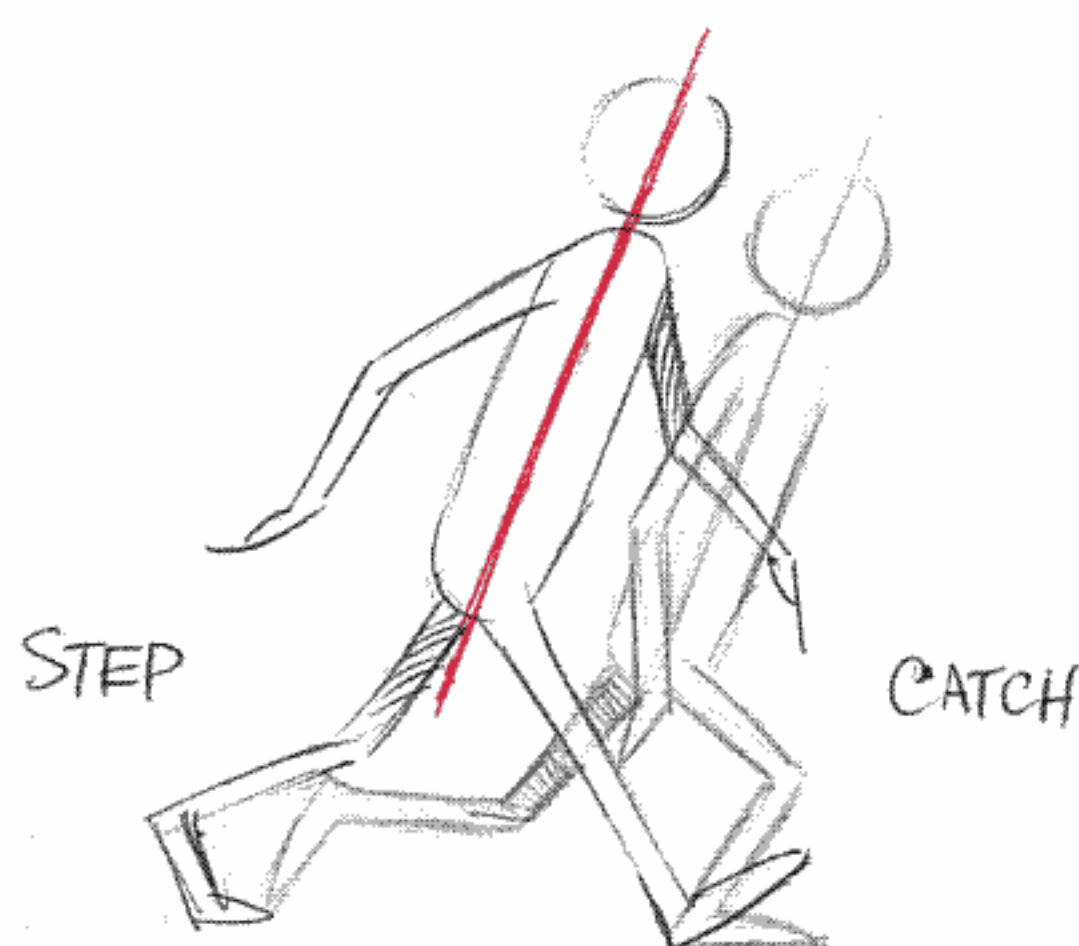




WALKS

Advice from Ken Harris:

'A walk is the *first* thing to learn. Learn walks of all kinds, 'cause walks are about the toughest thing to do right.'



THERE'S A TENDENCY
TO LEAN IN A WALK.

THE SLOWER IT IS,
THE MORE YOU'RE IN
BALANCE -

AND THE FASTER -
MORE OUT OF
BALANCE.

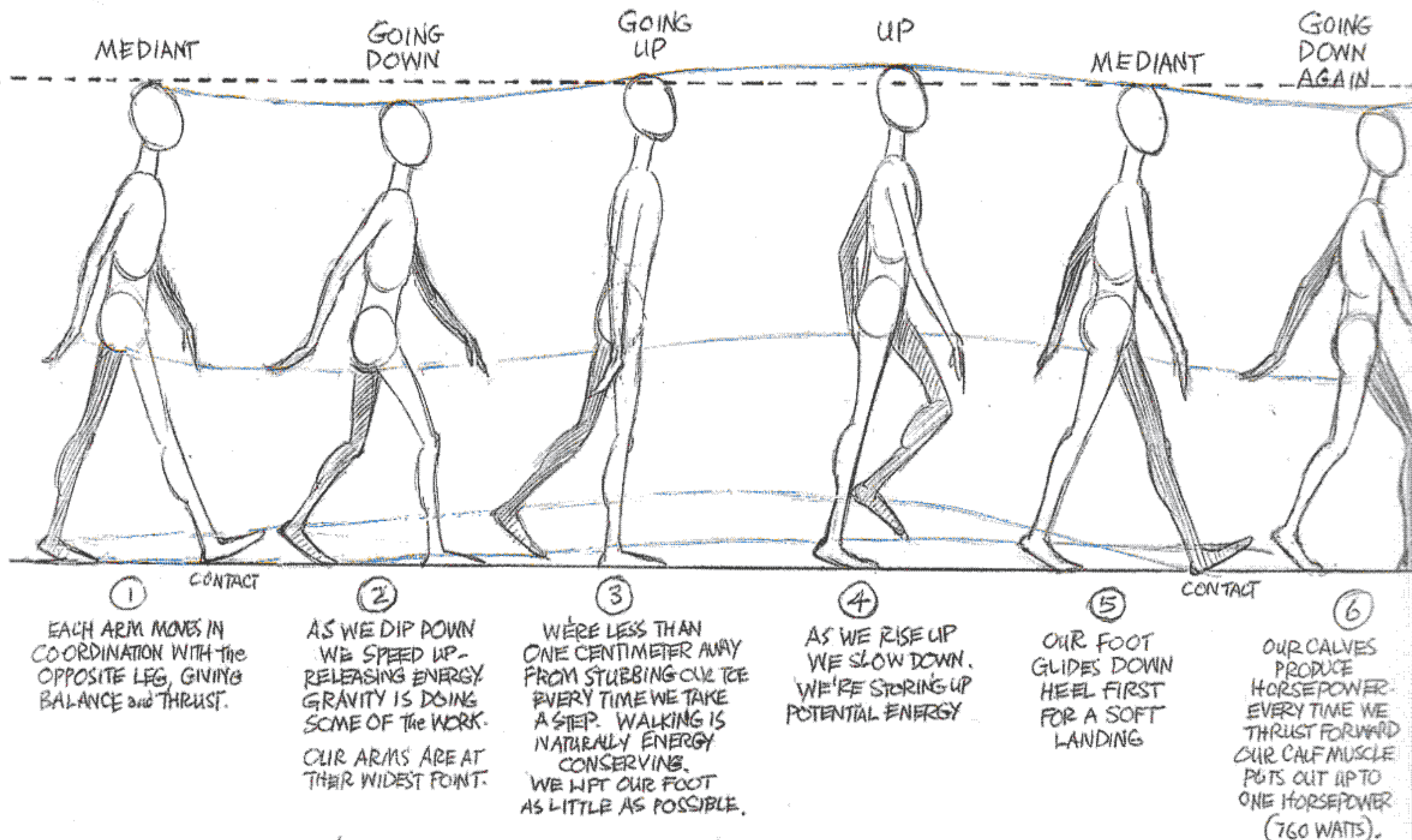
Walking is a process of falling over and catching yourself just in time. We try to keep from falling over as we move forward. If we don't put our foot down, we'll fall flat on our face. We're going through a series of controlled falls.

We lean forward with our upper bodies and throw out a leg just in time to catch ourselves. Step, catch. Step, catch. Step catch.

Normally we lift our feet off the ground just the bare minimum. That's why it's so easy for us to stub our toes and get tipped over. Just a small crack in the pavement can tip us over.

USELESS(?) BUT INTERESTING SCIENTIFIC INFORMATION ON WALKS:

DID YOU KNOW WE PUT A MILLION POUNDS OF WEIGHT ON OUR FEET EACH DAY?



DOESN'T HELP YOU MUCH WHEN YOU'RE ASKED TO ANIMATE THE WALK OF A SAD BUT HAPPY MAN — OR DOES IT?

BUT

ALL WALKS ARE DIFFERENT.

NO TWO PEOPLE IN THE WORLD WALK THE SAME.

ACTORS TRY TO GET HOLD OF A CHARACTER BY FIGURING OUT HOW HE/SHE/IT WALKS — TRY TO TELL THE WHOLE STORY WITH THE WALK.

Why is it that we recognize our Uncle Charlie even though we haven't seen him for ten years – walking – back view – out of focus – far away? Because everyone's walk is as individual and distinctive as their face. And one tiny detail will alter everything. There is a massive amount of information in a walk and we read it instantly.

