RICHARD WILLIAMS

DIRECTOR OF ANIMATION 'WHO FRAMED ROGER RABBIT'

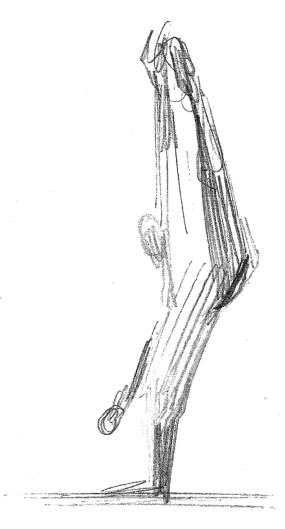




THE ANIMATOR'S SURVIVAL KIT

A MANUAL OF METHODS, PRINCIPLES AND FORMULAS FOR CLASSICAL, COMPUTER, GAMES, STOP MOTION AND INTERNET ANIMATORS





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."

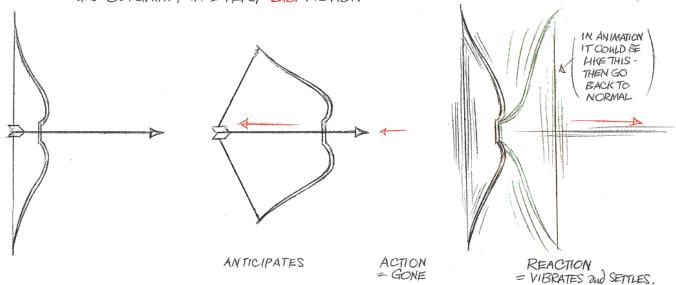
CHARLIE CHAPLIN SAID,

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

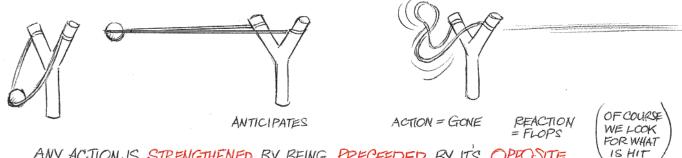
The GREAT FRENCH MIME, MARCEL MARCEAU SAYS,

"USE BIG ANTICIPATION."

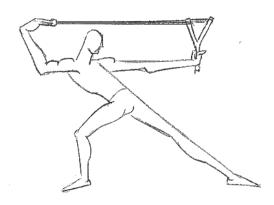
- WHY BECAUSE IT COMMUNICATES WHAT IS GOING TO HAPPEN. The AUDIENCE SEES WHAT IS GOING TO HAPPEN - THEY SEE THE ANTICIPATION and so they ANTICIPATE IT WITH US. THEY GO WITH US.
- MHAS BECAUSE FOR ALMOST EVERY ACTION WE MAKE THERE IS AN ANTICIPATION. WE THINK OF THINGS FIRST - THEN DO THEM. UNLESS ITS 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 ANTICIPATION TAKES PLACE IN ALMOST EVERY ACTIONand CERTAINLY IN EVERY BIG ACTION.



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

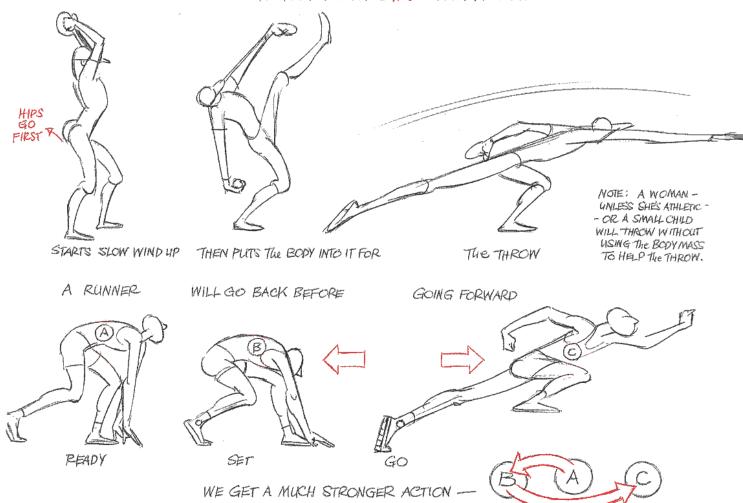


ANY ACTION IS STRENGTHENED BY BEING PRECEDED BY ITS OPPOSITE.



