



DRAWING IN TIME

Why animate? Everyone knows it's a lot of hard work doing all those drawings and positions. So what's the hook? Why do it?

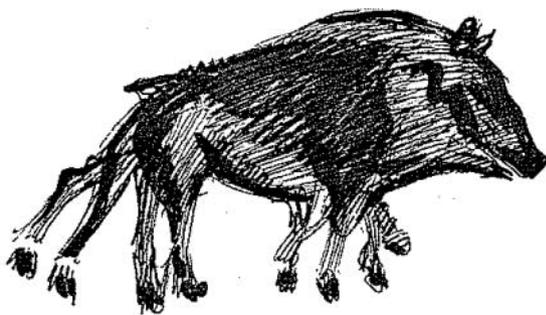
Answer: Our work is taking place in *time*. We've taken our 'stills' and leapt into another dimension.

Drawings that walk: seeing a series of images we've made spring to life and start walking around is already fascinating.

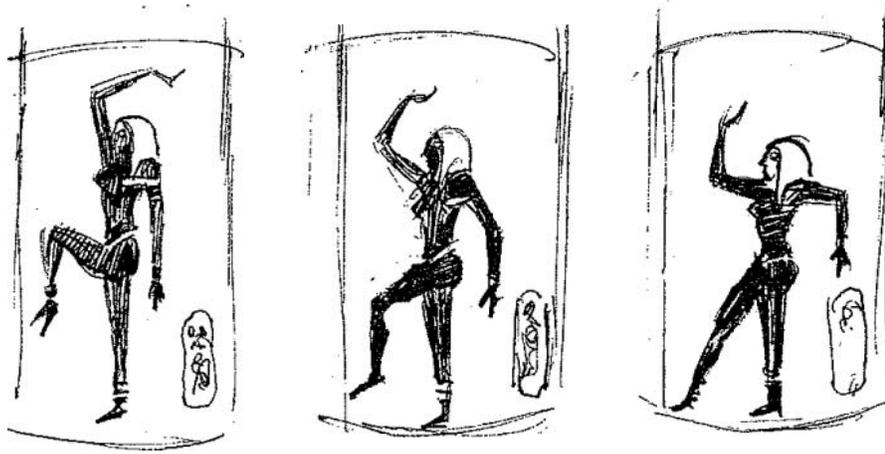
Drawings that walk and *talk*: seeing a series of our drawings talking is a very startling experience.

Drawings that walk and talk and *think*: seeing a series of images we've done actually go through a thinking process - and appear to be thinking - is the real aphrodisiac. Plus creating something that is unique, which has never been done before is endlessly fascinating.

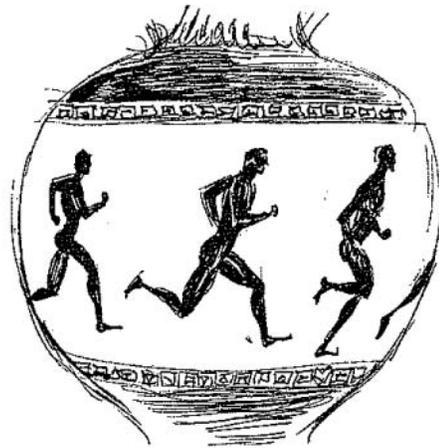
We've always been trying to make the pictures move, the idea of animation is aeons older than the movies or television. Here's a quick history:



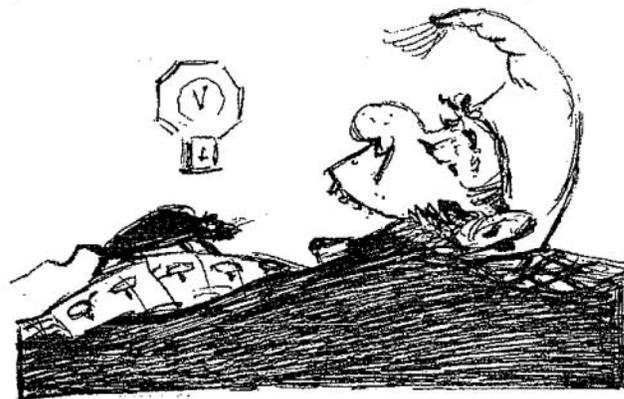
Over 35,000 years ago, we were painting animals on cave walls, sometimes drawing four pairs of legs to show motion.



In 1600 BC the Egyptian Pharaoh Rameses II built a temple to the goddess Isis which had 110 columns. Ingeniously, each column had a painted figure of the goddess in a progressively changed position. To horsemen or charioteers riding past – Isis appeared to move!



The Ancient Greeks sometimes decorated pots with figures in successive stages of action. Spinning the pot would create a sense of motion.



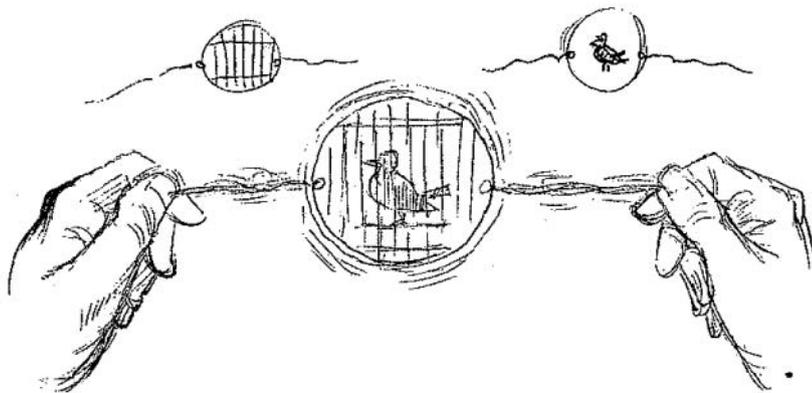
As far as we know, the first attempt to project drawings onto a wall was made in 1640 by Athanasius Kircher with his 'Magic Lantern'.

Kircher drew each figure on separate pieces of glass which he placed in his apparatus and projected on a wall. Then he moved the glass with strings, from above. One of these showed a sleeping man's head and a mouse. The man opened and closed his mouth and when his mouth was open the mouse ran in.

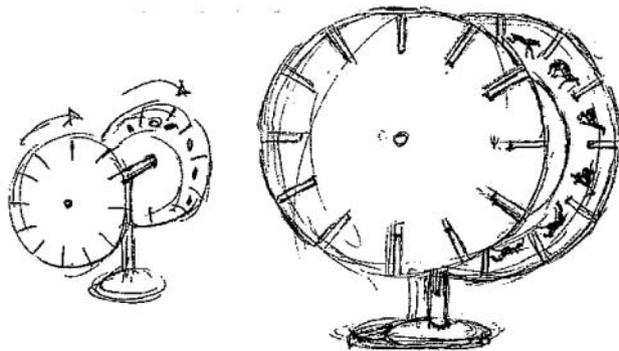
Although photography was discovered as early as the 1830s, most new devices for creating an illusion of movement were made using drawings, not photos.

In 1824 Peter Mark Roget discovered (or rediscovered, since it was known in classical times) the vital principle, 'the persistence of vision'. This principle rests on the fact that our eyes temporarily retain the image of anything they've just seen. If this wasn't so, we would never get the illusion of an unbroken connection in a series of images, and neither movies nor animation would be possible. Many people don't realise that movies don't actually move, and that they are still images that appear to move when they are projected in a series.

Roget's principle quickly gave birth to various optical contraptions:



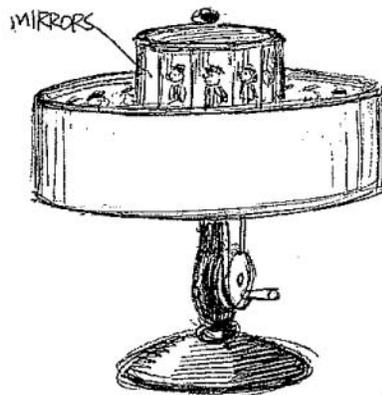
The Thaumatrope: A cardboard disc **mounted** on a top - or held between two pieces of string. A birdcage drawing is on one side and a bird on the other. When the **top** is spun or the strings are pulled the disc twirls, the images merge and the bird seems to be in the cage.



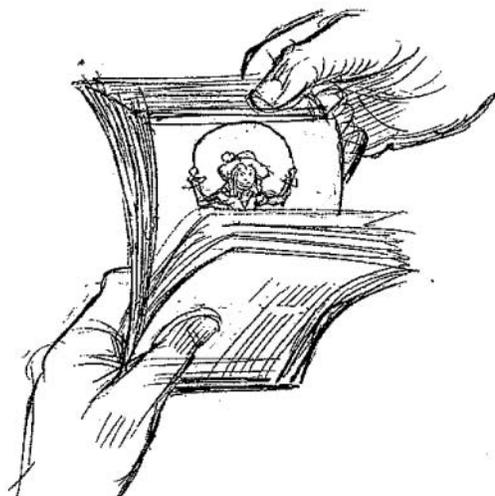
The Phenakistoscope: Two discs mounted on a shaft - the front disc has slits around the edge and the rear disc has a sequence of drawings. Align the drawings with the slits, look through the openings and as the discs revolve we have the illusion of motion.



The 'Wheel of Life' (or the Zoetrope): Appeared in the USA in **1867** and was sold as a toy. Long strips of paper with a sequence of drawings on them were inserted into a cylinder with slits in it. Spin the cylinder, look through the slits and the creature appears to move.

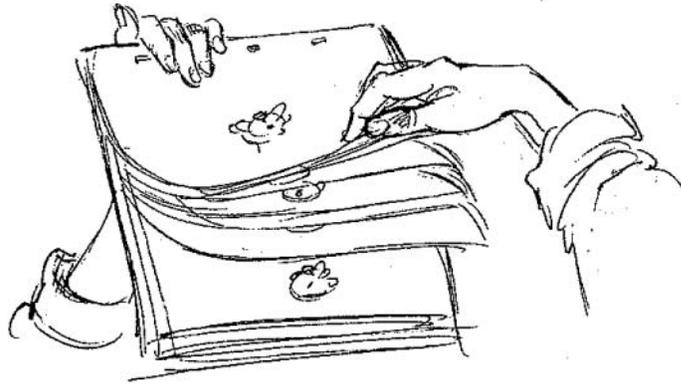


The Praxinoscope: Devised by the Frenchman Emile Reynaud in **1877**. He was the first to create short sequences of dramatic action by drawing on a 30 foot strip of transparent substance called 'Crystaloid'. This opened the way for the tremendous advances **to come**.



The Flipper book: In **1868** a novelty called 'the flipper book' appeared worldwide and it remained the simplest and most popular device. It's just a pad of drawings bound like a book along one edge. Hold the book in one hand along the bound edge and with the other hand flip the pages and 'see 'em move'. The result is animation – the illusion of continuous action. Drawings in time.

This is the same as school kids making drawings in the corners of their math books and flipping the pages.



Today the 'classical' animator still flips his drawings the same way as a flipper book before testing it on the video or film camera. He places the drawings in sequence, with the low numbers on the bottom, then flips through the action from the bottom up. Eventually he should get good enough at it to approximate actual screen time and spot any errors or drawings that need altering. Now that we have the video camera with its instant playback of the drawings at film speed, not everyone learns to flip.



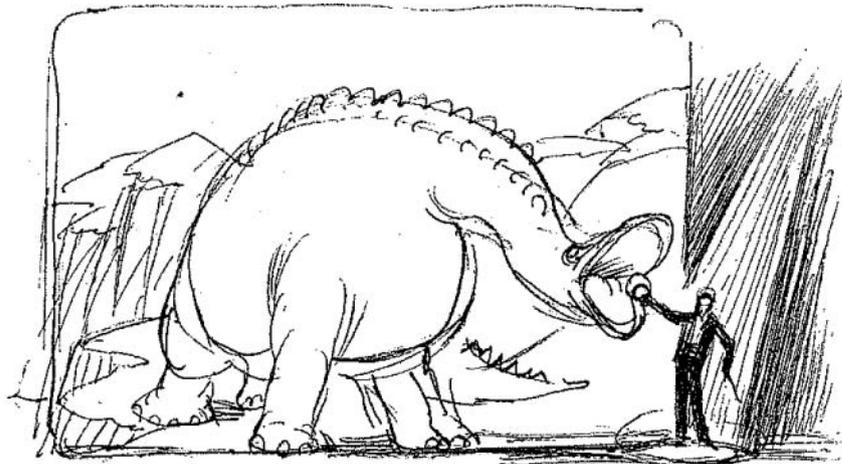
In **1896** a New York newspaper cartoonist James Stuart **Blackton** interviewed the inventor Thomas Edison who was experimenting with moving pictures. **Blackton** did some sketches of Edison, who was impressed by Blackton's speed and drawing facility and asked him to do some drawings in a series. Later, Edison photographed these - the first combination of drawings and photography. In **1906** they publicly released *Humorous Phases of Funny Faces*. A man puffed a cigar and blew smoke rings at his girl friend, she rolled her eyes, a dog jumped through a hoop and a juggler performed. **Blackton** used about **3000** 'flickering drawings' to make this first animated picture - the forefather of the animated cartoon. The novelty brought explosions of laughter and was an instant hit.