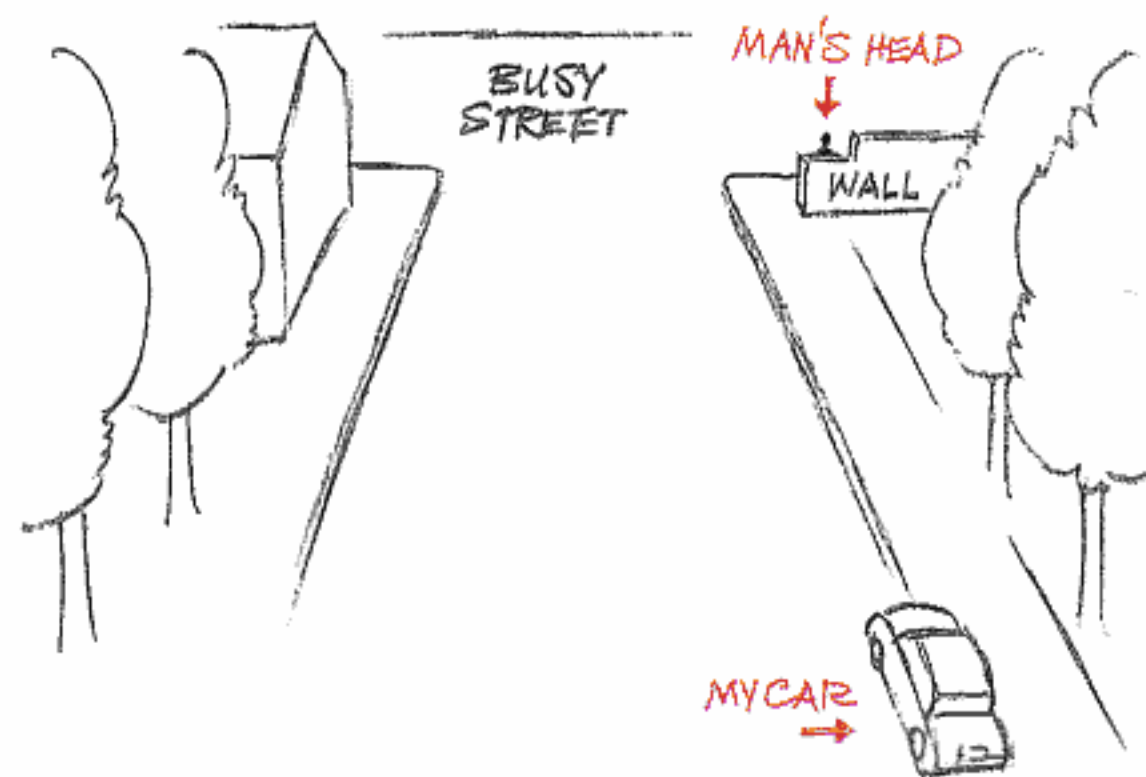
Art Babbitt taught us to look at someone walking in the street from the back view. Follow them along and ask yourself:

- ARE THEY OLD?
- YOUNG?
- WHAT'S THEIR FINANCIAL POSITION?
- STATE OF HEALTH?
- ARE THEY STRICT?
- PERMISSIVE?
- DEPRESSED?
- HOPEFUL?
- SAD?
- HAPPY?
- DRUNK?

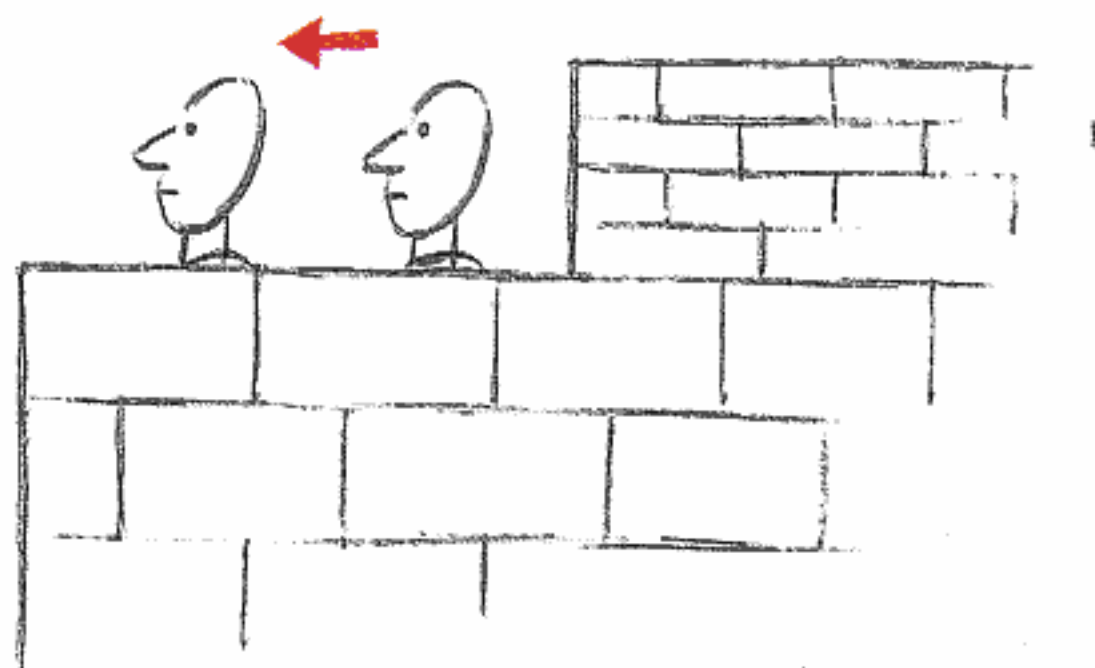
Then run around to see the front and check.

So what do we look for?

The big eye-opener for me happened like this. (Unfortunately it's a little politically incorrect, but it's a great example, so here goes.)

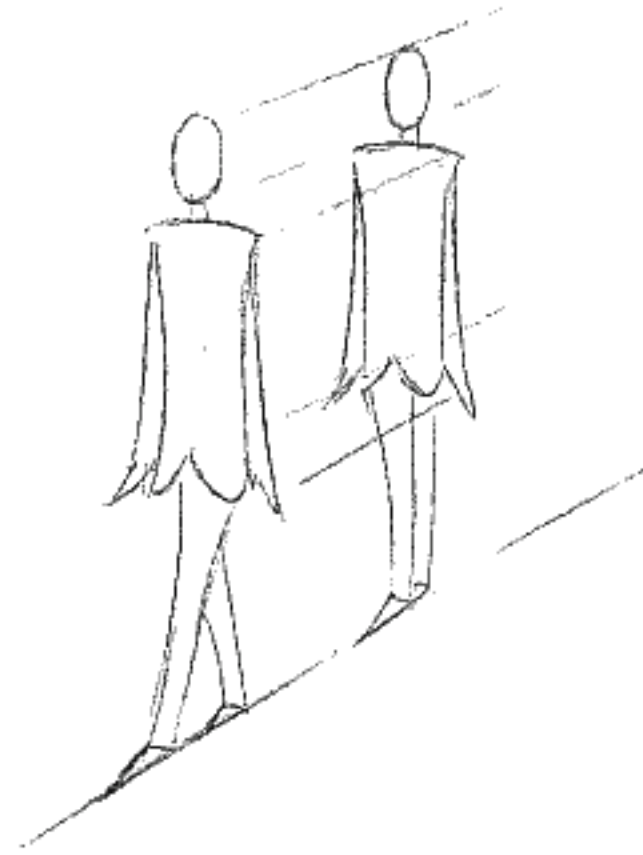


I was in my parked car turning on the ignition, when out of my peripheral vision I semi-consciously noticed a man's head walking behind a wall.