IF ACTION IS INTUE, WHOLE BODY THEN WE HAVE ANTICIPATION OF TREMENDOUS LATENT FORCE.

LISUALLY THE ANTICIPATION IS SLOWER - LESS VIOLENT THAN THE ACTION SLOW ANTICIPATION, ZIP! = FAST ACTION

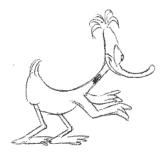


ANY ACTION CAN BE ENHANCED IF THERE IS AN ANTICIPATION BEFORE the ACTION.



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

OF COURSE, WITH A "CARTOON" CARTOON -







ANTICIPATES HIS EXIT



FEATHERS LINGER

NO DRAWINGS GOING OUT - HE'S JUST GONE.

ANTICIPATION HAPPENS WITH SMALLER and UNDERSTATED MOVEMENTS.

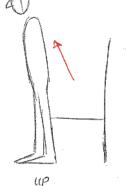
GETTING UP FROM A CHAIR, WE GO BACK BEFORE WE GO FORWARD AND DOWN A BEFORE WE GO UP.



ANTICIPATES BACK TO GO FORWARD



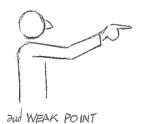
GOES FORWARD and DOWN TO GO



SOMEONE MAKING A POINT-



WEAK ANTICIPATE



NOW, MAKING THE ACTION STRONGER -







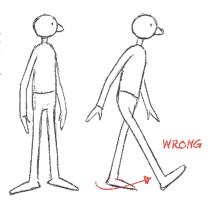
BODY BACK SLIGHTLY



BODY FORWARD GOING BACK FIRST IN the OPPOSITE PIRECTION MAGNIFIES the RESULT.

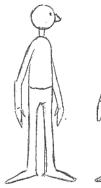
TAKE A SIMPLE THING LIKE STARTING A WALK-

ITS UNNATURAL TO START A WALK WITH the FARTHEST FOOT FROM The PIRECTION WE'RE GOING.