A year later Emile Cohl made and showed his first animated film at the Folies Bergeres in Paris. The figures were childlike – white lines on black – but the story was relatively sophisticated: a tale of a girl, a jealous lover and a policeman. He also gave lampposts and houses intelligence and movement, with emotions and moods of their own. **Cohl's** work prefigures the later animation dictum, 'Don't do what a camera can do – do what a camera *can't* do!'

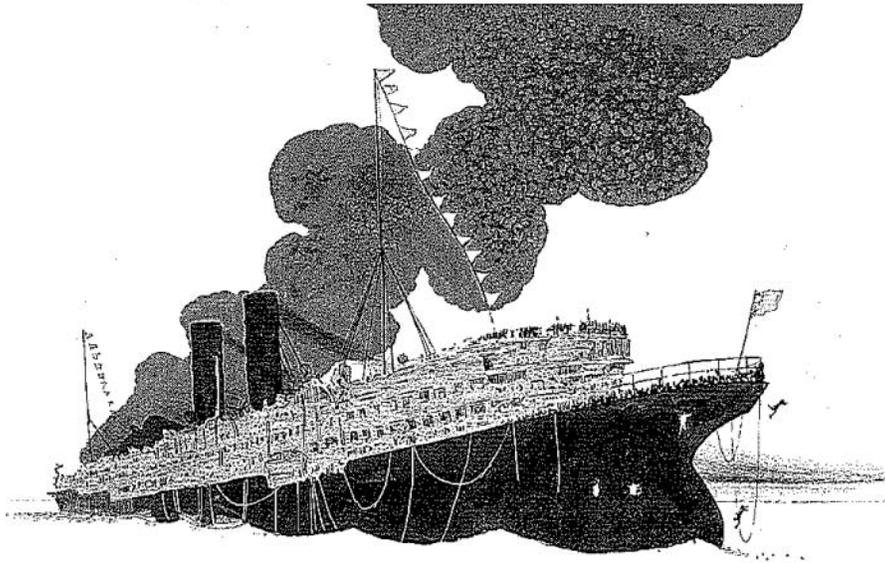
Winsor McCay, brilliant creator of the popular comic strip *Little Nemo in Slumberland*, was the first man to try to develop animation as an art form. Inspired by his young son bringing home some flipper books, he made **4000** drawings of 'Little Nemo' move. These were a big hit when flashed on the screen at Hammerstein's theatre in New York in **1911**.

As another experiment he drew a bizarre short film. *How a Mosquito Operates*, which was also enthusiastically received.



Then in **1914** McCay drew *Gertie the Dinosaur* and McCay himself performed 'live' in front of the projected animation, holding an apple in front of Certie and inviting her to eat. Certie lowered her long neck and swallowed the fruit – astounding the audience. This was the first 'personality' animation – the beginnings of cartoon individuality. It was so lifelike that the audience could identify with Gertie. It was a sensation.

In **McCay's** words: 'I went into the business and spent thousands of dollars developing this new art. It required considerable time, patience and careful thought - *timing and drawing* the pictures [my italics]. This is the most fascinating work I have ever done - this business of making animated cartoons live on the screen.'



McCay also made the first serious dramatic cartoon. *The Sinking of the Lusitania*, in **1918**. A war propaganda film expressing outrage at the catastrophe, it was a huge step forward in realism and drama - the longest animated film so far. It took two years of work and needed **25,000** drawings.

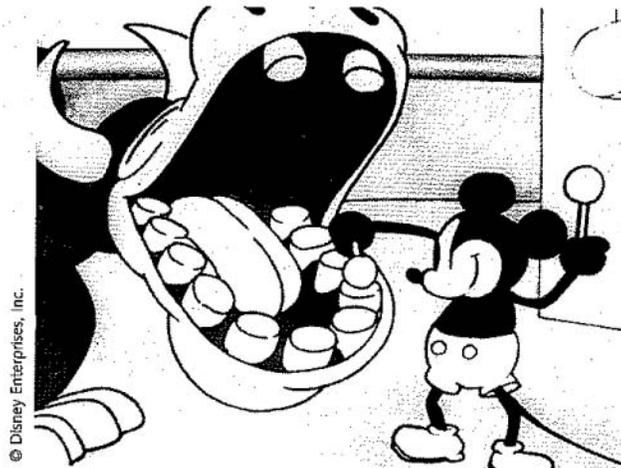
Later, as an older man being celebrated by the younger funny-cartoon animators in the business, McCay lashed out at them saying that he had developed and **given** them a great new art form which they had cheapened and turned into a crude money-making business done by hack artists.

This well defines the endlessly uncomfortable relationship between the pioneering **artist/idealist** and the animation industry - working to comfortable and predictable formulas.

Still doth the battle rage

In the twenties Felix the cat became as popular as Charlie Chaplin. These short Felix cartoons were visually inventive, doing what a camera can't do. But more importantly a real personality emerged from this flurry of silent, black and white drawings and Felix 'himself' connected with audiences worldwide.

The Felix cartoons led straight to the arrival of Walt Disney, and in **1928**, Mickey Mouse took off with his appearance in *Steamboat Willie* - the first cartoon with synchronised sound.



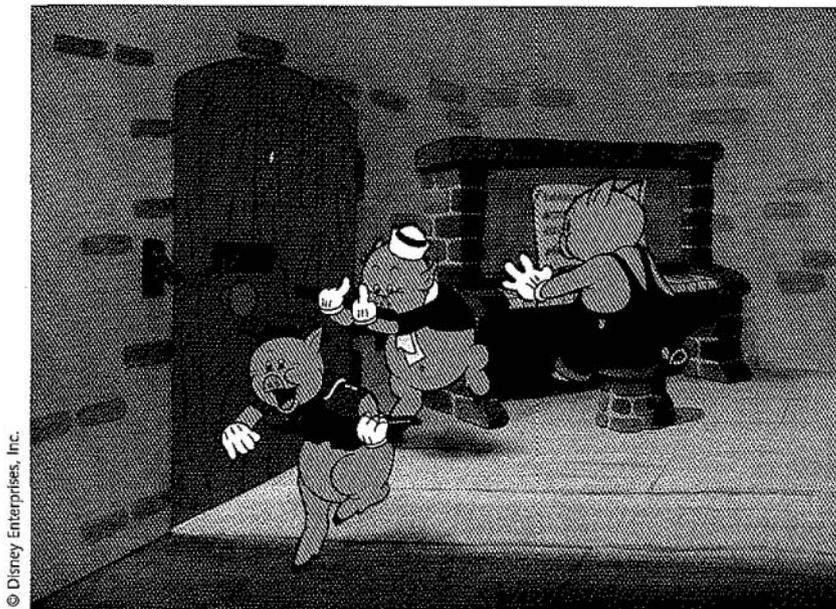
The brilliant Ward Kimball, who animated Jiminy Cricket in *Pinocchio* and the crows in *Dumbo*, once told me. 'You can have *no idea* of the impact that having these drawings suddenly speak and make noises had on audiences at that time. People went crazy over it.'



Disney followed *Steamboat Willie* with *The Skeleton Dance*. For the first time, action was coordinated with a proper musical score. This was the first *Silly Symphony*. Ub Iwerks was chief animator on both films and a lot of the sophisticated action of *The Skeleton Dance* still holds up today.



Disney leapt forward again in 1932 with *Flowers and Trees* – the first full colour cartoon.



Then he followed it one year later with *Three Little Pigs*. This had a major impact because of its fully developed 'personality' animation – clearly defined and believable separate personalities acting so convincingly that the audience could identify with and root for them. Another first.



Astonishingly, only four years after that, Disney released *Snow White and the Seven Dwarfs*, the world's first fully-animated feature-length film, raising cartoon drawings to the level of art and holding the audience spellbound for eighty-three minutes. A truly staggering feat accomplished in an incredibly short space of time. (it's said that many of the artists booked themselves in advance into hospital to recover from the effort of completing the film.)

The tremendous financial and critical success of *Snow White and the Seven Dwarfs* became the foundation of Disney's output and gave birth to the 'Golden Age' of animation: *Pinocchio*, *Dumbo*, *Bambi* and *Fantasia*, as well as the *Silly Symphonies* and Donald Duck and Mickey Mouse shorts.

Surrounding the potent Disney centre were the satellite studios: Max Fleischer with **two** features – *Gulliver's Travels* and *Mr Bug Goes to Town* – and **Popeye** shorts; Warner Bros' Looney Tunes and Merrie Melodies with Bugs Bunny, Daffy Duck, Porky Pig; MGM with Tom and Jerry, Droopy and the great anarchic Tex Avery shorts, and Walter Lantz with Woody Woodpecker. Fed as they were by the knowledge and expertise emanating from the Disney training centre, their much wilder humour was often in reaction to or in rebellion against Disney 'realism' and 'believability'.

But after the Second World War the situation changed.

The arrival of television and its voracious appetite for rapidly produced product demanded simpler and cruder work. 1950s stylisation gave birth to UPA studios in Hollywood who created Mr. **Magoo** and Gerald **McBoing** Boing. **UPA's** approach was regarded as more graphically sophisticated than Disney and used more 'limited' and much less realistic animation. At the same time there was a worldwide flourishing of personal, experimental and 'art house' animated films made in new ways with many different techniques and with very different content to the Hollywood product. Animators were reinventing the wheel stylistically but were ignorant of the structural knowledge developed in Hollywood's Golden Age.

This knowledge, though residing in the hands of the originators, was generally ignored as being 'old hat' or was forgotten in the following thirty years.

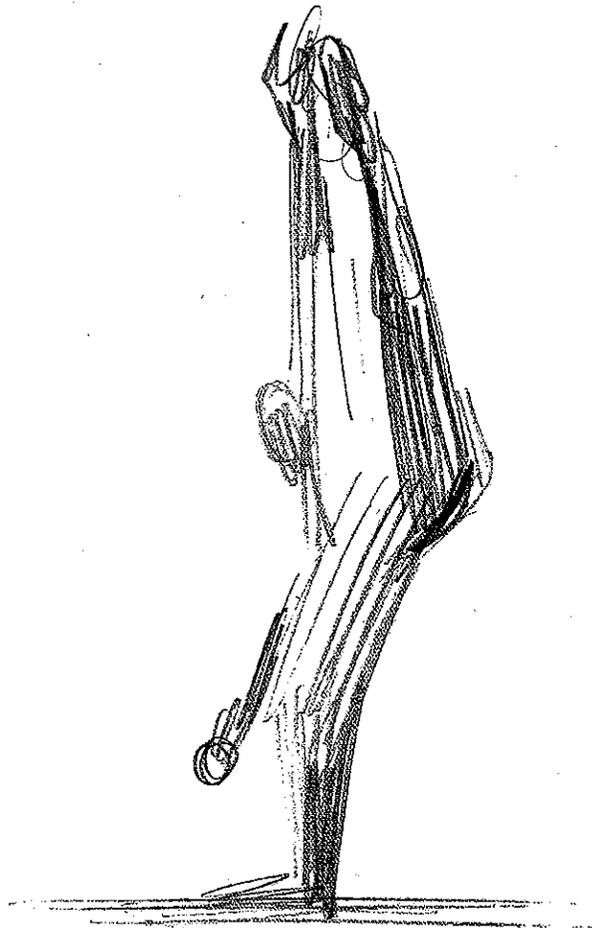
However, in the last few years, the renaissance of animation as a form of mass entertainment is giving rebirth to the old knowledge. The startlingly successful innovations of computer animation are helping to transform animation in all its multi-faceted forms into a major part of the entertainment mainstream. Alongside this, there is also the explosion in the computer games industry.