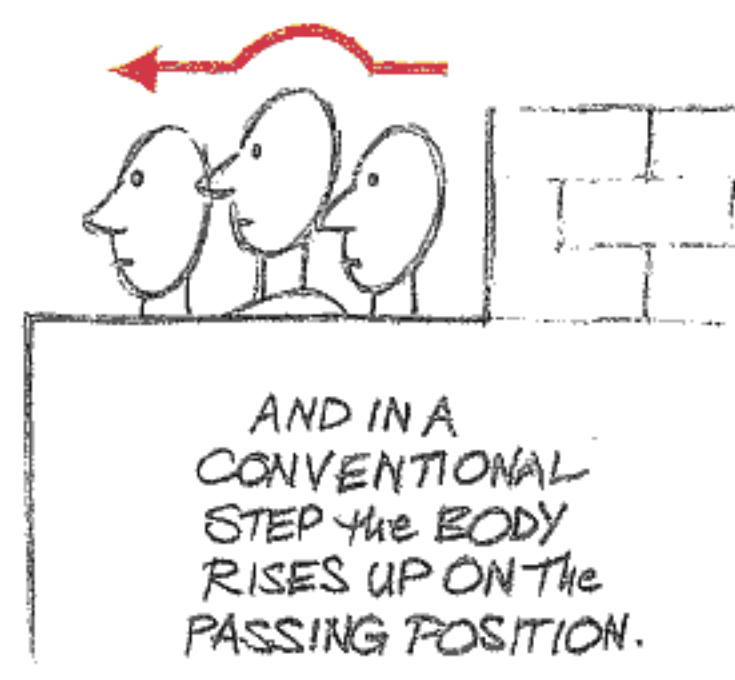
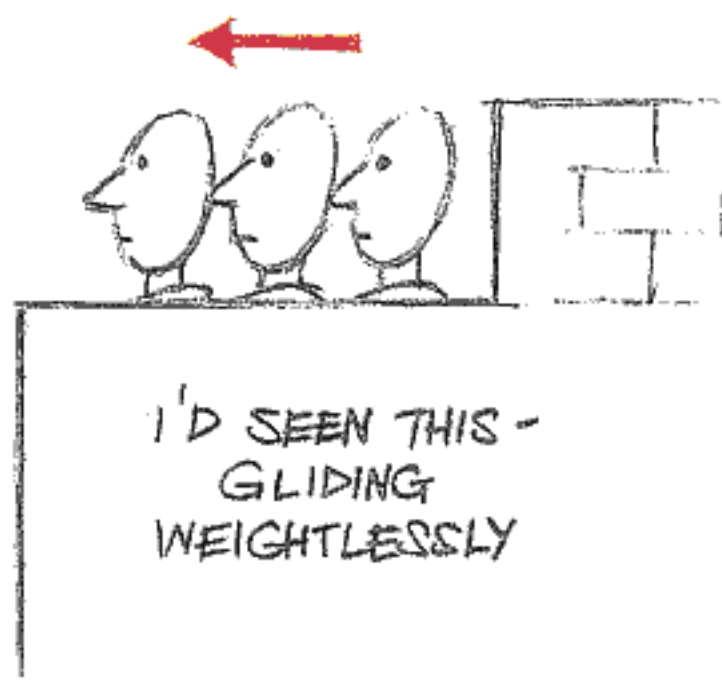


It passed through my mind that he was gay. A gay walk. Now I'm quite short-sighted – my eyes were focused on the ignition key, and it was a busy street with lots of cars and people – and he was about fifty yards away! Wow! How did I know that? This is crazy. All I'd seen was his out-of-focus head moving along behind a wall for a split second!

I started to drive away, then stopped. Wait a minute – I'm supposed to be good at this. I'm supposed to know these things. I have to know *why*! I remembered Art's advice, re-parked, jumped out and ran a block and a half to catch up with the fellow. I walked along behind him, copying him. Sure enough, it was an effeminate walk. Then I got it. He was walking as if on a tightrope and *gliding* along.

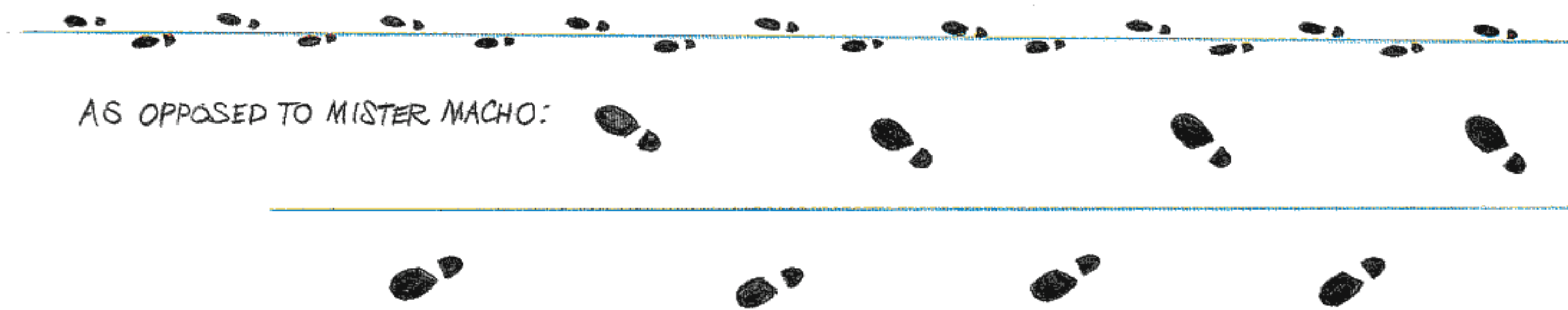


Now how could I have registered this with out-of-focus peripheral vision at fifty yards without even seeing his body? Simple, really. There was *no up and down action on the head*. Try walking on an imaginary tightrope and your head stays level. No ups and downs.



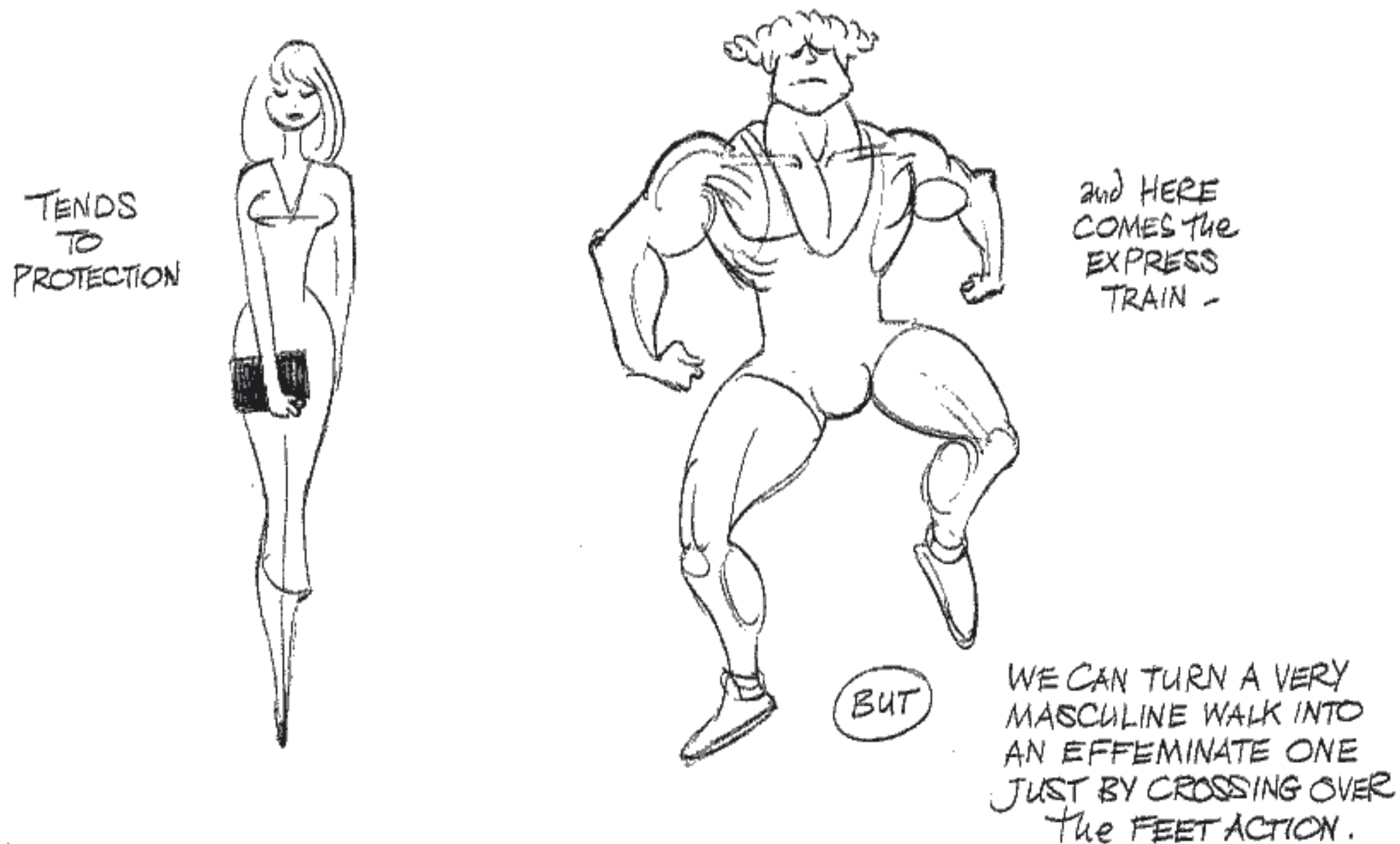
From then on the first thing I always look for is how much up and down action there is on the head. The amount of up and down is the key!

WOMEN OFTEN TAKE SHORT STEPS IN A STRAIGHT LINE - LEGS CLOSE TOGETHER = LITTLE UP and DOWN ON the BODY



Women mostly walk with their legs close together, protecting the crotch, resulting in not much up and down action on the head and body. Skirts also restrict their movement.

Mr Macho, however, because of *his* equipment, has his legs well apart so there's lots of up and down head and body action on each stride.