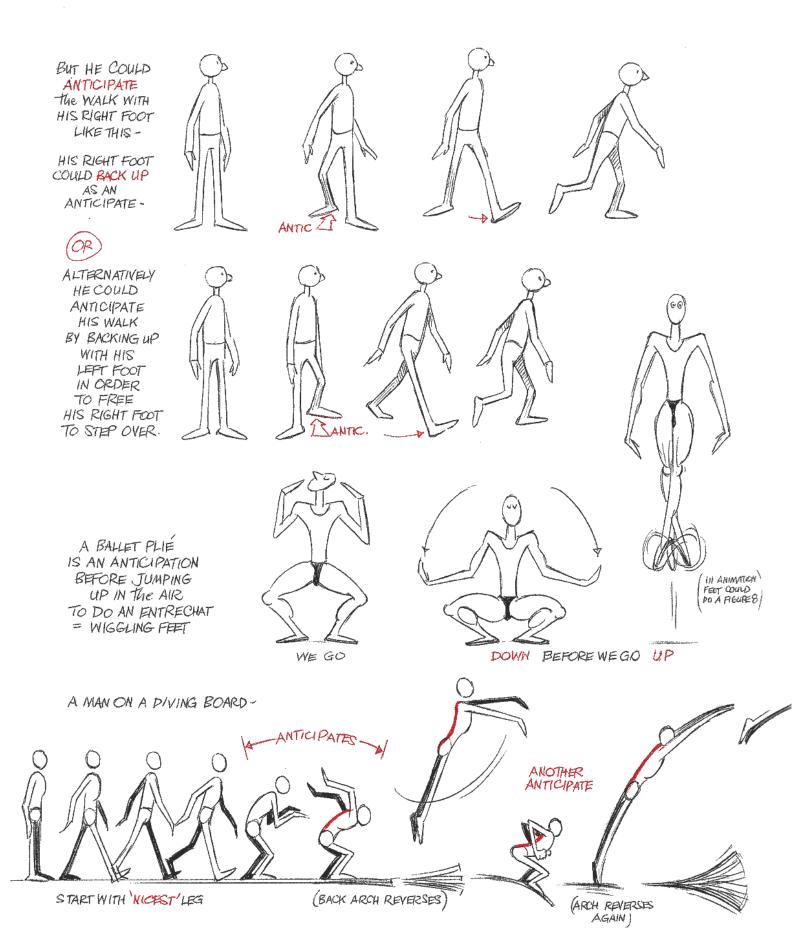


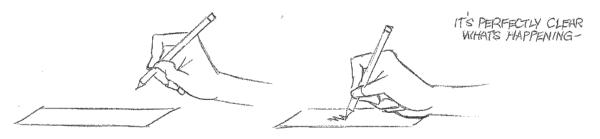
The OBVIOUS WAY TO GO TO HIS LEFT IS TO START WITH HIS LEFT FOOT.

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

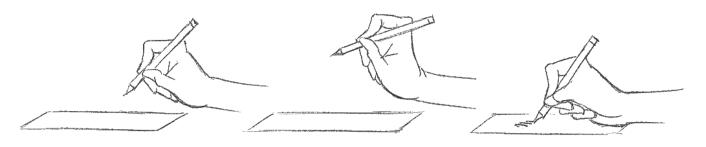








BUT JUST BY PUTTING IN A SMALL ANTICIPATE UP BEFORE HE WRITES - WE FEEL THE PERSON THINKING.



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)





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



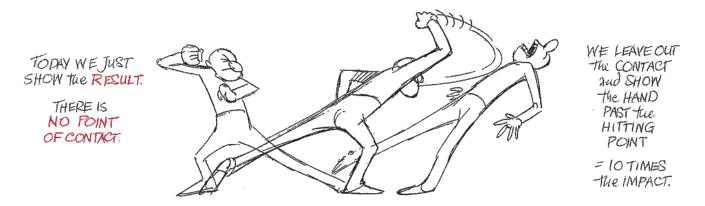
The ANTICIPATION TELLS US EXACTLY WHAT'S GOING TO HAPPEN.

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 BABBITT.
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!"



KEN HARRIS TOLD ME THIS IS WHAT THEY DID IN OLD WESTERN FILMS. THEY WOULD EDITOUT THE POINT OF CONTACT FRAMES TO JUST SHOW THE RESULT OF THE HIT and PUT A RIG 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,

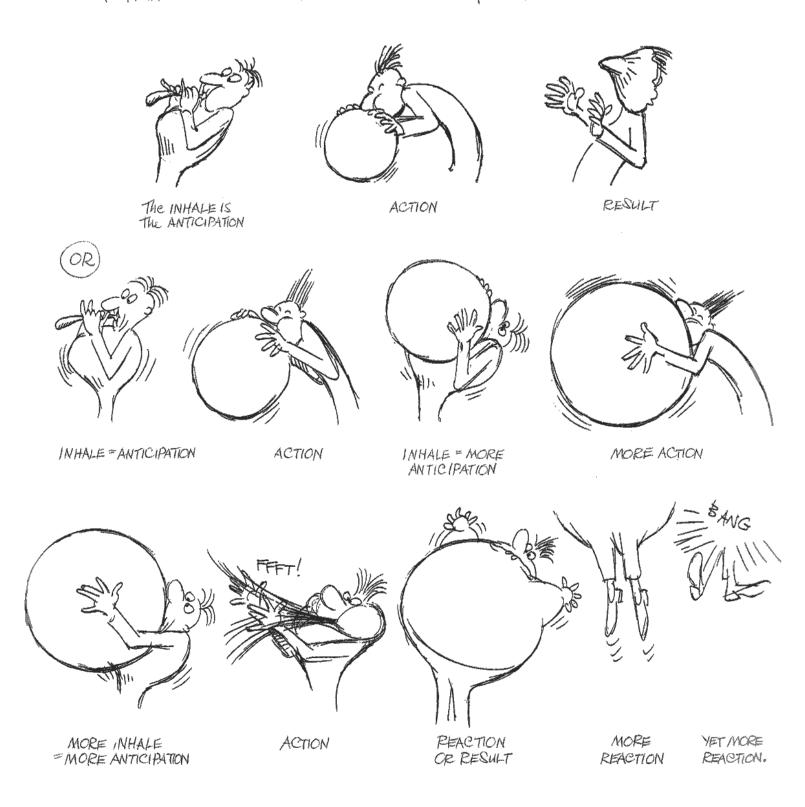
The ANTICIPATION IS - WE PREPARE FOR The ACTION. WE BROADCAST WHAT WE'RE GOING TO DO.