If drawn 'classical' animation is an extension of drawing, then computer animation can be seen as an extension of puppetry – high tech marionettes. Both share the same problems of how to give a performance with movement, weight, timing and empathy.

The old knowledge applies to *any* style or approach to the medium no matter what the advances in technology. Most of the work methods and devices in this book were developed and refined in the Hollywood animation studios between 1930–1940.

I've co-ordinated what I've learnt from various approaches and I'm presenting it here in a form based on my own experience in this medium – with its limitless possibilities of imagination.

Emery **Hawkins** said to me. 'The only limitation in animation is the person doing it. Otherwise there is no limit to what you can do. And why shouldn't you do it?'



ANTICIPATION

IS THERE ANYBODY WHO DOESN'T KNOW WHAT THIS GUY'S GOING TO DO?

The GREAT ANIMATOR, BILL TYTLA SAID,

"THERE ARE ONLY 3 THINGS IN ANIMATION -

- 1 ANTICIPATION
- 2 ACTION
- 3 REACTION

AND THESE IMPLY THE REST.
LEARN TO DO THESE THINGS WELL
and YOU CAN ANIMATE WELL."

CHARLIE CHAPLIN SAID,

- 1 TELL 'EM WHAT YOU'RE GOING TO DO.
- 2 DO IT.
- 3 TELL 'EM THAT YOU'VE DONE IT.

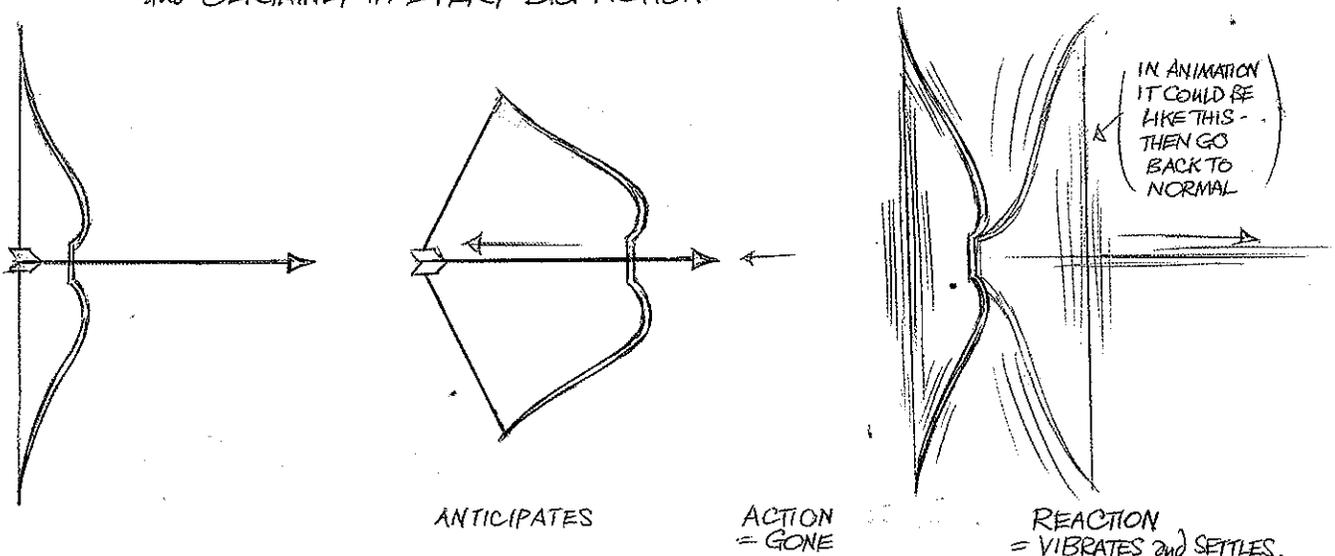
The GREAT FRENCH MIME, MARCEL MARCEAU SAYS,

"USE BIG ANTICIPATION."

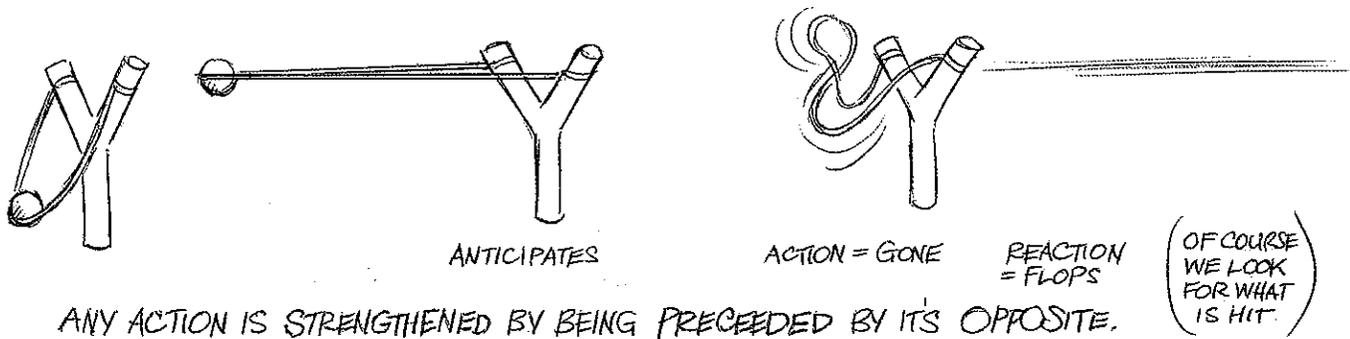
WHY? BECAUSE IT COMMUNICATES WHAT IS GOING TO HAPPEN.
 The AUDIENCE SEES WHAT IS GOING TO HAPPEN - THEY SEE THE ANTICIPATION
 and SO THEY ANTICIPATE IT WITH US. THEY GO WITH US.

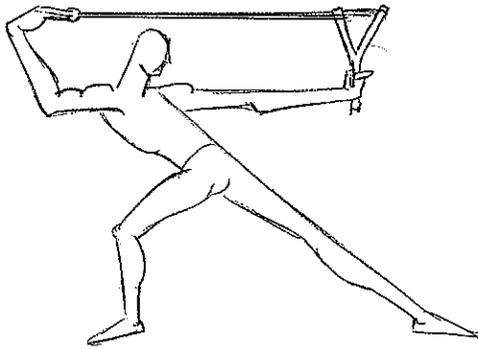
WHY? BECAUSE FOR ALMOST EVERY ACTION WE MAKE THERE IS AN ANTICIPATION.
 WE THINK OF THINGS FIRST - THEN DO THEM.
 UNLESS IT'S A PRE-PROGRAMMED RESPONSE LIKE SHIFTING GEARS ON A CAR
 OR GETTING DRESSED, WE KNOW THAT WE THINK OF SOMETHING FIRST - THEN DO IT.
 AS WITH SPEECH, WE KNOW THAT OUR BRAIN FIXES UPON THE SENSE OF WHAT
 IT WANTS TO SAY - THEN GOES INTO A VERY COMPLEX SERIES OF MUSCLE
 SELECTIONS TO SAY IT.

SO, ANTICIPATION IS THE PREPARATION FOR AN ACTION. (WHICH WE ALL RECOGNISE WHEN WE SEE IT.)
 ANTICIPATION TAKES PLACE IN ALMOST EVERY ACTION -
 and CERTAINLY IN EVERY BIG ACTION.



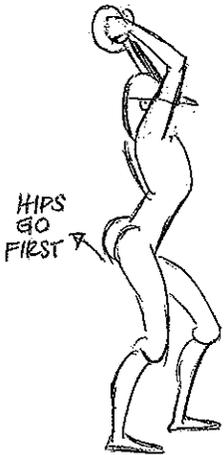
The ANTICIPATION IS ALWAYS IN THE OPPOSITE DIRECTION TO WHERE THE MAIN ACTION IS GOING TO GO.



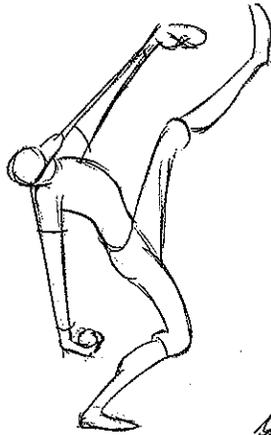


IF ACTION IS IN THE WHOLE BODY THEN WE HAVE ANTICIPATION OF TREMENDOUS LATENT FORCE.

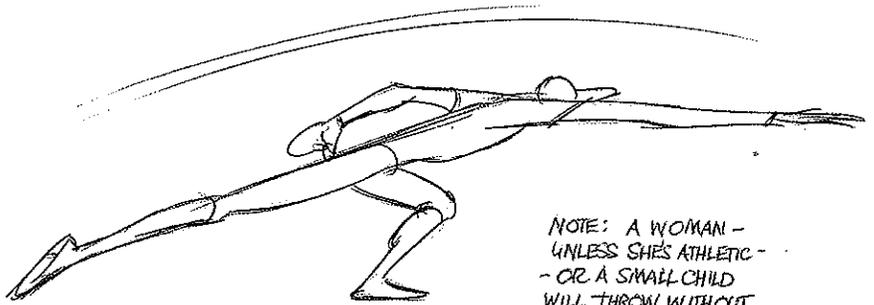
USUALLY THE ANTICIPATION IS SLOWER - LESS VIOLENT THAN THE ACTION
SLOW ANTICIPATION..... ZIP! = FAST ACTION



STARTS SLOW WIND UP



THEN PUTS THE BODY INTO IT FOR



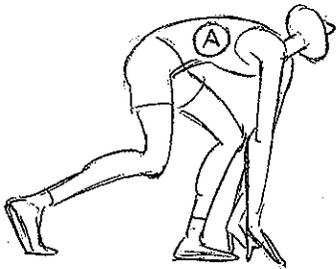
THE THROW

NOTE: A WOMAN - UNLESS SHE'S ATHLETIC - OR A SMALL CHILD WILL THROW WITHOUT USING THE BODY MASS TO HELP THE THROW.

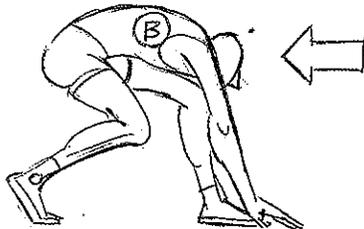
A RUNNER

WILL GO BACK BEFORE

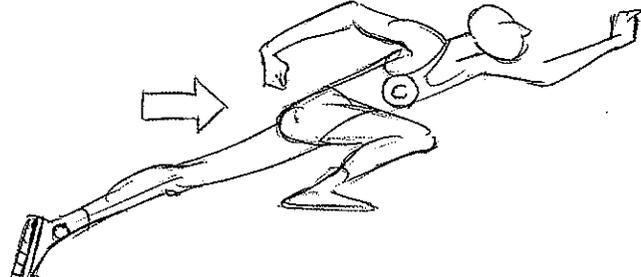
GOING FORWARD



READY



SET



GO

WE GET A MUCH STRONGER ACTION -



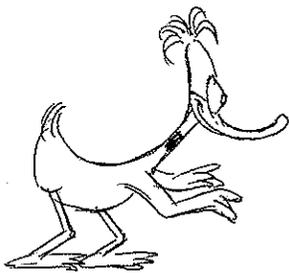
ANY ACTION CAN BE ENHANCED IF THERE IS AN ANTICIPATION BEFORE THE ACTION.

(SO)

WE GO BACK BEFORE WE GO FORWARD.
WE GO FORWARD BEFORE WE GO BACK.
WE GO DOWN BEFORE WE GO UP.
WE GO UP BEFORE WE GO DOWN.

The RULE IS: 'BEFORE WE GO ONE WAY - FIRST GO THE OTHER WAY.'

OF COURSE, WITH A 'CARTOON' CARTOON -



SEES SOMETHING



ANTICIPATES HIS EXIT

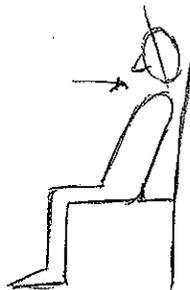


FEATHERS LINGER

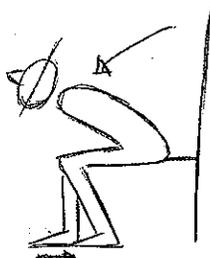
NO DRAWINGS GOING OUT - HE'S JUST GONE.

ANTICIPATION HAPPENS WITH SMALLER and UNDERSTATED MOVEMENTS.