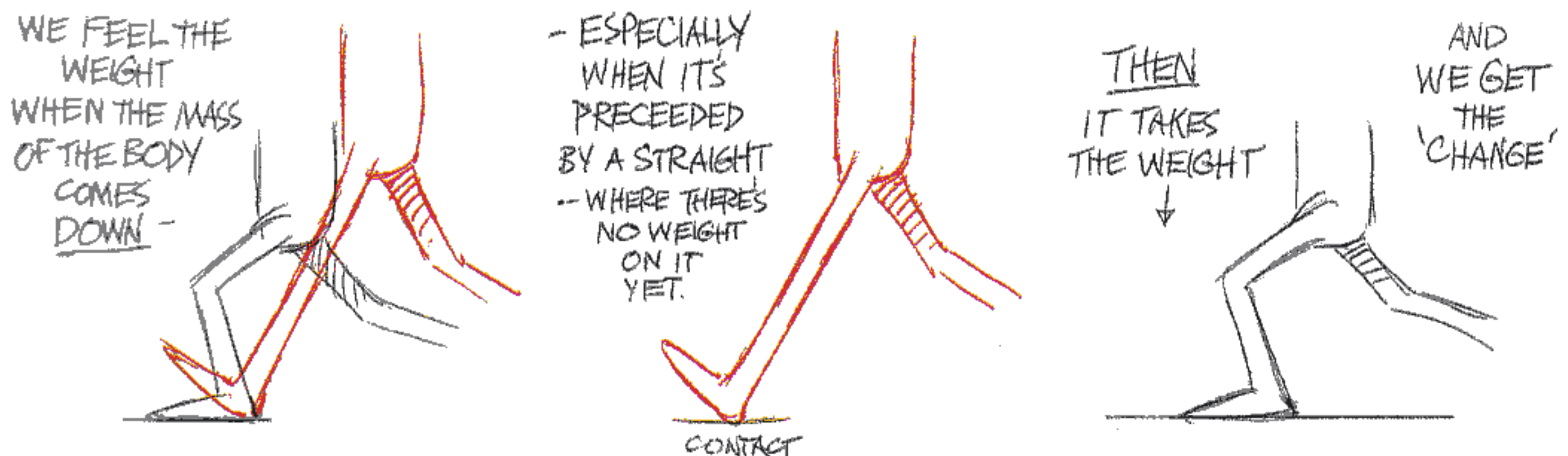


GETTING THE WEIGHT

WE DON'T GET WEIGHT BY A SMOOTH LEVEL MOVEMENT.

When we trace off a live action walk (the fancy word is rotoscoping), it doesn't work very well. Obviously, it works in the live action – but when you trace it accurately, it floats. Nobody really knows why. So we increase the ups and the downs – accentuate or exaggerate the ups and downs – and it works.

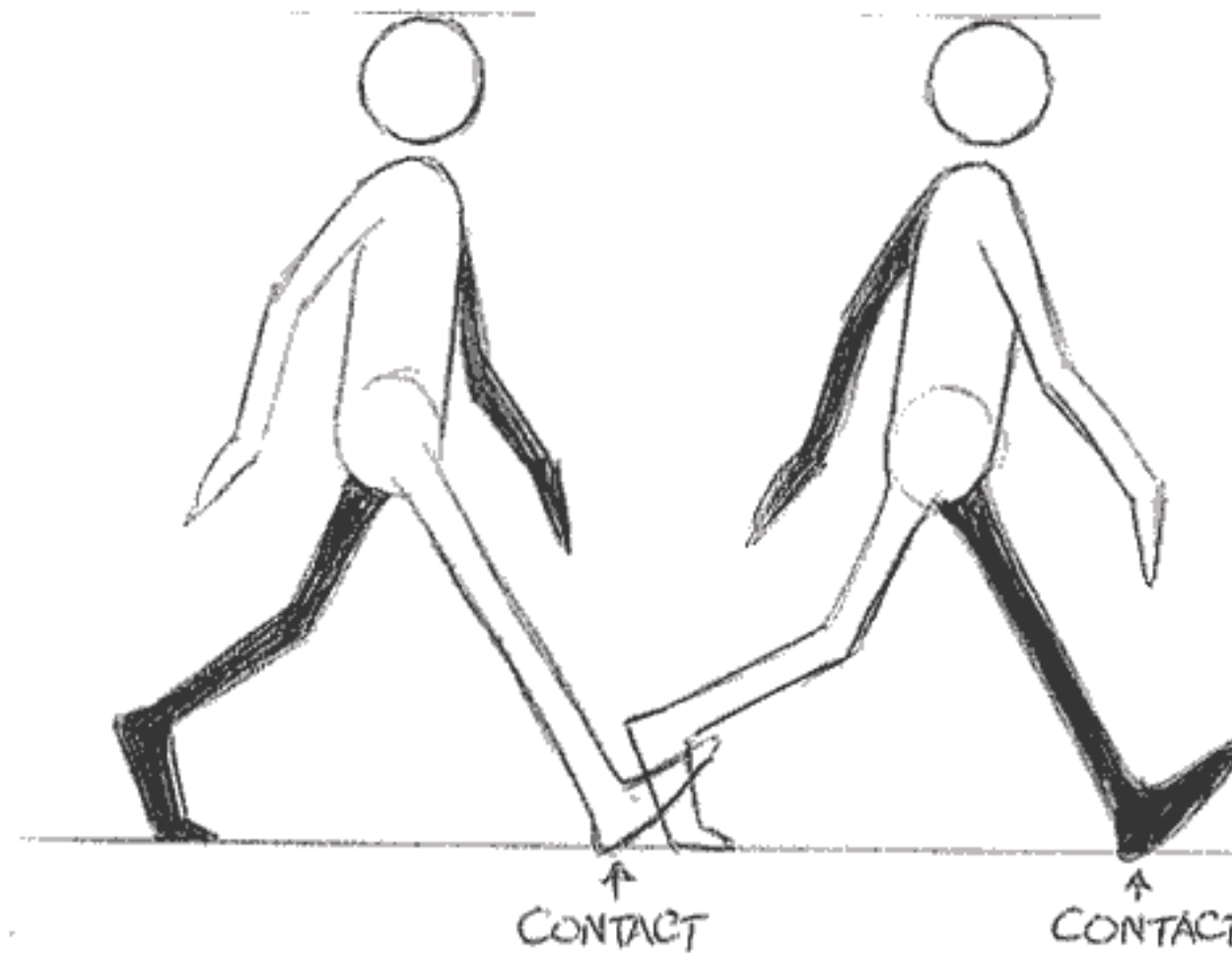
IT'S THE UP AND DOWN POSITION OF YOUR MASSES THAT GIVES YOU THE FEELING OF WEIGHT.



IT'S THE DOWN POSITION WHERE THE LEGS ARE BENT AND THE BODY MASS IS DOWN-- WHERE WE FEEL THE WEIGHT.

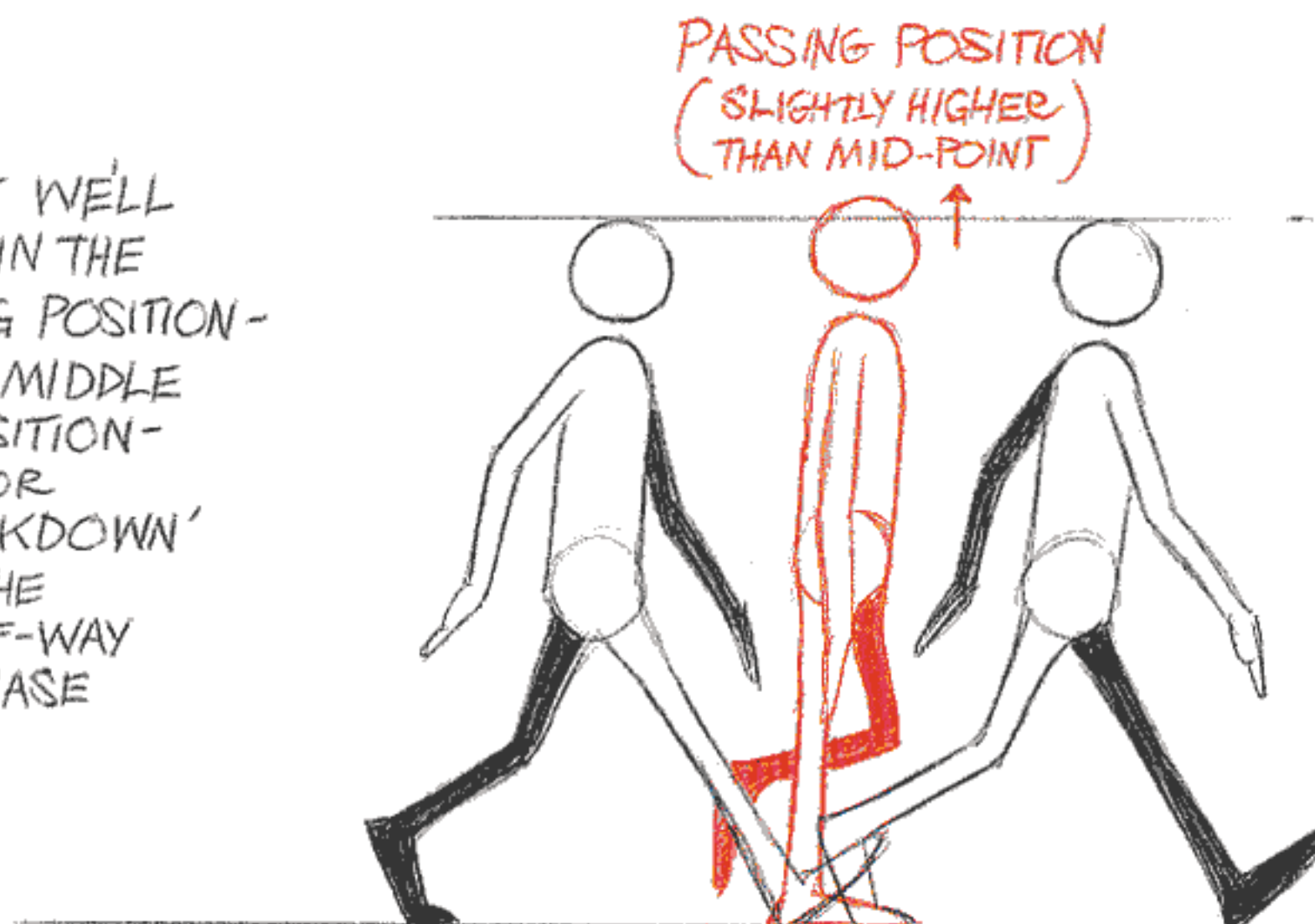
Before we start building walks and 'inventing' walks – here's what happens in a so-called 'normal' walk:

FIRST WE'LL
MAKE THE
2 CONTACT
POSITIONS –



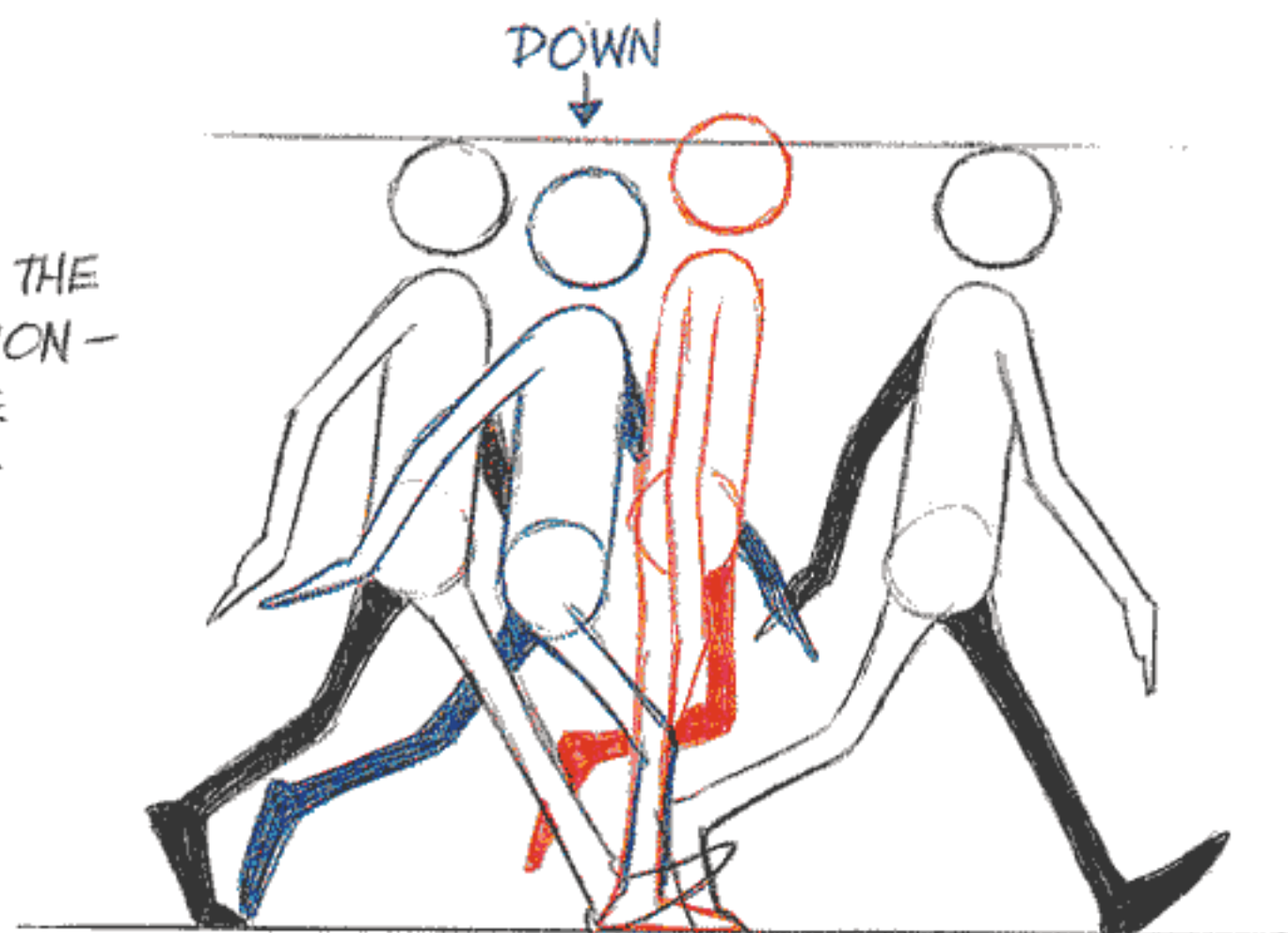
IN A NORMAL,
CONVENTIONAL
WALK,
THE ARMS ARE
ALWAYS
OPPOSITE
TO THE LEGS
TO GIVE
BALANCE
AND THRUST.

NEXT WE'LL
PUT IN THE
PASSING POSITION –
THE MIDDLE
POSITION –
OR
'BREAKDOWN'
– THE
HALF-WAY
PHASE



BECAUSE THE LEG
IS STRAIGHT UP ON
THE PASSING POSITION,
IT'S GOING TO LIFT
THE PELVIS,
BODY and HEAD
SLIGHTLY
HIGHER.

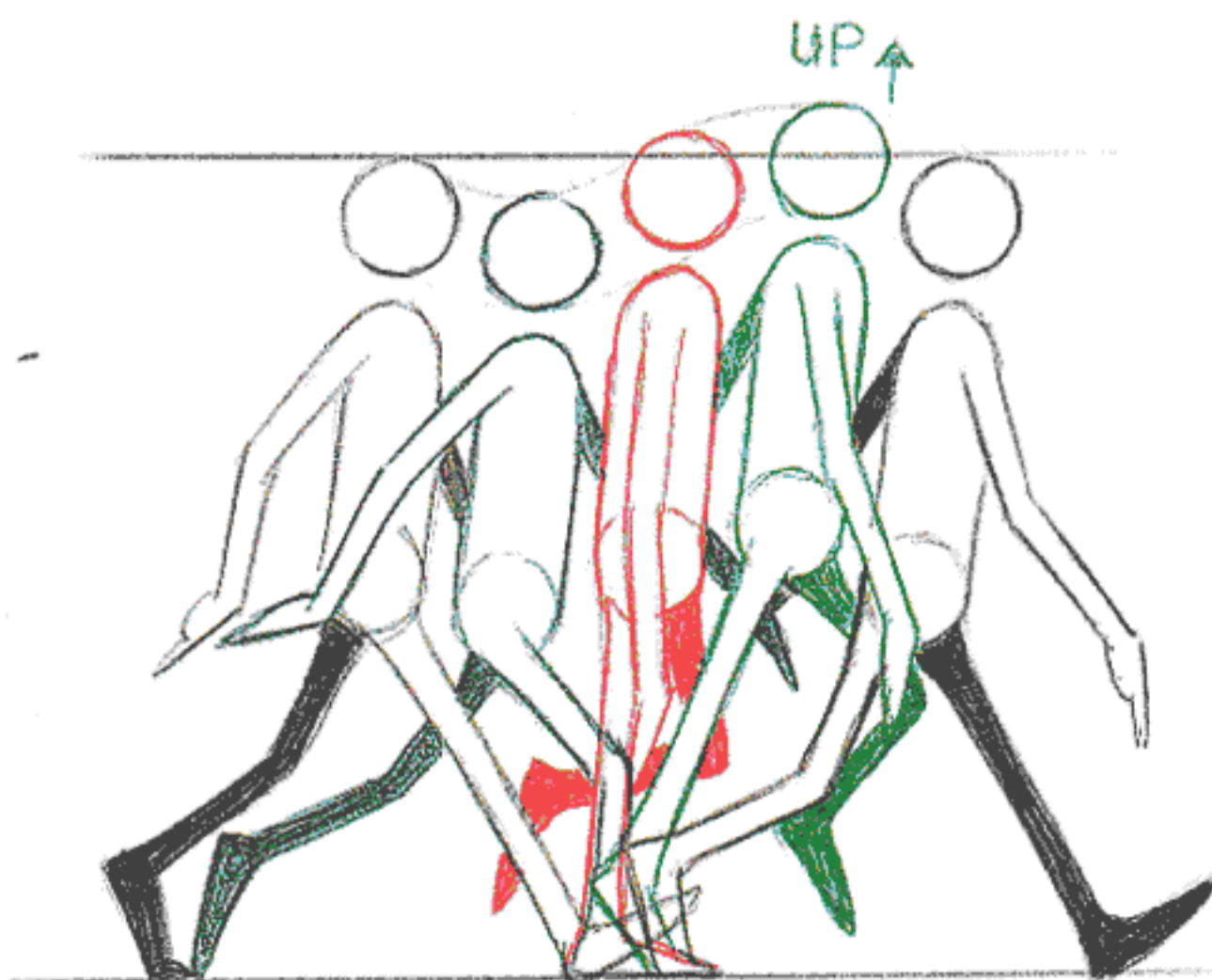
NEXT COMES THE
DOWN POSITION –
WHERE THE
BENT LEG
TAKES THE
WEIGHT



AND JUST TO COMPLICATE
LIFE - IN A NORMAL WALK
THE ARM SWING IS AT
IT'S **WIDEST**
ON THE DOWN POSITION
(AND NOT ON THE CONTACT
POSITION AS WE'D PREFER.)