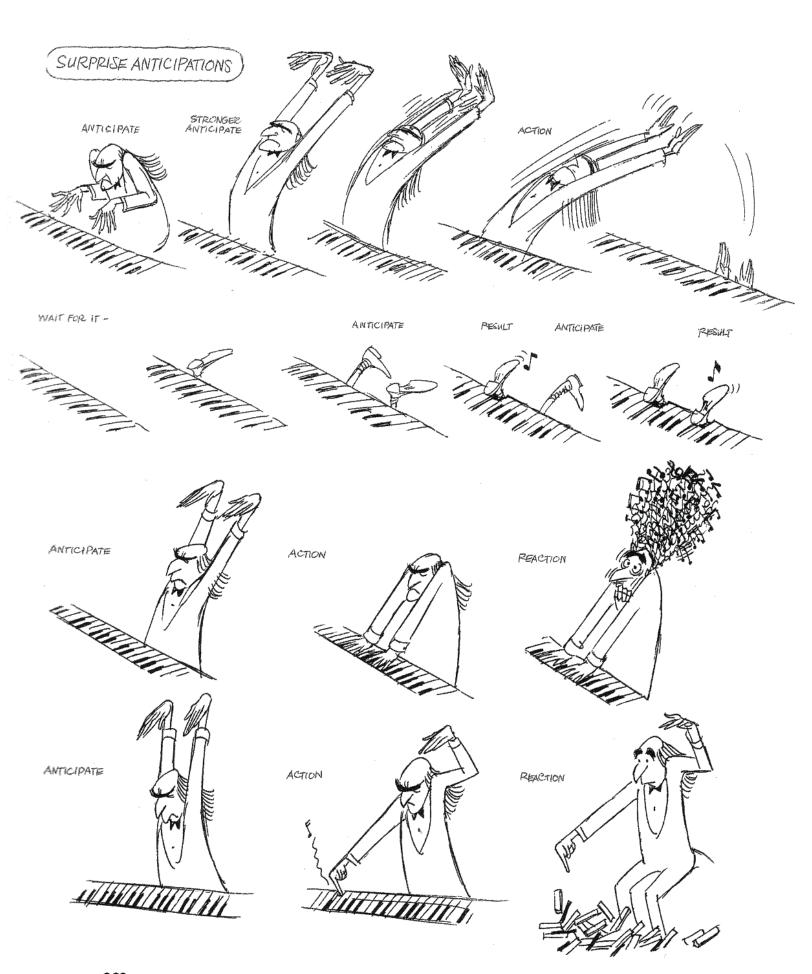
The ONLY TROUBLE WITH ANTICIPATIONS IS THAT THEY CAN BE CORNY.
THE AUDIENCE GOES, "AW SURE, I KNOW, I SEE, NOW YOU'RE GOING TO DO THIS ... BORING ...

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





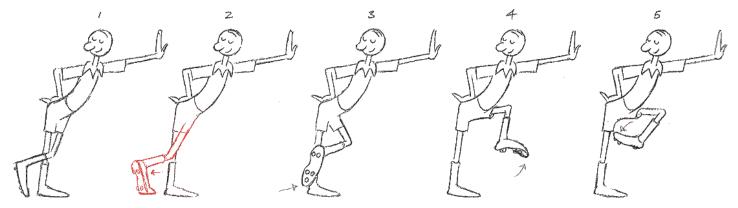
INVISIBLE ANTICIPATIONS

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

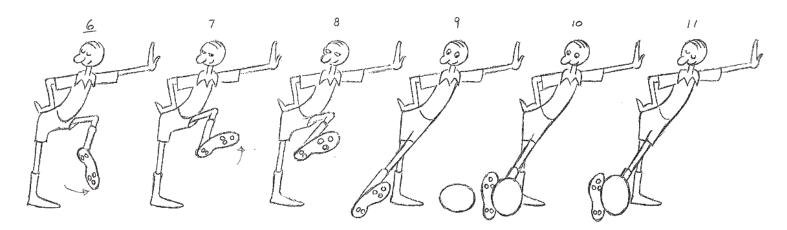


WE PUT IN A VERY FAST ANTICIPATION - A DRAWING OR TWO IN The OPPOSITE DIRECTION FROM WHERE WE WANT TO GO. It'S TOO FAST FOR THE EYE TO SEE IT - IT'S JUST FOR ONE OR TWO FRAMES - IT'S INVISIBLE TO THE EYE BUT WE FEEL IT. THIS GIVES IT THE SNAP.