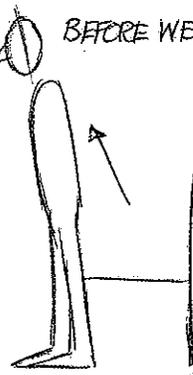
GETTING UP FROM A CHAIR, WE GO BACK BEFORE WE GO FORWARD and DOWN BEFORE WE GO UP.



ANTICIPATES BACK TO GO FORWARD



GOES FORWARD and DOWN TO GO

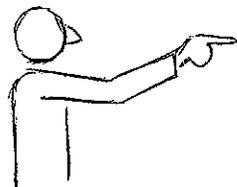


UP

SOMEONE MAKING A POINT -

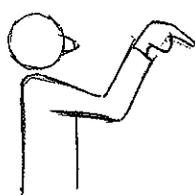


WEAK ANTICIPATE



and WEAK POINT

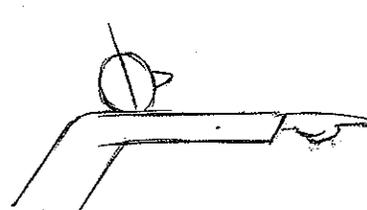
NOW, MAKING THE ACTION STRONGER -



PREPARING



BODY BACK SLIGHTLY

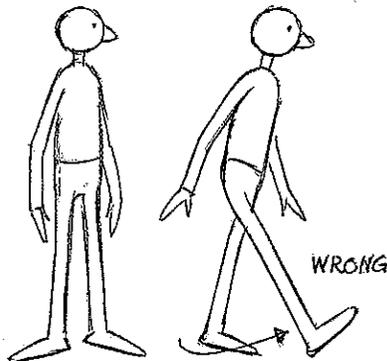


BODY FORWARD

GOING BACK FIRST IN THE OPPOSITE DIRECTION MAGNIFIES THE RESULT.

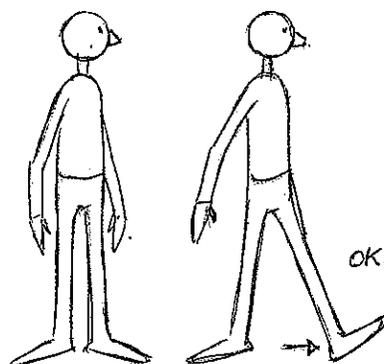
TAKE A SIMPLE THING LIKE STARTING A WALK -

IT'S UNNATURAL TO START A WALK WITH THE FARTHEST FOOT FROM THE DIRECTION WE'RE GOING.



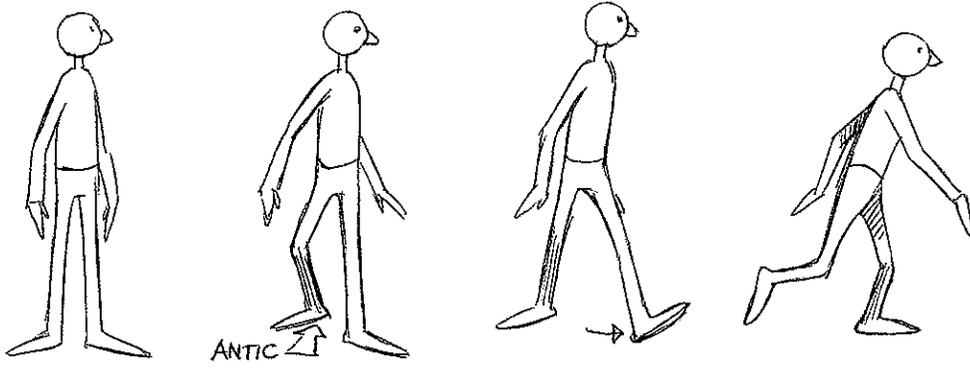
THE OBVIOUS WAY TO GO TO HIS LEFT IS TO START WITH HIS LEFT FOOT.

START THE WALK WITH THE FOOT NEAREST TO WHERE HE'S GOING -



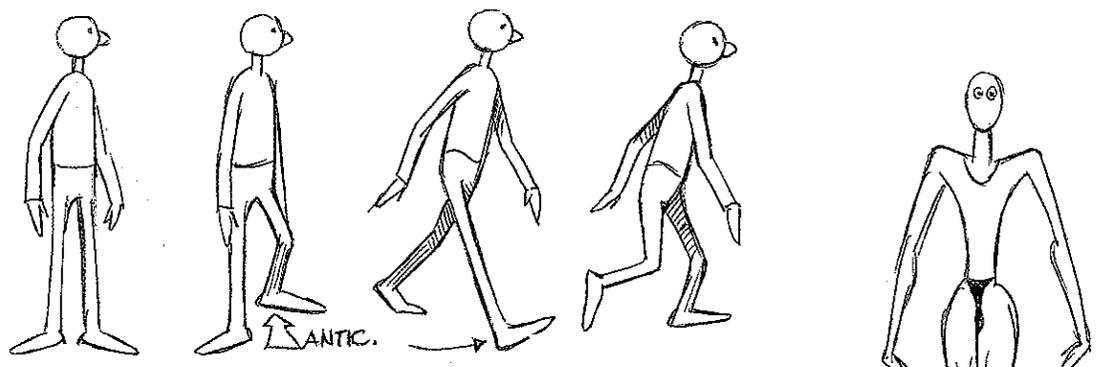
BUT HE COULD ANTICIPATE THE WALK WITH HIS RIGHT FOOT LIKE THIS -

HIS RIGHT FOOT COULD BACK UP AS AN ANTICIPATE -

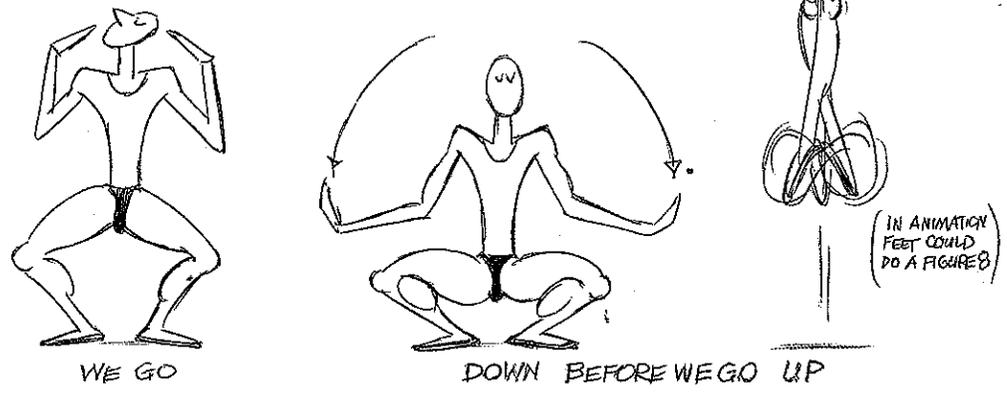


OR

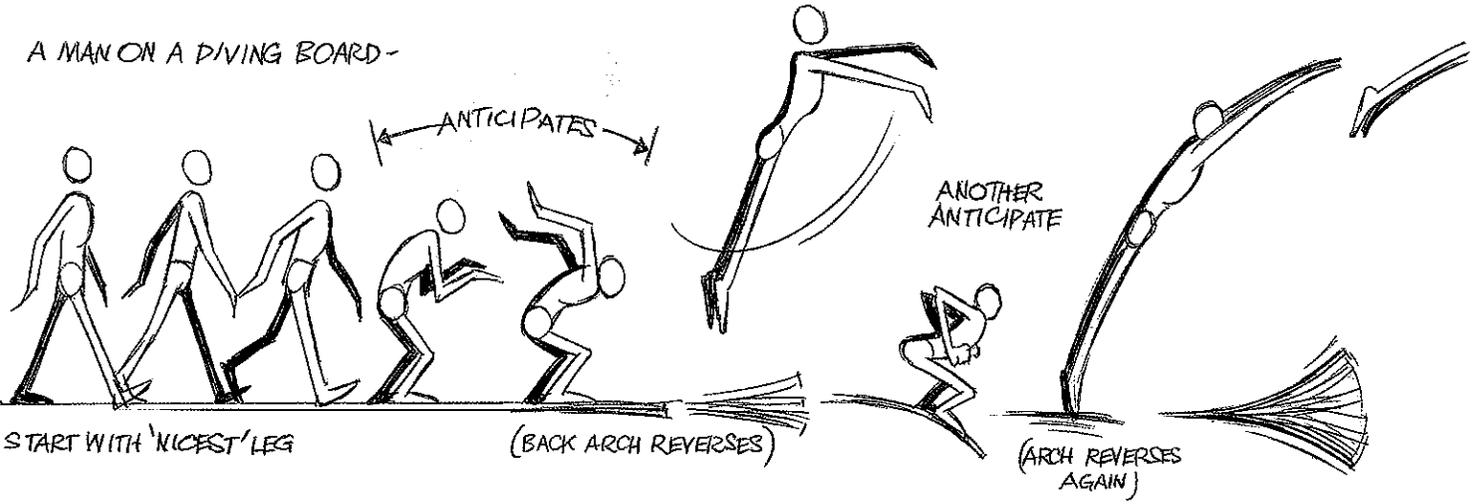
ALTERNATIVELY HE COULD ANTICIPATE HIS WALK BY BACKING UP WITH HIS LEFT FOOT IN ORDER TO FREE HIS RIGHT FOOT TO STEP OVER.



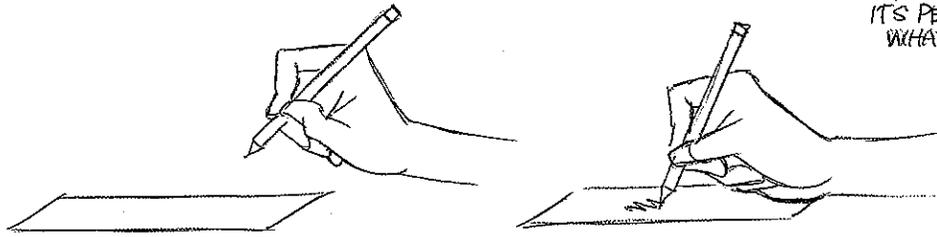
A BALLET PLIE IS AN ANTICIPATION BEFORE JUMPING UP IN THE AIR TO DO AN ENTRECHAT = WIGGLING FEET



