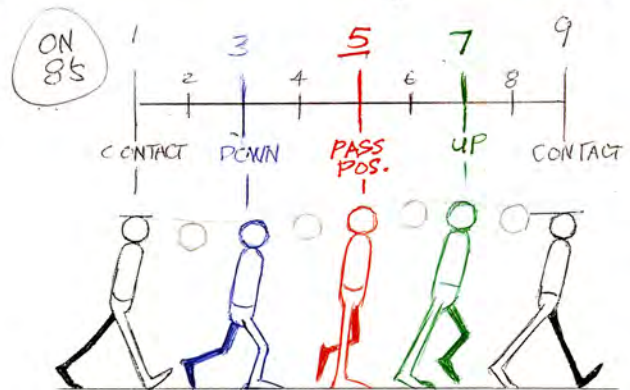


OOPS - NOW WHERE DO WE PUT THE DOWN OR UP?
HEY, THIS IS GETTING HARD - ESPECIALLY
WHEN WE GET INTO THE ARMS AND HEAD, AND
'ACTING' AND DRAPERY - MAYBE THERE'S AN
EASIER WAY?

THERE IS AN EASIER WAY - HAVE HIM/HER WALK ON 16'S - OR WALK ON 8'S.
MUCH EASIER TO WALK ON 16'S - IT'S EASY TO DIVIDE UP - SAME THING ON 8'S.
(EACH STEP = $\frac{2}{3}$ SEC) (3 STEPS PER SEC.)



WHEW, THAT MAKES LIFE EASIER.
NICE EVEN DIVISIONS NOW -



(REDUCED UP AND DOWN ACTION - SINCE
IT'S TAKING PLACE IN A SHORTER TIME)

THIS IS WHY CARTOON WALKS ARE OFTEN ON 8'S.
BUMP, BUMP, BUMP, 3 STEPS A SECOND.

SO, WE SET A BEAT:

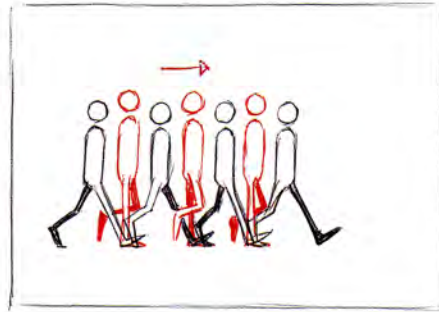
- 4 FRAMES = A VERY FAST RUN (6 STEPS A SECOND)
- 6 FRAMES = A RUN OR VERY FAST WALK (4 STEPS A SECOND)
- 8 FRAMES = SLOW RUN OR 'CARTOON' WALK (3 STEPS A SECOND)
- 12 FRAMES = BRISK, BUSINESS-LIKE WALK - 'NATURAL' WALK (2 STEPS A SECOND)
- 16 FRAMES = STROLLING WALK - MORE LEISURELY ($\frac{2}{3}$ OF A SECOND PER STEP)
- 20 FRAMES = ELDERLY OR TIRED PERSON (ALMOST A SECOND PER STEP)
- 24 FRAMES = SLOW STEP (ONE STEP PER SECOND)
- 32 FRAMES = ...'SHOW ME THE WAY... TO GO HOME'...



The best way to time a walk (or anything else) is to act it out and time yourself with a stop-watch. Also, acting it out with a metronome is a great help.

In trying out walks, it's best to keep the figure simple. It's quick to do and easy to fix – easy to make changes.

ALSO, IN DOING THESE WALKS – TAKE A FEW STEPS ACROSS THE PAGE OR SCREEN –



DON'T TRY TO WORK OUT A CYCLE WALKING IN PLACE WITH THE FEET SLIDING BACK, ETC. THAT ALL BECOMES TOO TECHNICAL. WE WANT OUR BRAIN FREE TO CONCENTRATE ON AN INTERESTING WALK PROGRESSING FORWARD.

WE CAN WORK OUT A CYCLE FOR THE WALK LATER ... PERHAPS JUST FOR THE FEET AND BODY. BUT THEN HAVE THE ARMS AND THE HEAD PERFORMING SEPARATELY.

CYCLES ARE MECHANICAL AND LOOK JUST LIKE WHAT THEY ARE – CYCLES.

CHUCK JONES TELLS OF HIS TINY 3 YEAR OLD GRANDDAUGHTER SAYING, "GRANDAD, WHY DOES THE SAME WAVE KEEP LAPPING ON THE ISLAND?"

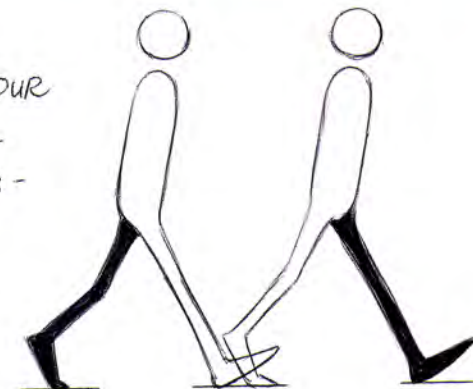
Incidentally, if you are using colours as I am here, it works just fine when you film them. I often have a lot of colours going at first, and you still see the action clearly.