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



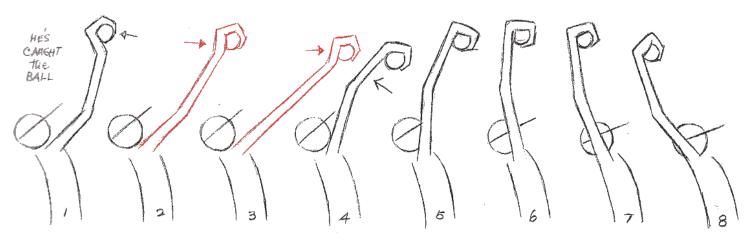
JUST A ONE FRAME 4-ANTICIPATION WILL DO THE TRICK! THEN - P MOVES IN OPPOSITE DIRECTION



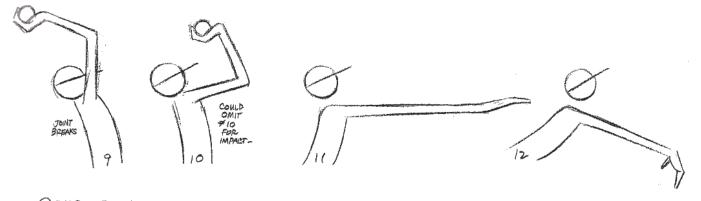
OF COURSE, THE FOOT FLOURISH IS ITSELF AN ANTICIPATION OF CATCHING THE BALL.

THIS DEVICEGIVES 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.

TYTLA SAID,

BE SIMPLE.

BE DIRECT.

BE CLEAR.

AND

BE VERY SIMPLE.

MAKE A STATEMENT
and FINISH IT-SIMPLY.

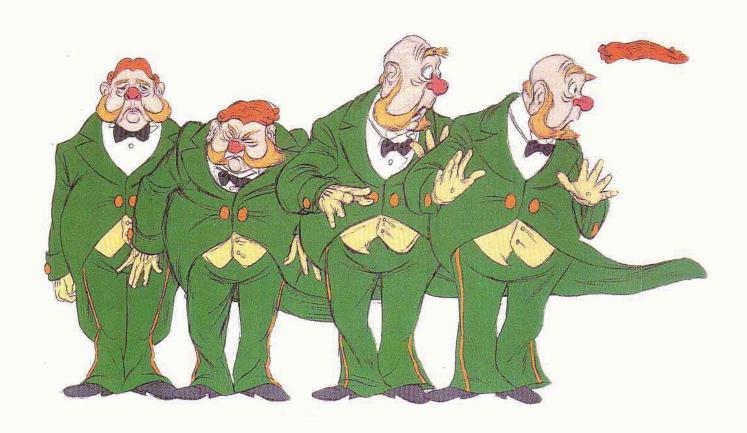
SO,

I WE ANTICIPATE THE ACTION

2 DO IT

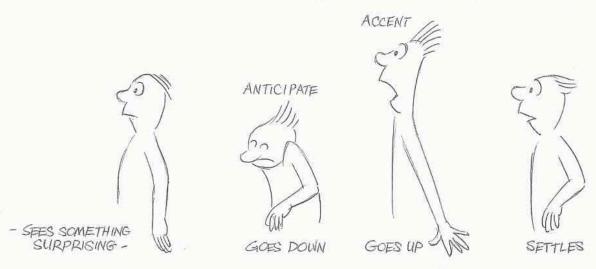
3 and SHOW WE'VE DONE IT.

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



TAKES AND ACCENTS

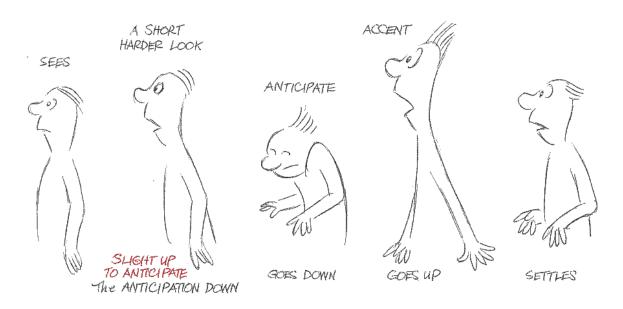
A TAKE IS AN ANTICIPATION OF AN ACCENT WHICH THEN SETTLES.