A MAN ON A DIVING BOARD -

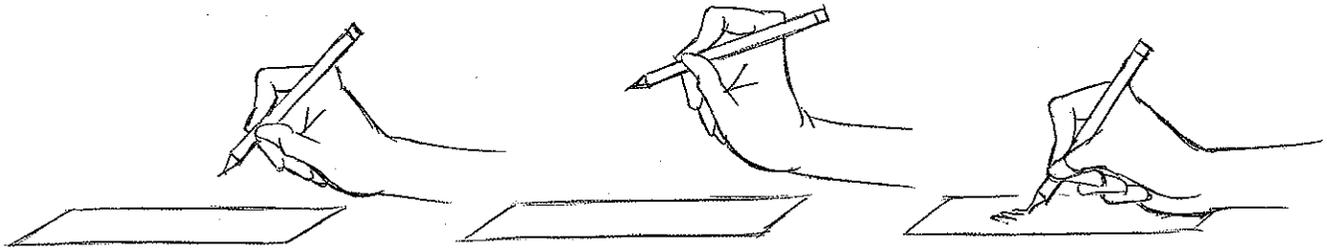


WITH SMALLER ACTIONS - TAKE A HAND WRITING -

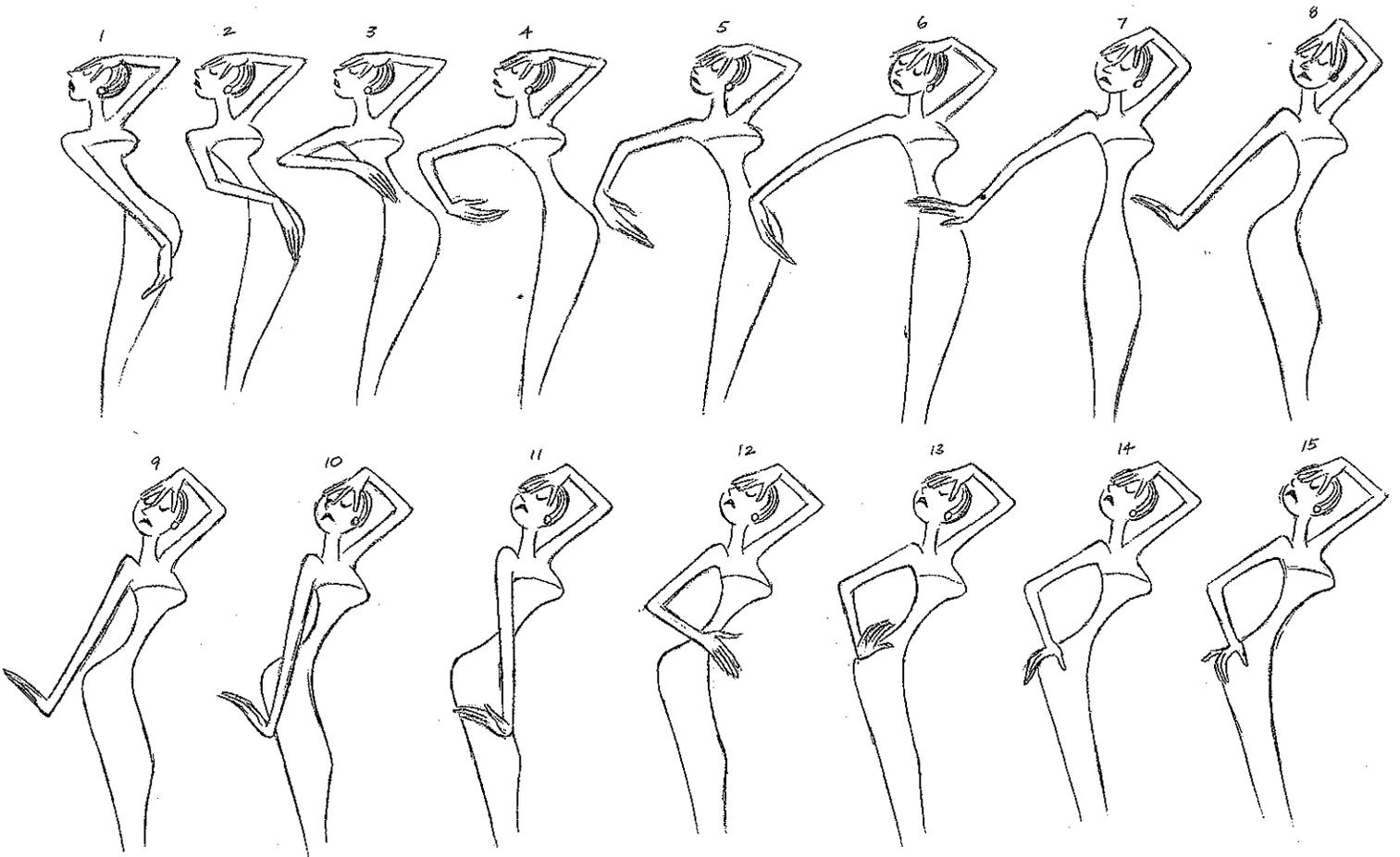


IT'S PERFECTLY CLEAR
WHAT'S HAPPENING -

BUT JUST BY PUTTING IN A SMALL ANTICIPATE UP BEFORE HE WRITES - WE FEEL THE PERSON THINKING.



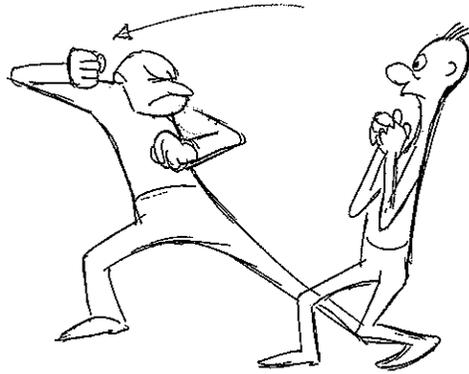
OR WE CAN USE FLAMBOYANT THEATRICAL GESTURES AS ANTICIPATION.
SAY A SHOWBIZ WOMAN IS GOING TO PUT HER HAND ON HER HIP - (IT'S A FIGURE 8)



ANTICIPATION IS A MAGICIAN'S STOCK IN TRADE-

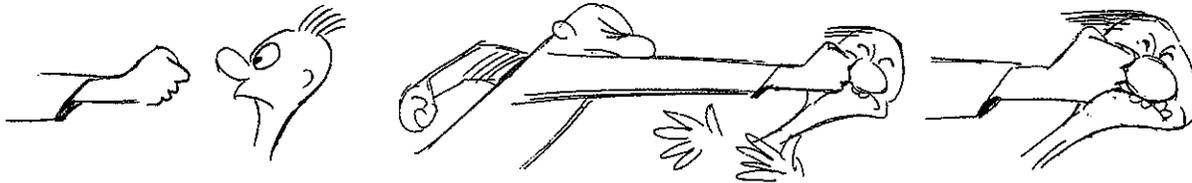


IF SOMEONE'S GOING TO HIT SOMEONE HE WOULD ANTICIPATE BACK BEFORE SWINGING FORWARD.



The ANTICIPATION TELLS US EXACTLY WHAT'S GOING TO HAPPEN.

IN THE EARLY DAYS OF ANIMATION THE CONTACT WAS LIKE HITTING A PUDDING—

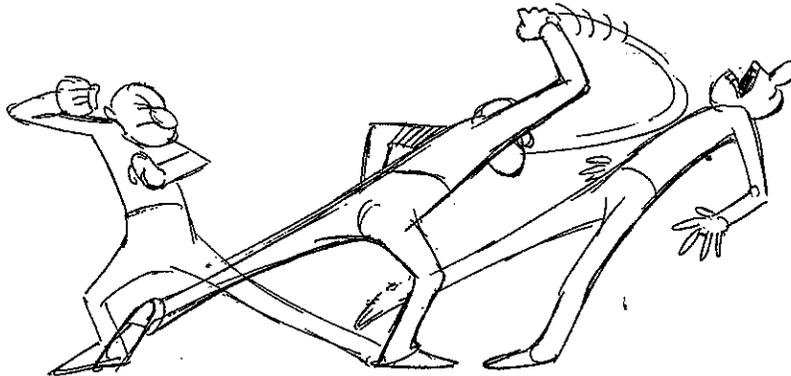


THE 'HIT' WAS USUALLY HELD FOR 4 FRAMES.

GRIM NATWICK SAID, "AT DISNEY'S I LEARNED HOW TO DELIVER A PUNCH FROM ART BARRITT. ART SAID, 'DON'T EVER SHOW THE HAND HITTING THE CHIN. SHOW THE HAND AFTER IT'S PAST THE CHIN AND THE CHIN HAS MOVED OUT OF PLACE!'"

TODAY WE JUST SHOW THE RESULT.

THERE IS NO POINT OF CONTACT.



WE LEAVE OUT THE CONTACT AND SHOW THE HAND PAST THE HITTING POINT

= 10 TIMES THE IMPACT.

KEN HARRIS TOLD ME THIS IS WHAT THEY DID IN OLD WESTERN FILMS. THEY WOULD EDIT OUT THE 'POINT OF CONTACT' FRAMES TO JUST SHOW THE RESULT OF THE HIT AND PUT A BIG BANG ON IT.

SO, WE PUT THE SOUND HIT WHEN THE FIST IS PAST THE FACE - WHEN THE CHARACTER IS DISLODGED AND THE ARM SWINGS THROUGH. WE GET THE IMPACT, THE STRENGTH FROM THE DISPLACEMENT.

AGAIN,

The ANTICIPATION IS - WE PREPARE FOR THE ACTION. WE BROADCAST WHAT WE'RE GOING TO DO.

The ONLY TROUBLE WITH ANTICIPATIONS IS THAT THEY CAN BE CORNY.

The AUDIENCE GOES, "AW SURE, I KNOW, I SEE, NOW YOU'RE GOING TO DO THIS... BORING..."

SO THEN THE GREAT THING IS TO DO SOMETHING DIFFERENT - A SURPRISE - WHICH CAN BE VERY FUNNY (OR SHOCKING.) JUST DON'T DO WHAT'S EXPECTED.

WE COULD SAY THAT AN ANTICIPATION IS AN EXPECTATION OF WHAT WILL OCCUR. THE AUDIENCE EXPECTS SOMETHING TO HAPPEN BEFORE IT ACTUALLY HAPPENS.

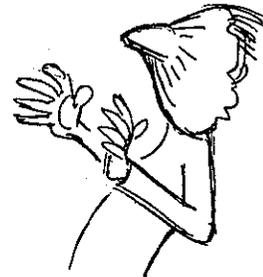
A SURPRISE GAG WORKS WHEN THE AUDIENCE READS THE EXPECTATION AND EXPECTS A CERTAIN THING TO HAPPEN AND THEN SOMETHING QUITE DIFFERENT HAPPENS—



The INHALE IS
The ANTICIPATION



ACTION

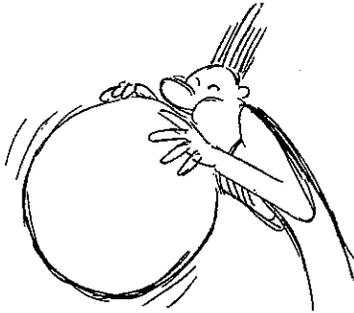


RESULT

OR



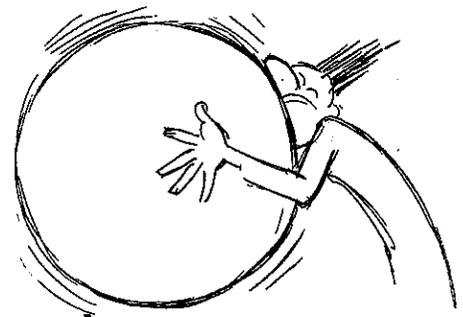
INHALE = ANTICIPATION



ACTION



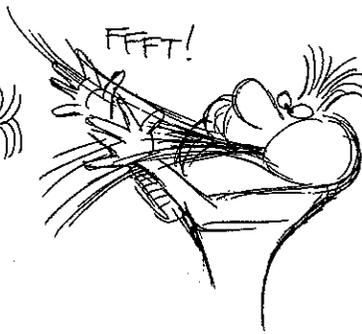
INHALE = MORE
ANTICIPATION



MORE ACTION



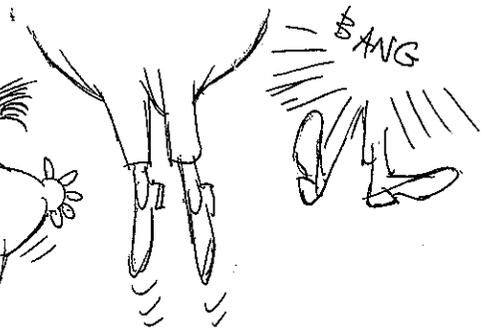
MORE INHALE
= MORE ANTICIPATION



ACTION



REACTION
OR RESULT



MORE
REACTION

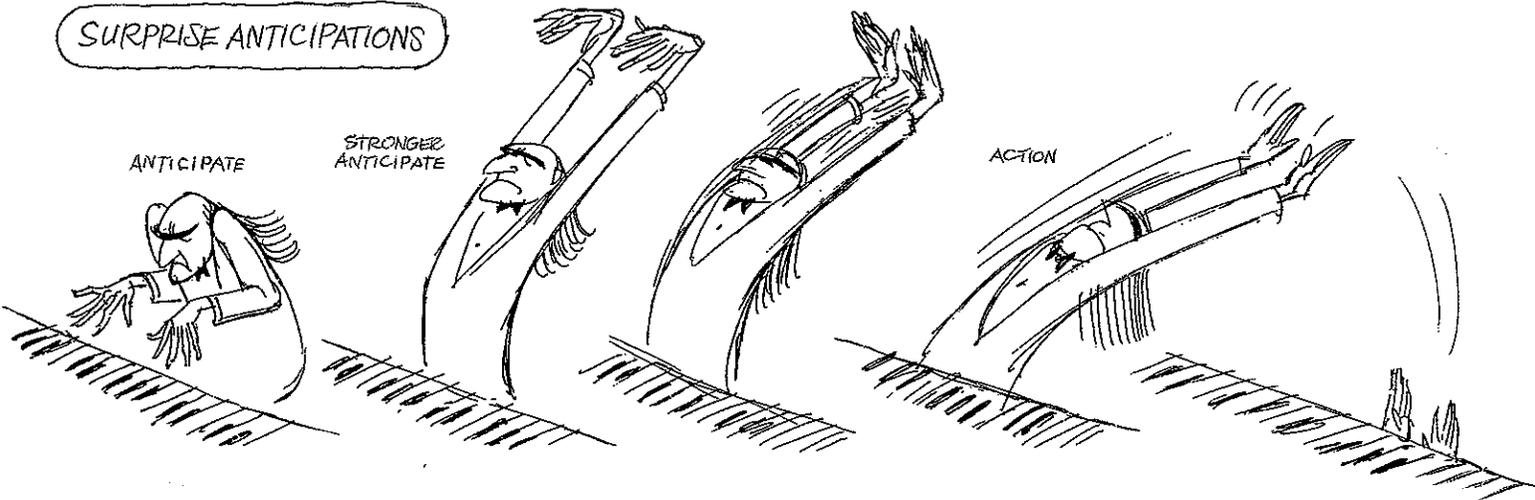
YET MORE
REACTION.