Now we're going to start taking things out of the normal:

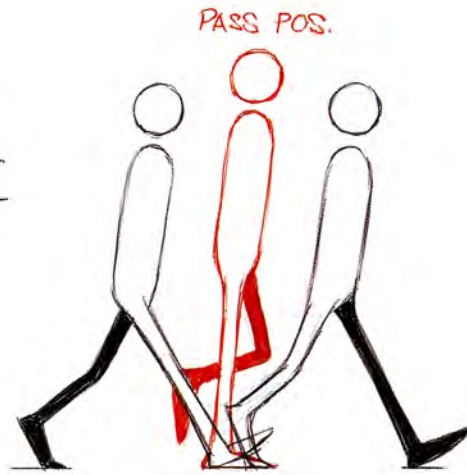
The PASSING POSITION OR BREAKDOWN

THERE'S A VERY SIMPLE WAY TO BUILD A WALK. START WITH JUST 3 DRAWINGS –

FIRST
WE MAKE OUR
TWO
CONTACT
POSITIONS –



THEN PUT IN
THE MIDDLE POSITION -
THE PASSING POSITION -
OR
BREAKDOWN



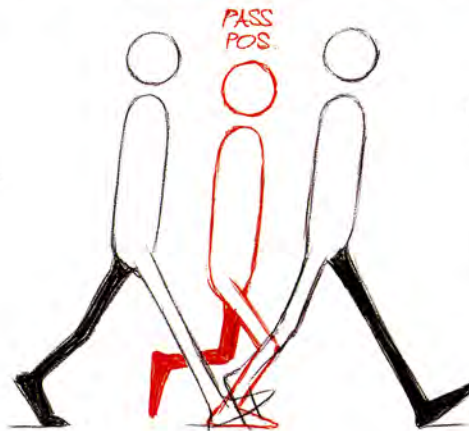
THIS TIME
WE'RE RAISING IT
HIGHER THAN
PREVIOUSLY.
WE'RE MAKING IT
THE UP POSITION -
-THE HIGH.

(WE'VE OMITTED
THE BENT LEG
TAKING THE WEIGHT
AND OUR CONTACTS
WILL ACT AS
THE LOW)

When we join these up with connecting drawings, the walk will still have a feeling of weight because of the up and down. We can make tremendous use of this simple three drawing device.

BUT LOOK WHAT HAPPENS IF WE GO **DOWN** ON THE PASSING POSITION!

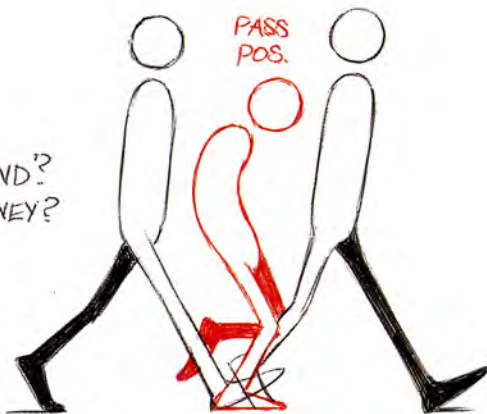
WE GET A **VERY**
DIFFERENT WALK -
A 'CARTOONY' WALK



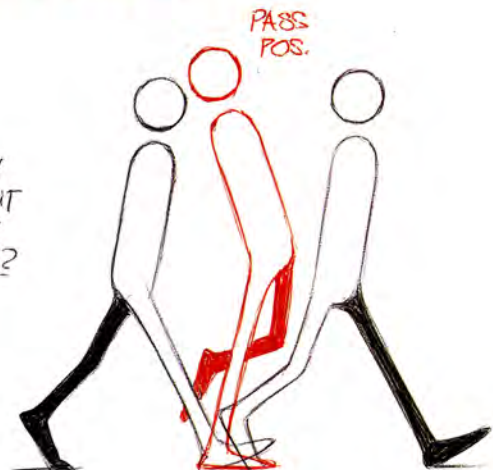
NOW THE PASSING
POSITION IS THE
LOW AND THE
CONTACTS ACT
AS THE HIGH -
STILL GIVING A
FEELING OF
WEIGHT.

THE CRUCIAL THING IS THIS MIDDLE POSITION AND **WHERE** WE PUT IT.

SQUASH
WITH A BEND?
-LIKE A KIDNEY?



HOW
ABOUT
THIS
ONE?



THESE CONTACTS ARE ALL THE SAME BUT THE MIDDLE POSITION LITTERLY CHANGES THE WALK.