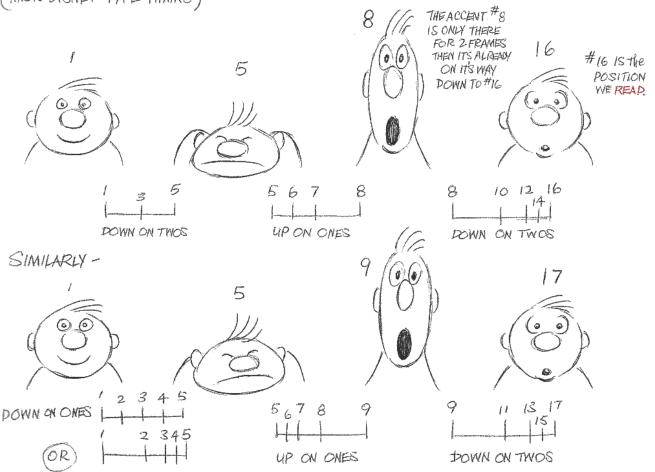
THIS IS THE BASIC PATTERN OF A CARTOON TAKE!

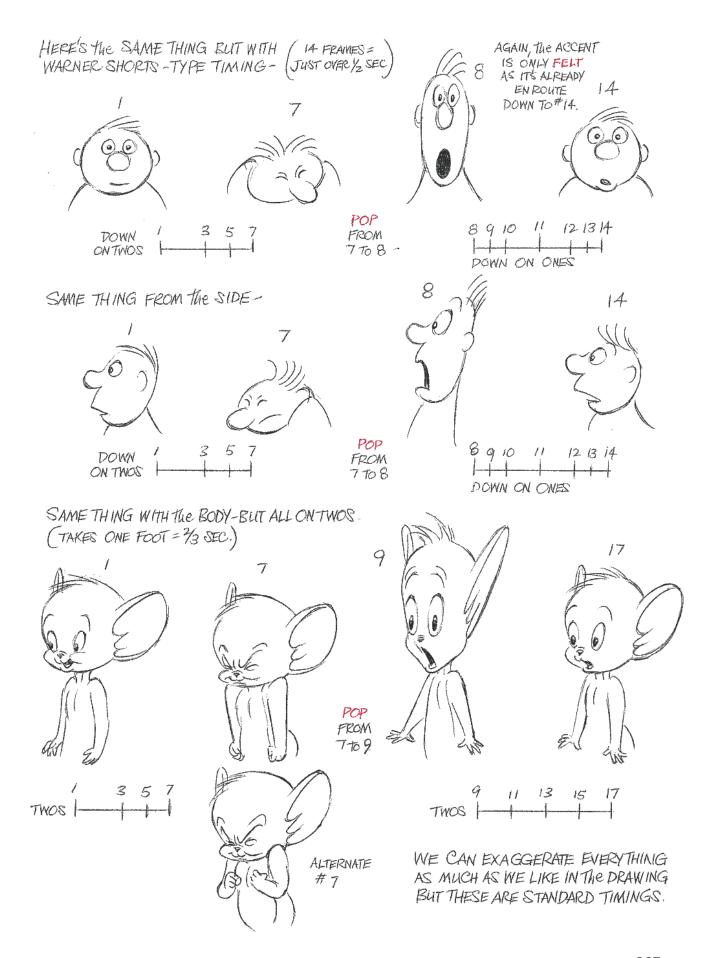
HERE FOLLOWS A BUNCH OF FORMULAS and VARIATIONS ON HOLLYWOOD TAKES WORKED OUT IN The 1930'S and 40'S....