SURPRISE ANTICIPATIONS

ANTICIPATE

STRONGER ANTICIPATE

ACTION



WAIT FOR IT -

ANTICIPATE

RESULT

ANTICIPATE

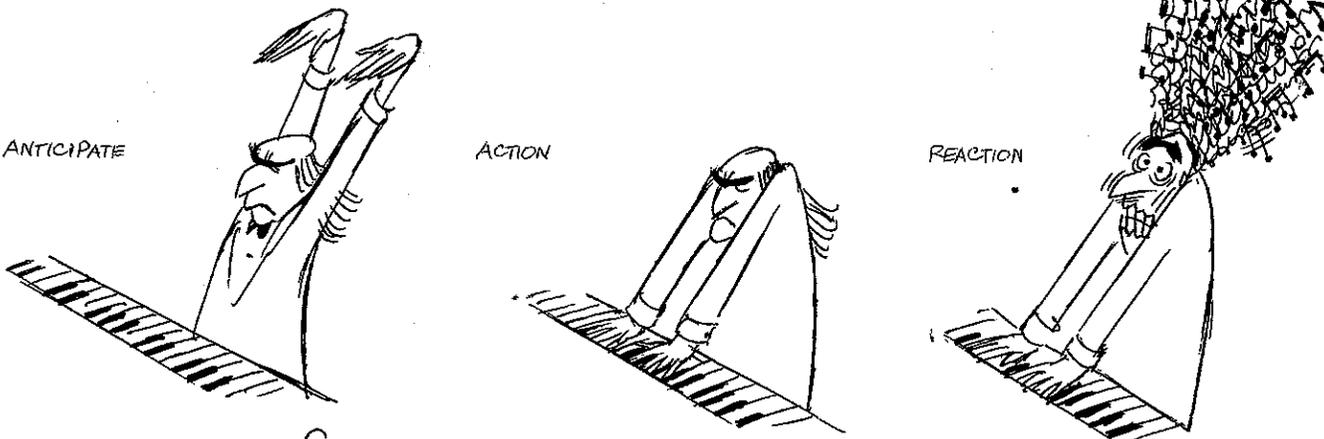
RESULT



ANTICIPATE

ACTION

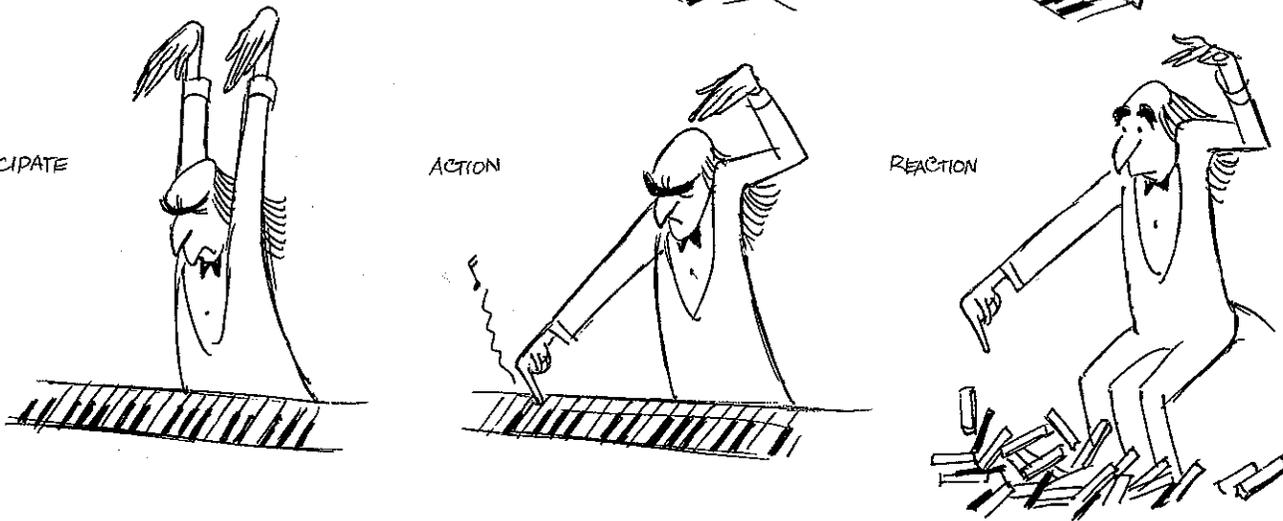
REACTION



ANTICIPATE

ACTION

REACTION



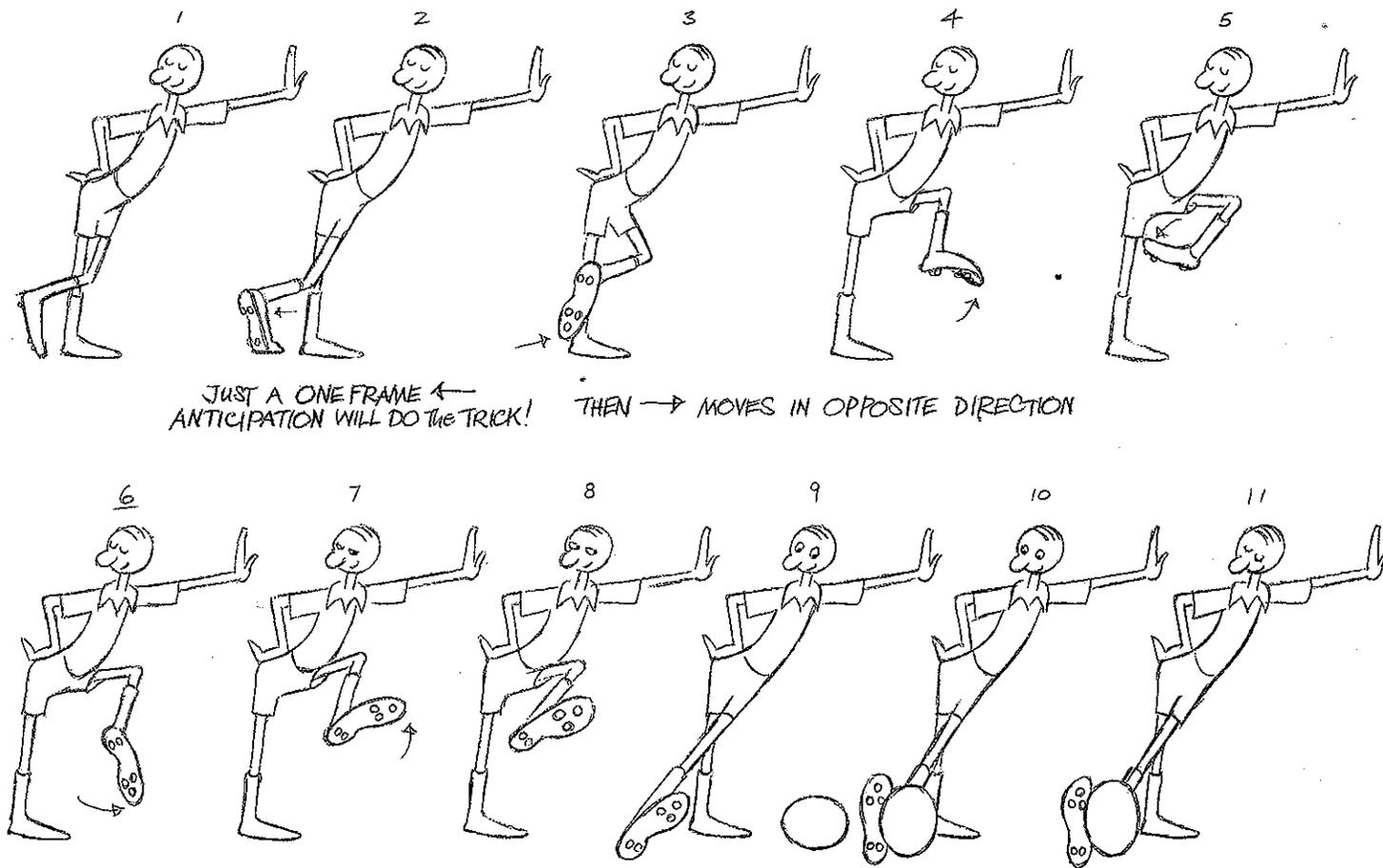
INVISIBLE ANTICIPATIONS

A WAY TO GET 'SNAP' WHICH ANIMATORS ARE ALWAYS TALKING ABOUT IS THIS:
SAY A CHARACTER SEES SOMETHING MILDLY SURPRISING and LOOKS UP SLIGHTLY -



WE PUT IN A VERY FAST ANTICIPATION - A DRAWING OR TWO IN THE OPPOSITE DIRECTION FROM WHERE WE WANT TO GO. IT'S TOO FAST FOR THE EYE TO SEE IT - IT'S JUST FOR ONE OR TWO FRAMES - IT'S INVISIBLE TO THE EYE BUT WE FEEL IT. THIS GIVES IT THE SNAP.

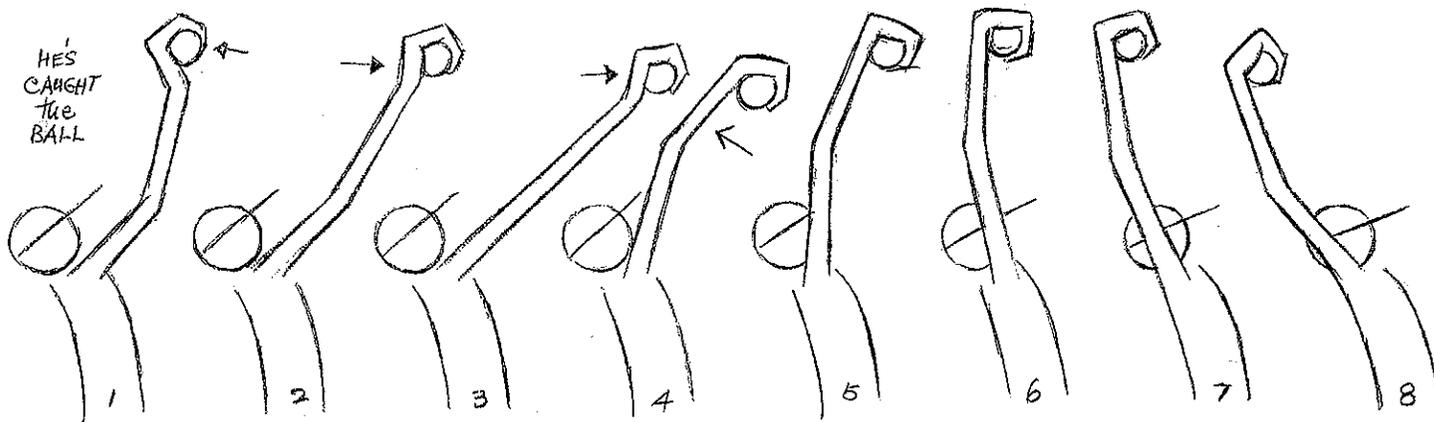
SAY A SOCCER GOALIE IS GOING TO STOP A BALL WITH A CIRCULAR FOOT FLOURISH -



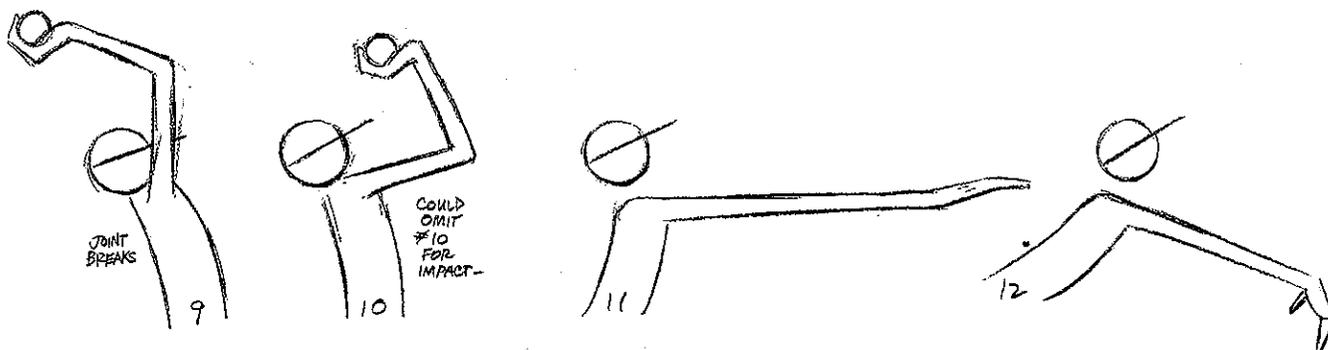
OF COURSE, THE FOOT FLOURISH IS ITSELF AN ANTICIPATION OF CATCHING THE BALL.