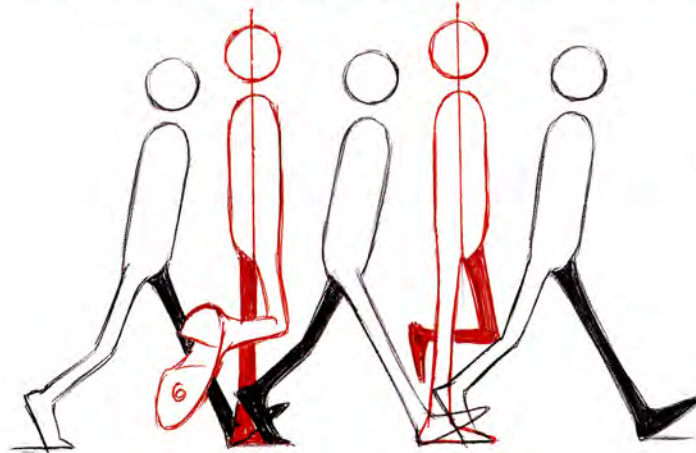


(OBVIOUSLY WE'LL NEED THE TIME TO ACCOMODATE BROAD MOVES LIKE THIS)



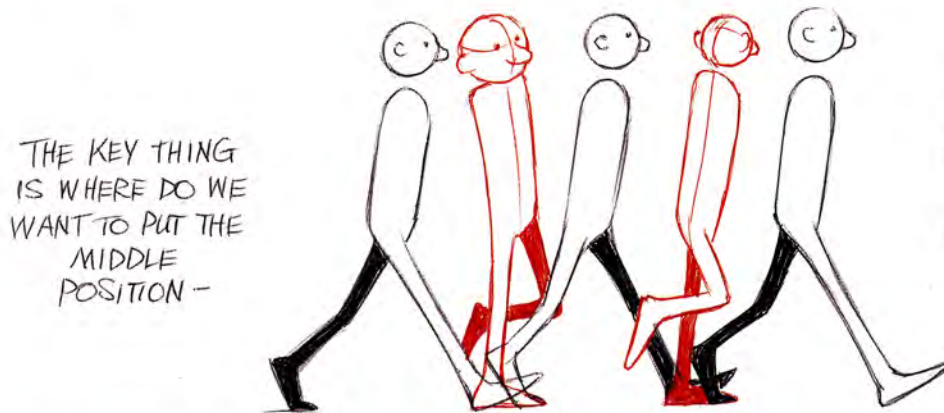
IN A SLOW STEP WE MIGHT GO AS FAR AS THIS -

WHAT IF THE FEET SWING OUT SIDWAYS ON THE PASSING POSITIONS?



AND
MAYBE
STRAIGHTEN
THE BODY
ON THE PASS
POSITIONS?

OR JUST TILT THE HEAD AND SHOULDERS SIDWAYS ON THE PASS POSITIONS -



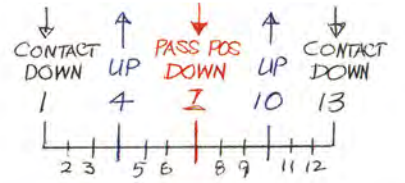
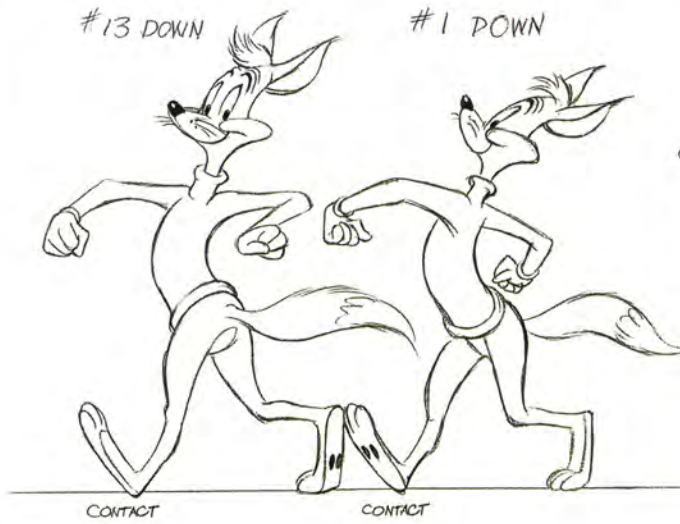
THE KEY THING
IS WHERE DO WE
WANT TO PUT THE
MIDDLE
POSITION -

NOT TO MENTION
WHAT WE CAN DO
WITH THE HEAD,
HANDS, ARMS OR
FEET -

THE VARIATIONS ARE ENDLESS -

I MADE THIS DOUBLE BOUNCE WALK BY **COMBINING** THE TWO APPROACHES.
 I DID THE STRAIGHT LEG CONTACTS FIRST, BUT **ALSO** MADE THEM THE LOW - THE DOWN.

THIS IS ON ONES -
 TAKING ONE STEP
 OF A WALK ON 12'S



THE INBETWEENS ARE ON
 THIRDS - UNFORTUNATELY.