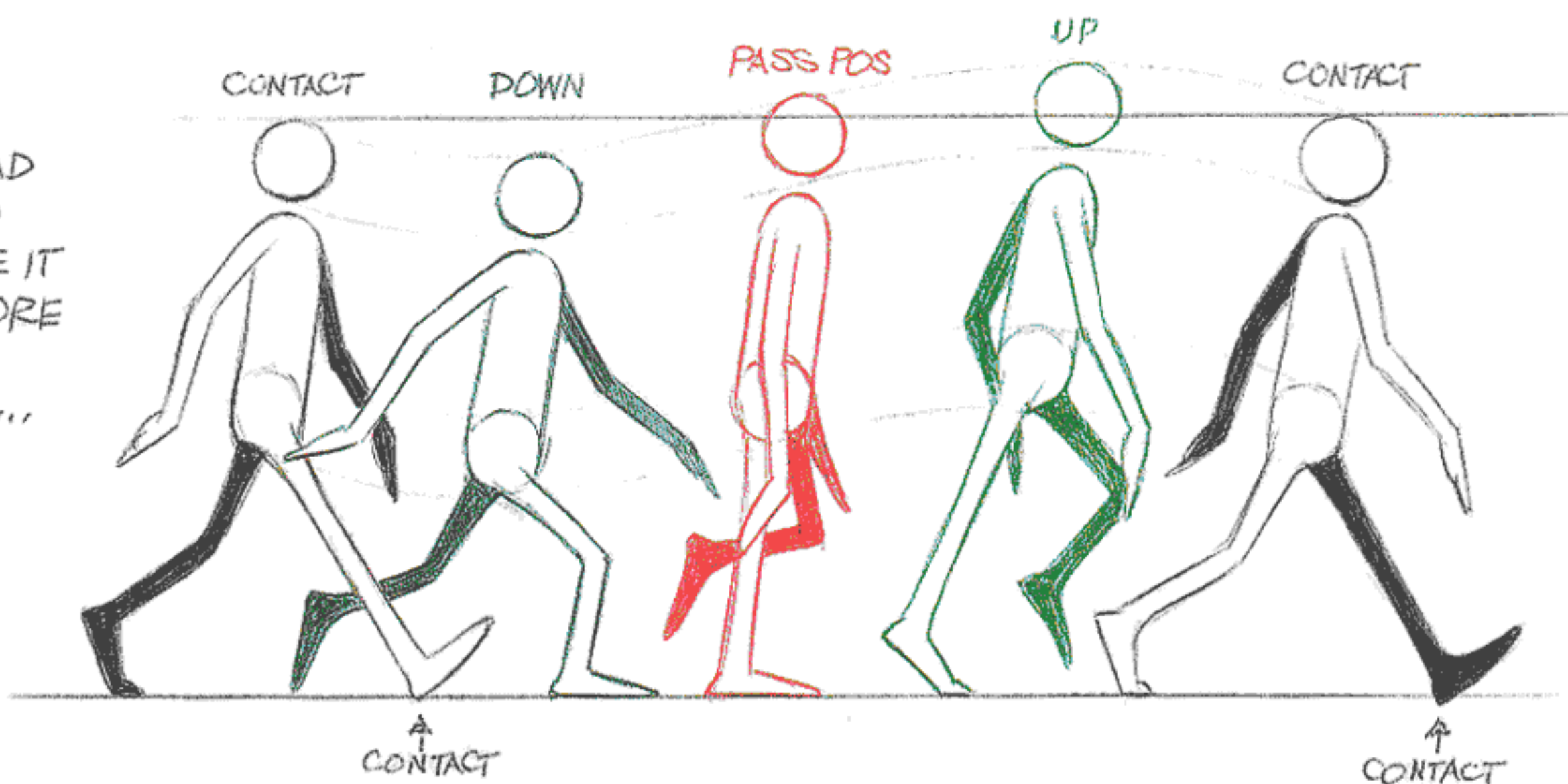
WE CAN IGNORE THIS
AS WE PROCEED BUT WE
MIGHT AS WELL UNDERSTAND
THE NORM BEFORE WE
START MESSING AROUND.

NEXT WE PUT IN
THE UP POSITION -
-THE PUSH-OFF.



The FOOT PUSHING OFF
LIFTS THE PELVIS,
BODY and HEAD UP
TO ITS HIGHEST POSITION
- THEN THE LEG IS THROWN
OUT TO CATCH US ON
THE CONTACT POSITION
- SO WE DON'T FALL
ON OUR FACE.

LET'S SPREAD
IT OUT AND
EXAGGERATE IT
A LITTLE MORE
SO IT'S
CLEARER...



SO, IN A NORMAL 'REALISTIC' WALK

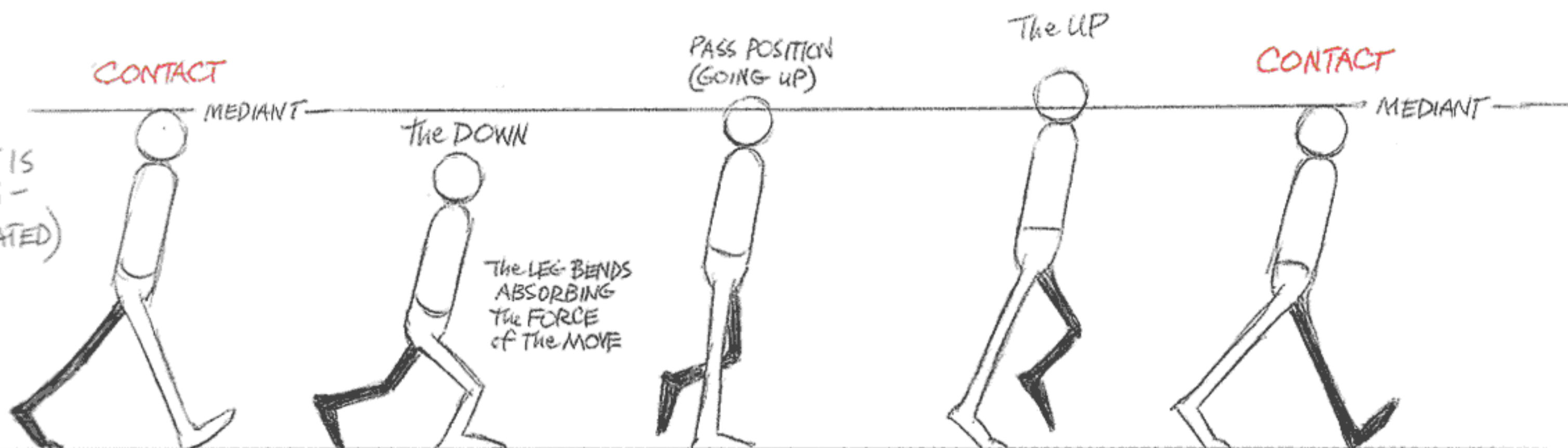
THE WEIGHT GOES (DOWN)

JUST AFTER THE STEP -
JUST AFTER THE CONTACT.

AND THE WEIGHT GOES (UP)

JUST AFTER THE PASSING POSITION.