THIS DEVICE GIVES AN EXTRA PUNCH TO AN ACTION BY INVISIBLY ANTICIPATING ANY ACTION. IT'S THE SAME THING AS A 'NATURAL' ANTICIPATION - JUST GO THE OPPOSITE WAY FIRST - BUT ONLY FOR ONE, TWO OR THREE FRAMES.

A BASEBALL PLAYER HAVING CAUGHT A BALL COULD ANTICIPATE THE ANTICIPATION OF HIS THROW FOR JUST 2 FRAMES -



ANTIC. FORWARD FOR 2 FRAMES - NOW GO BACK INTO THE 'NORMAL' ANTICIPATION -



CONCLUSION:

WHENEVER POSSIBLE WE TRY TO FIND AN ANTICIPATION (OR ANTICIPATIONS) BEFORE THE ACTION.

BILL TYTLA SAID,

" BE SIMPLE.
BE DIRECT.
BE CLEAR. "

AND

" BE VERY SIMPLE.
MAKE A STATEMENT -
and FINISH IT - SIMPLY. "

SO,

1 WE ANTICIPATE THE ACTION
2 DO IT
3 and SHOW WE'VE DONE IT.

ANTICIPATION LEADS ON NATURALLY RIGHT INTO 'TAKES' and 'ACCENTS' →

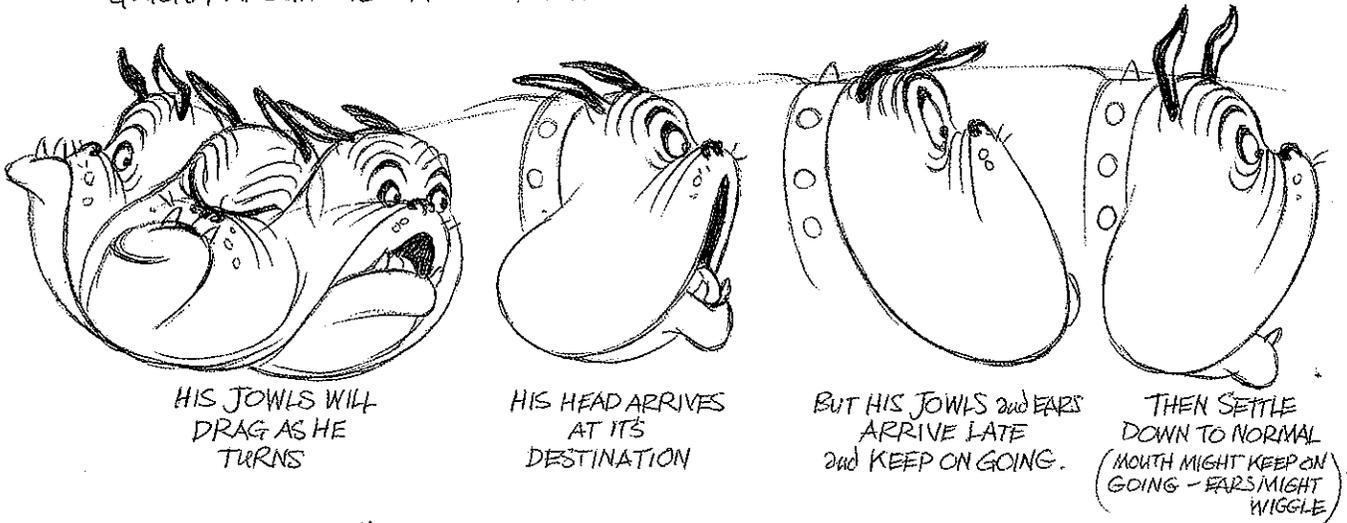
NOW WE COME TO A DIFFERENT THING WITH A SIMILAR NAME -

OVERLAPPING ACTION

THIS IS WHERE THINGS MOVE IN PARTS.

- WHERE EVERYTHING DOES NOT HAPPEN AT THE SAME TIME.

TAKE A HOLLYWOOD BULLDOG TURNING QUICKLY AROUND TO SEE SOMETHING -



HIS JOWLS WILL DRAG AS HE TURNS

HIS HEAD ARRIVES AT ITS DESTINATION

BUT HIS JOWLS AND EARS ARRIVE LATE AND KEEP ON GOING.

THEN SETTLE DOWN TO NORMAL (MOUTH MIGHT KEEP ON GOING - EARS MIGHT WIGGLE)

THE JARGON IS - "THE JOWLS AND EARS" DRAG" AND THEN THEY "FOLLOW THROUGH"

THEY'RE THE RESULT OF THE MAIN ACTION - GENERATED BY THE MAIN ACTION.

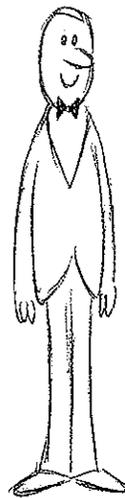
'OVERLAPPING ACTION' MEANS ONE PART STARTS FIRST AND OTHER PARTS FOLLOW.

LET'S TAKE A TYPICAL UTTERLY-BLAND, BORING DESIGN LIKE THEY HAD FOR TV COMMERCIALS IN THE 1950'S -

THIS DULL CREATURE IS GOING TO TURN AND FACE US.



NOT MUCH TO WORK WITH - IS IT?

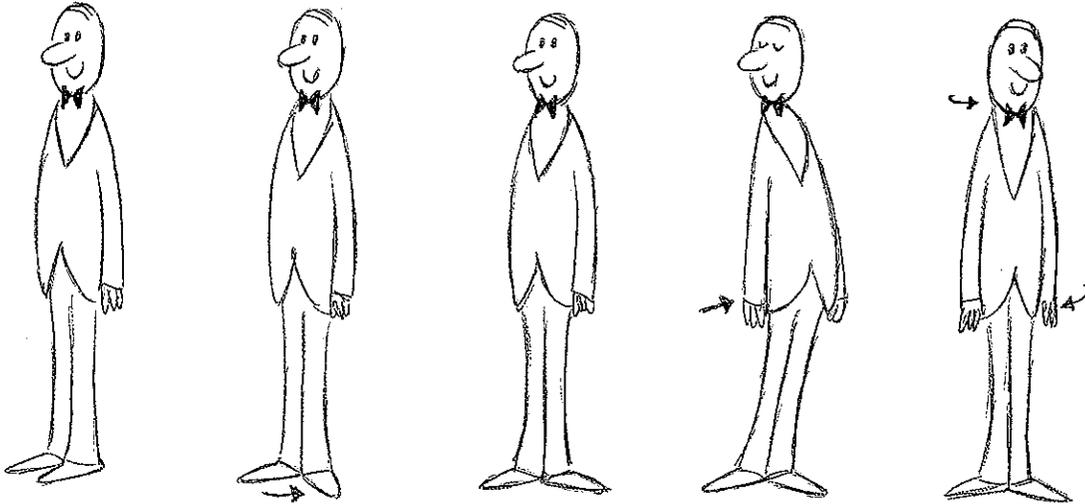


WE COULD CONTRIBUTE TO THE BOREDOM BY PUTTING IN AN EQUALLY DULL BREAKDOWN RIGHT IN THE MIDDLE and GO HOME,

AS MILT KAHL SAID, "THE MOST DIFFICULT THING TO DO IN ANIMATION IS NOTHING. - YOU KNOW, THATS A VERY TRUE STATEMENT."

RIGHT, BUT HERE'S HOW WE CAN MAKE 'NOTHING' AT LEAST INTERESTING... WE CAN TAKE THE CURSE OFF THIS VERY ORDINARY BIT OF ACTION BY SIMPLY BREAKING THE ACTION INTO PARTS.

PASS POS.



THE EYES WOULD PROBABLY MOVE FIRST, BUT WE'RE STUCK WITH DOTS -

SO LET'S SIMPLY MOVE THE FOOT FIRST

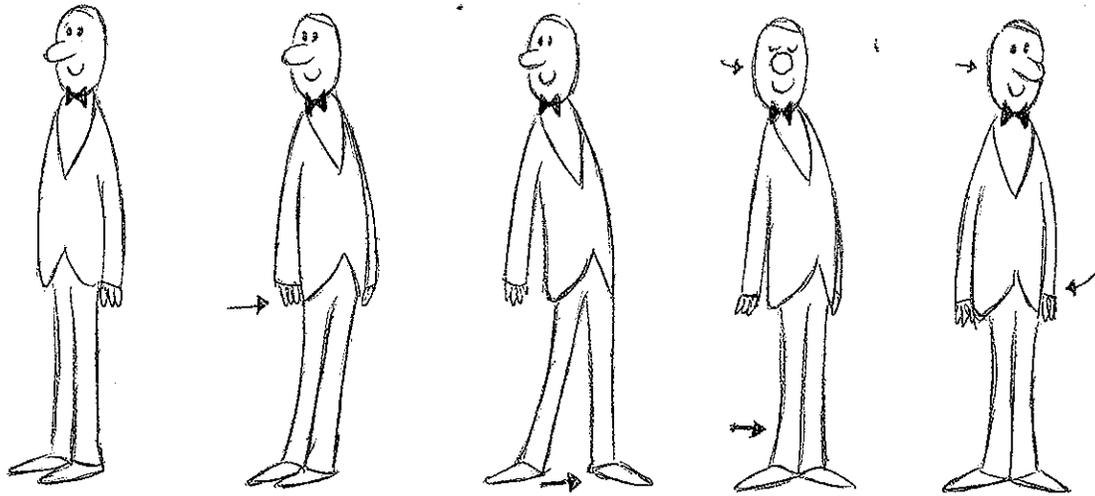
DELAY THE HEAD and THE REST

THEN LET'S MOVE THE STOMACH and HIPS. STILL DELAY THE HEAD BUT THROW IN A BLINK

THEN EVERYTHING SETTLES and THE HEAD FOLLOWS LAST.

(OR) SINCE MOST OF OUR BODY ACTIONS START FROM THE HIPS ...

PASS POS



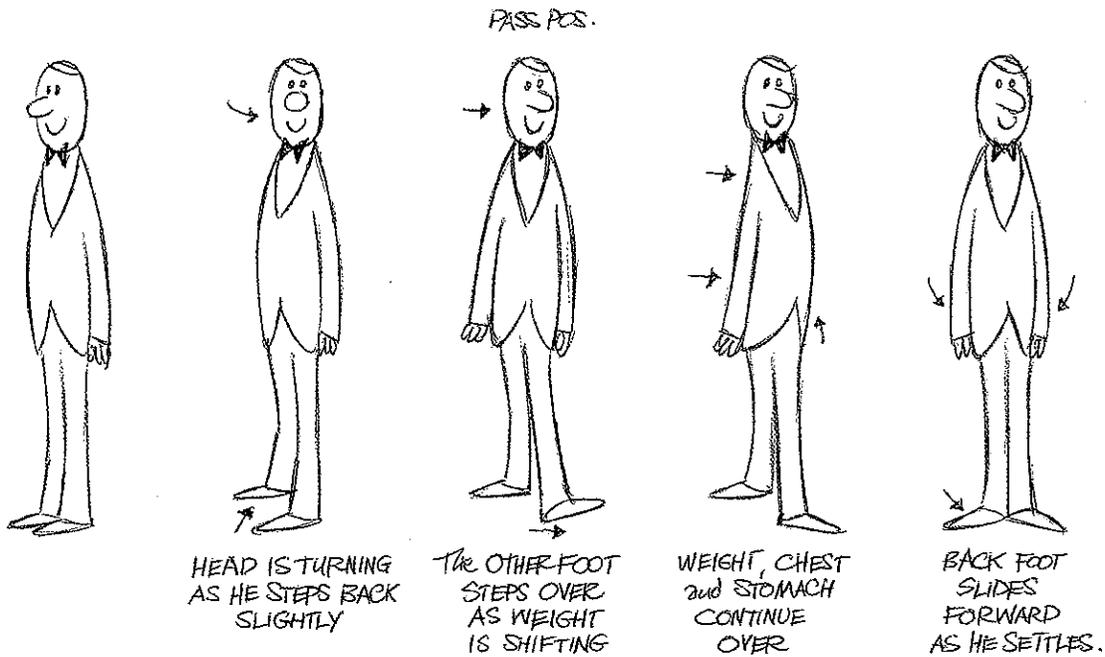
WE'LL MOVE THE HIPS and STOMACH FIRST.