HERE IT IS
AGAIN -
EXAGGERATED)



SET THE TEMPO

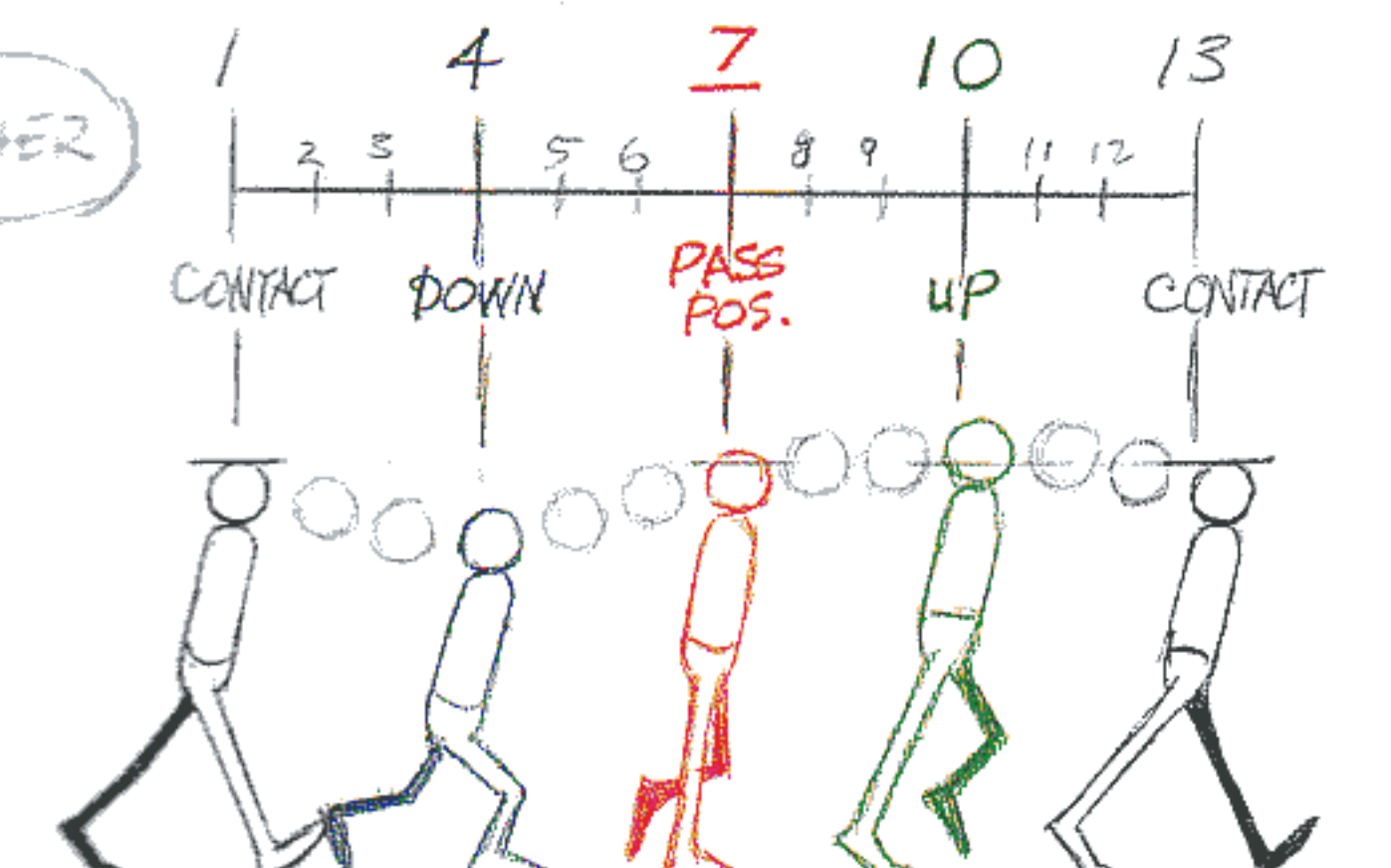
The **FIRST** THING TO DO IN A WALK IS SET A BEAT.

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.

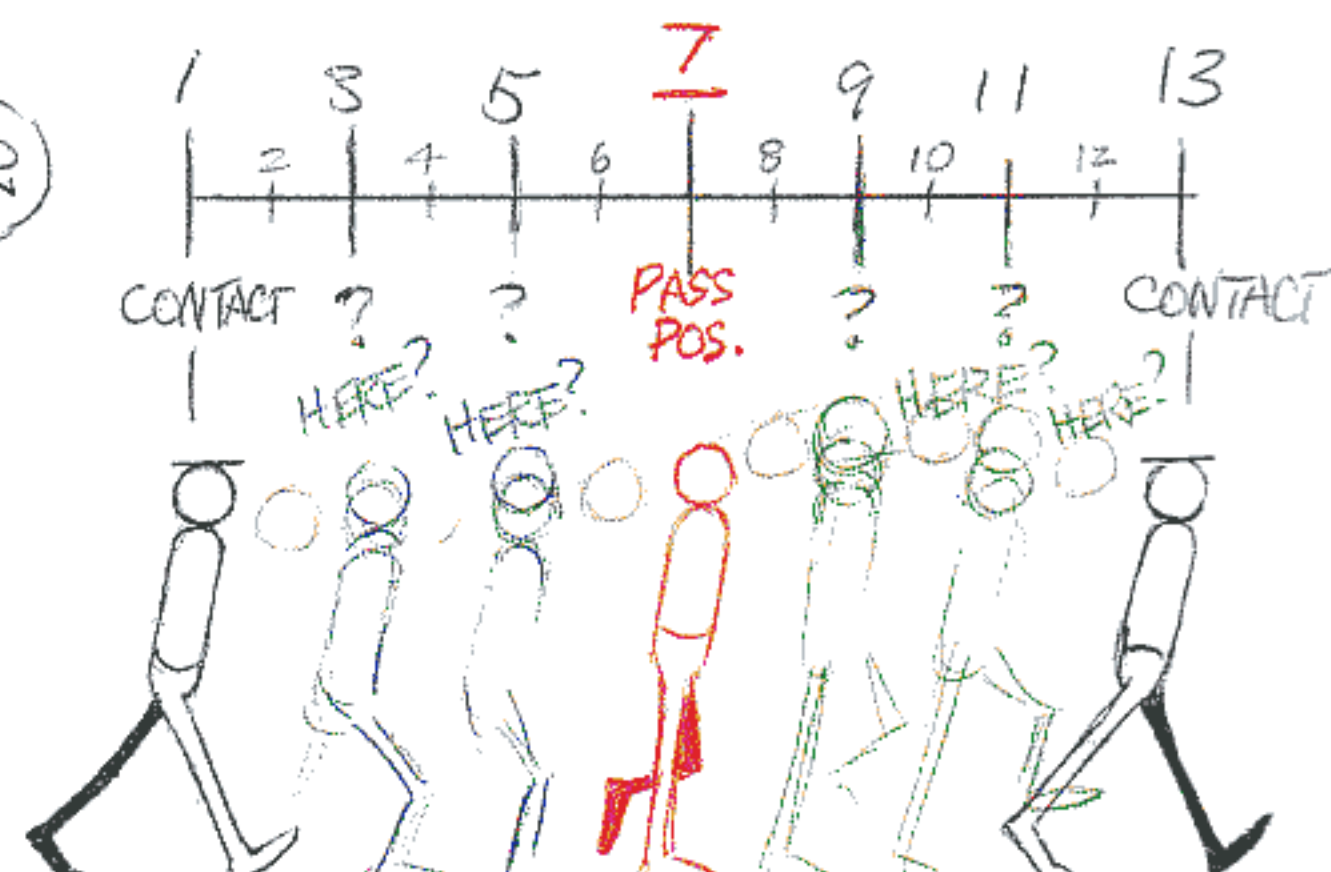
IT'S HARD TO DIVIDE UP. YOU HAVE TO USE 'THIRDS' — THINK PARTLY IN THIRDS.

(EITHER)



THE IN BETWEENS ARE GOING TO BE ON THIRDS.

(OR)



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?

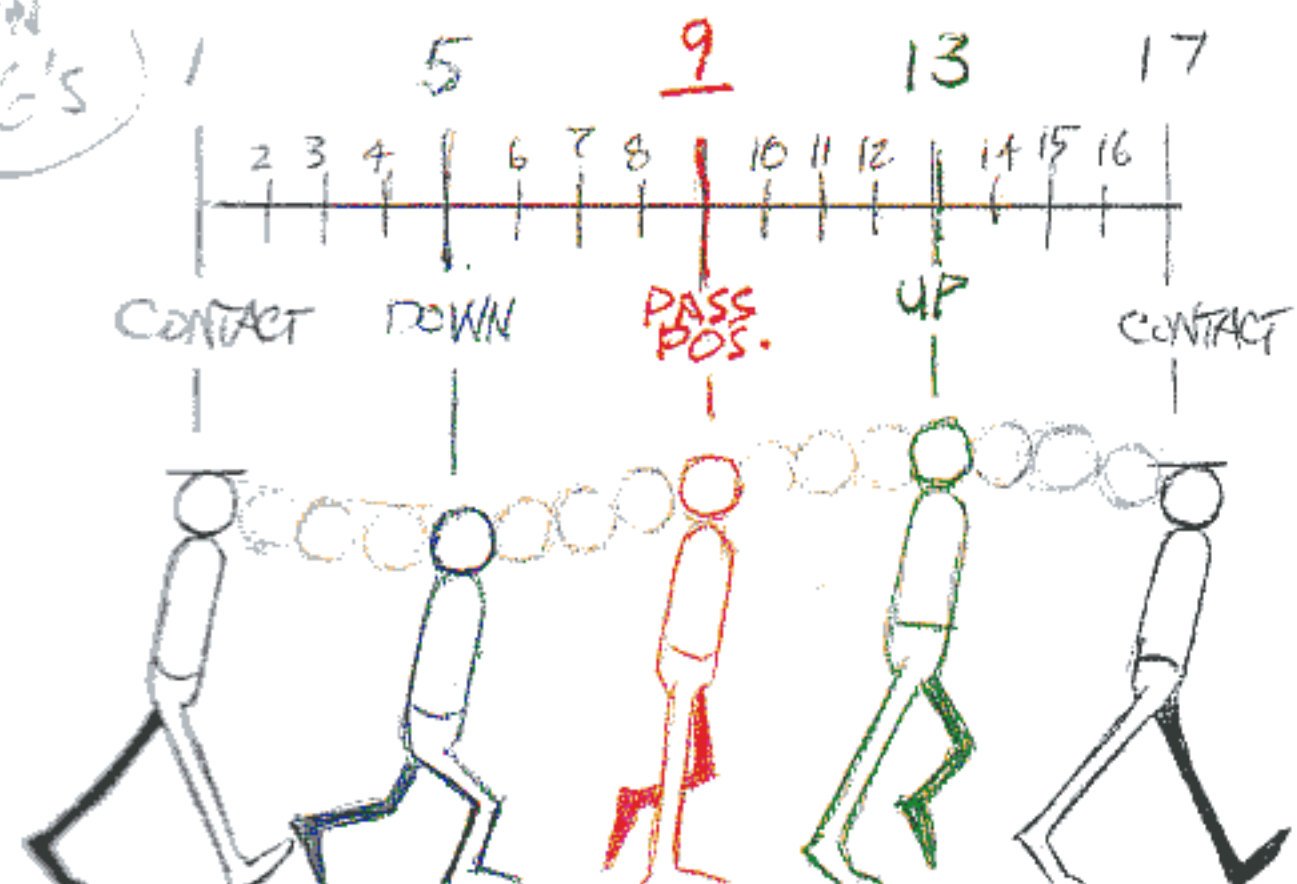
THERE **IS** AN EASIER WAY — HAVE HIM/HER WALK ON 16'S — OR WALK ON 8'S.