TAKES A STEP. STILL DELAY THE HEAD.

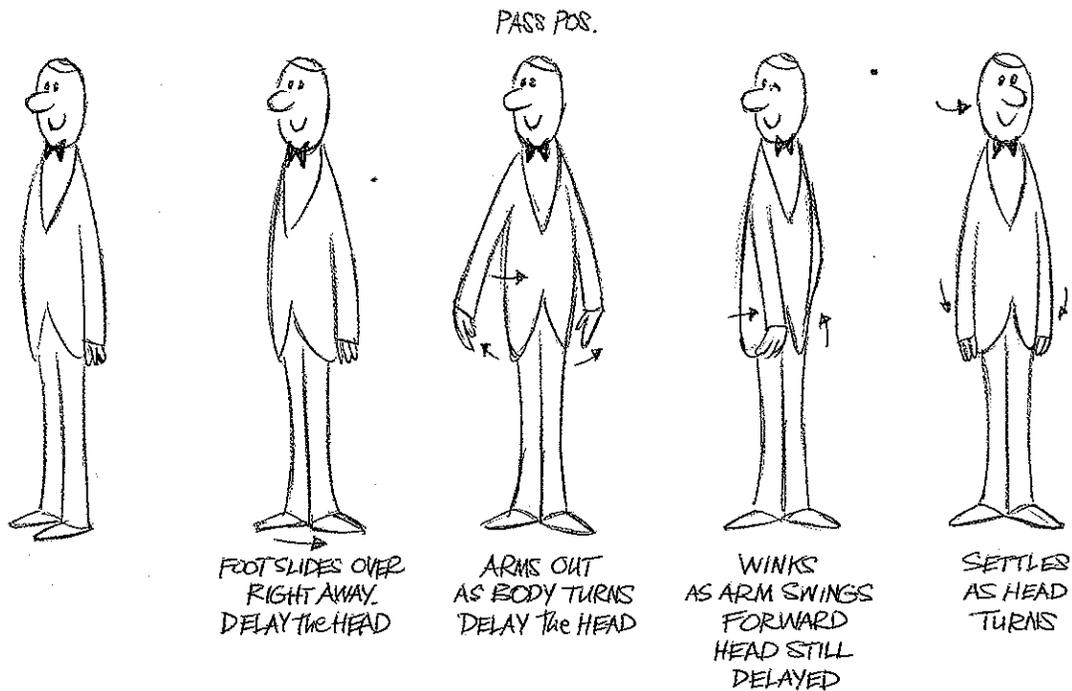
OTHER FOOT SLIDES OVER WHILE HEAD IS IN MID TURN. THROW IN A SLOW BLINK.

SETTLES.

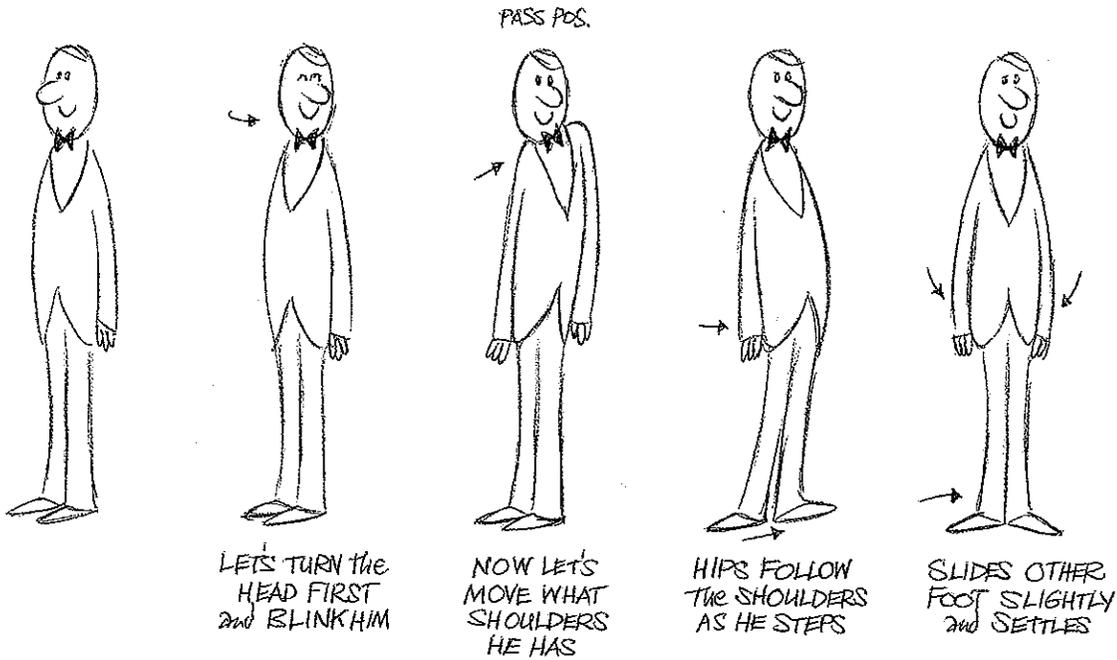
WE HAVEN'T EVEN TILTED HIS HEAD OR CHANGED HIS EXPRESSION - BUT SIMPLY BY OVERLAPPING PARTS WE'VE INJECTED LIFE INTO A PEDESTRIAN SITUATION.



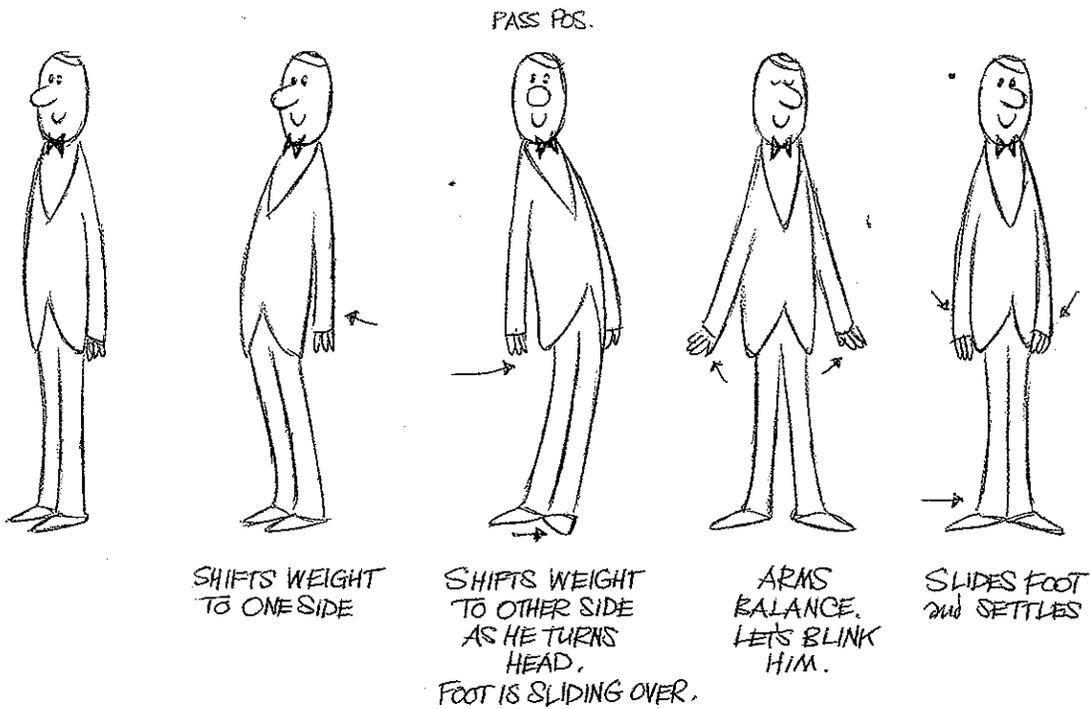
WE CAN GO ON LIKE THIS FOREVER...



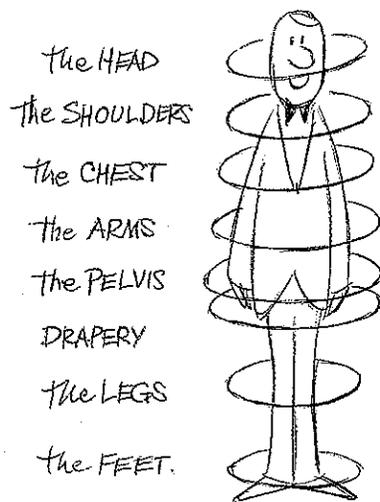
NO MATTER HOW DEADLY THE ACTION IS THAT'S CALLED FOR - WE CAN MAKE IT MORE INTERESTING BY OVERLAPPING -



JUST ONE LITTLE DETAIL THAT'S DIFFERENT WILL CHANGE EVERYTHING.



SO TO MAKE EVEN THE DULLEST ACTION OR FIGURE INTERESTING, WE BREAK THE BODY INTO SECTIONS - INTO DIFFERENT ENTITIES AND MOVE SECTIONS - ONE AT A TIME, CONSTANTLY OVERLAPPING.

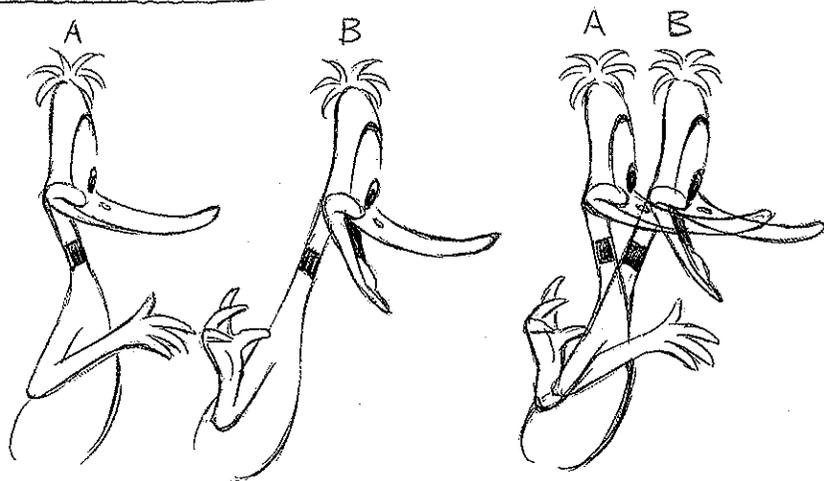


AND WE CAN BREAK IT UP INTO EVEN SMALLER SECTIONS IF WE LIKE.

CONCLUSION:

PEOPLE UNFOLD, ONE PART STARTS FIRST, GENERATING THE ENERGY FOR OTHER PARTS TO FOLLOW - WHICH THEN 'FOLLOW THROUGH'. WHEN A FIGURE GOES FROM ONE PLACE TO ANOTHER, A NUMBER OF THINGS TAKE PLACE AND EVERYTHING ISN'T HAPPENING AT THE SAME TIME. WE HOLD BACK ON AN ACTION. THINGS DON'T START OR END AT THE SAME TIME. VARIOUS PARTS OF THE BODY OVERLAP EACH OTHER, SO THIS IS WHAT'S CALLED IN THE CRAFT - 'OVERLAPPING ACTION'.

SIMPLE COUNTERACTION



THERE'S NOT MUCH TO SAY ABOUT COUNTERACTION. OBVIOUSLY WE DO IT NATURALLY TO BALANCE OURSELVES.

ONE PART GOES FORWARD AS ANOTHER PART BALANCES BY GOING BACK.

- OR ONE PART GOES UP AS ANOTHER BALANCES BY GOING DOWN.