MUCH EASIER TO WALK ON 16'S — IT'S EASY TO DIVIDE UP — SAME THING ON 8'S.

(EACH STEP = $\frac{2}{3}$ SEC)

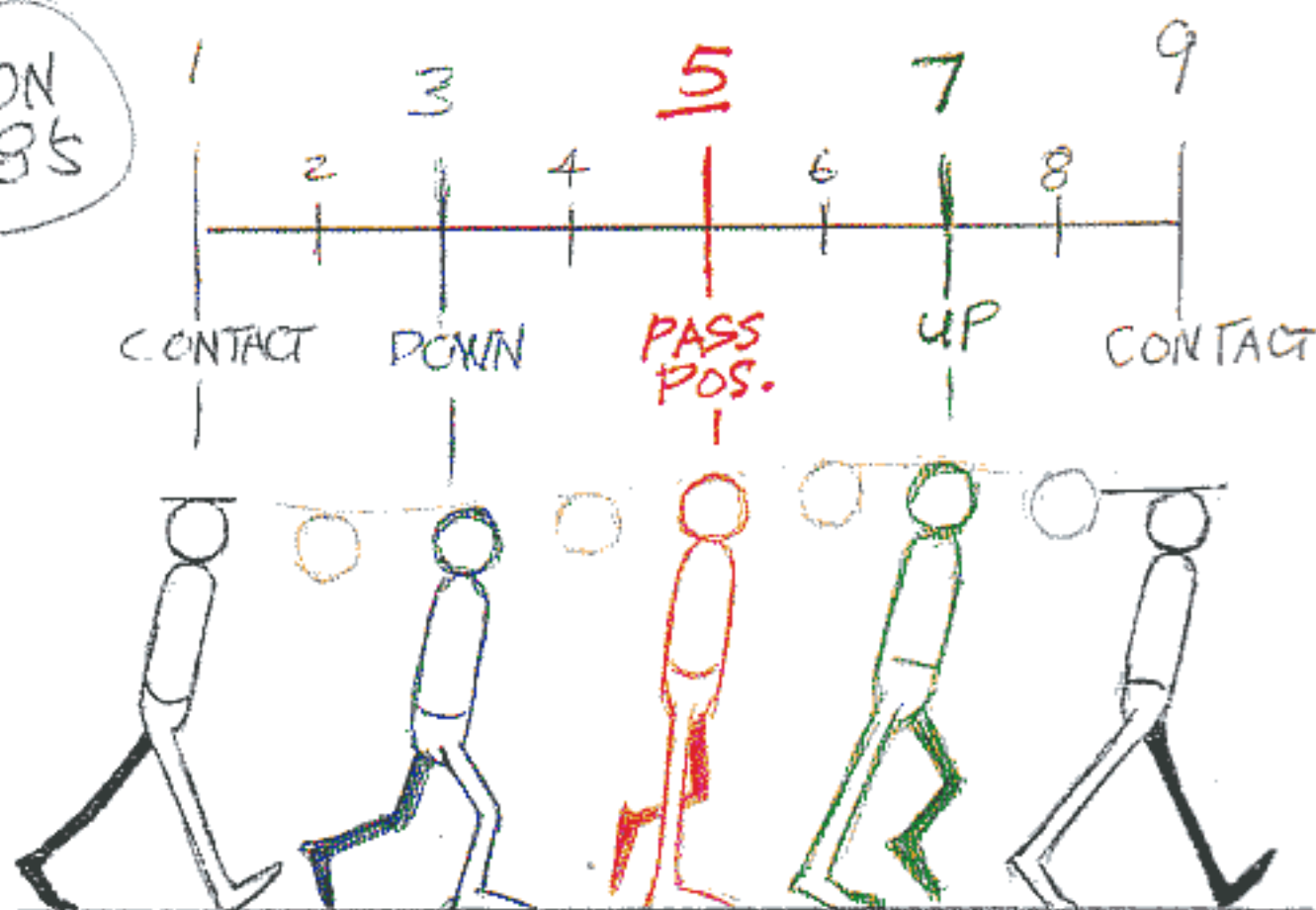
(3 STEPS PER SEC.)

(ON 16'S)



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

(ON 8'S)



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

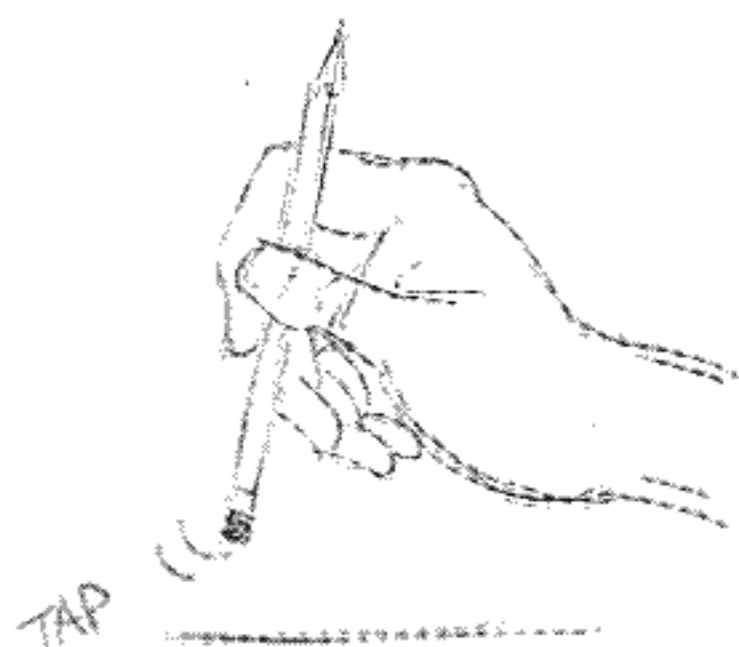
THIS IS WHY CARTOON WALKS ARE OFTEN ON 8'S.
BUMP, BUMP, BUMP, 3 STEPS A SECOND.

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 stopwatch. Also, acting it out with a metronome is a great help.

I naturally think in seconds - 'one Mississippi' or 'one little monkey' or 'a thousand and one, a thousand and two' etc.



Ken Harris thought in feet, probably because he was so footage conscious - having to produce thirty feet of animation a week. He'd tap his upside-down pencil *exactly* every two thirds of a second as we'd act things out.

Milt Kahl told me that on his first week at Disney's he bought a stopwatch and went downtown in the lunch break and timed people walking - normal walks, people just going somewhere. He said they were *invariably* on twelve exposures - right on the nose. March time.

As a result, he used to beat off twelve exposures as his reference point. Anything he timed was just so much more or so much less than that twelve exposures. He said he used to say 'Well, it's about 8s.' He said it made it easy for him - or *easier* anyway.

Chuck Jones said the *Roadrunner* films had a musical tempo built into them. He'd time the whole film out, hitting things on a set beat so they had a musical, rhythmic integrity already built in. Then the musician could hit the beat, ignore it or run the music against it.

Chuck told me that they used to have exposure sheets with a coloured line printed right across the page for every sixteen frames and another one marking every twelve frames. He called them '16 sheets' or '12 sheets' I guess '8 sheets' would be the normal sheets.

I mentioned once to Art Babbitt that I liked the timing on the *Tom and Jerrys*. 'Oh yeah,' he said dismissively, 'All on 8s.'

That kind of tightly synchronized musical timing is rare today. They call it 'Mickey Mousing' where you accent everything - it's a derogatory term nowadays and considered corny. But it can be extremely effective.