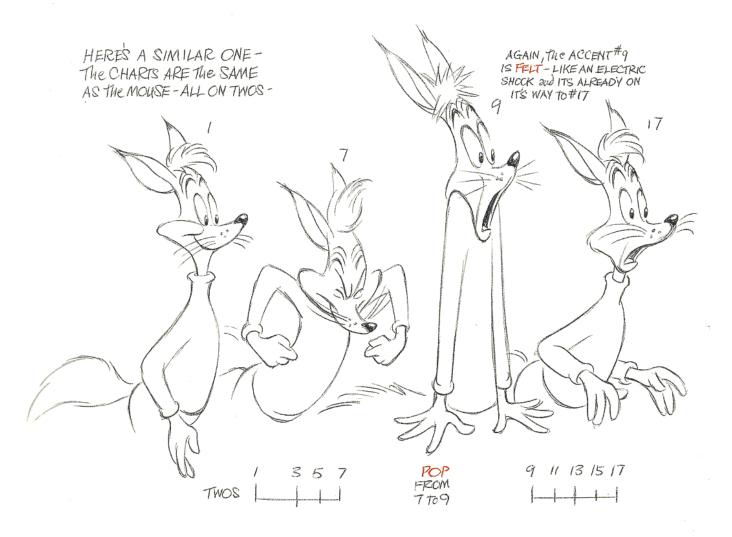
BUT WHILE WE'RE AT IT, WE COULD STRENGTHEN OUR BARIC TAKE BY ADDING IN A SLIGHT UP ANTICIPATION OF THE DOWN ANTICIPATION AS HE TAKES A CLOSER LOCK-



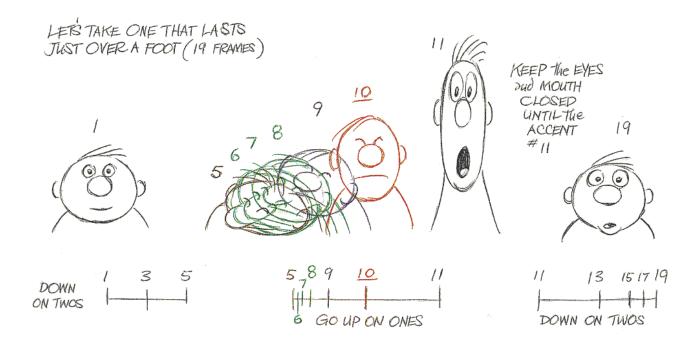
HERE'S A FORMULA FOR AN ORDINARY STRAIGHT UP and DOWN TAKE (LASTS I FOOT = 1/3 SEC.)
(THIS IS DISNEY-TYPE TIMING)

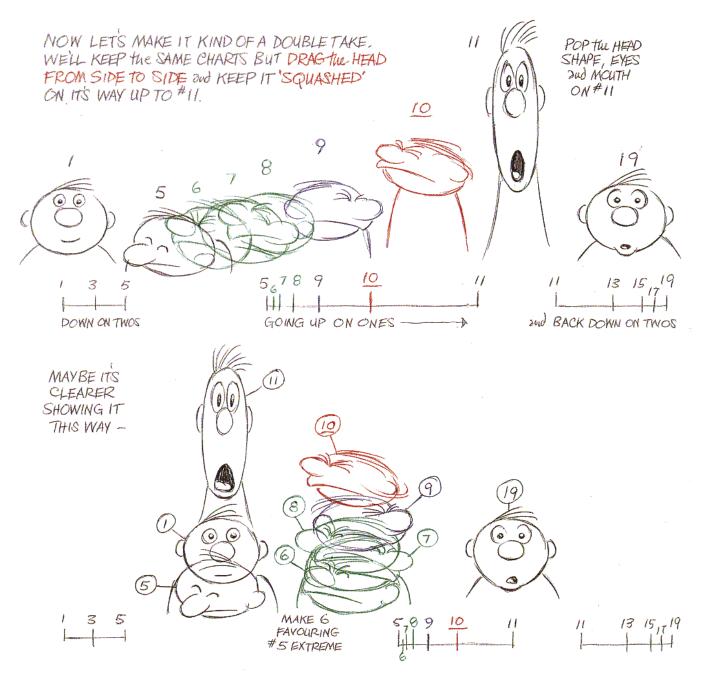






THESE ARE SOLID WORKING FORMULAS - BUT WE CAN START BEING MORE INVENTIVE -





WE SHOULDN'T WORRY ABOUT DISTORTED PRAWINGS OR IMAGES. LIVE ACTION HAS TERRIBLY DISTORTED FRAMES.

BUT WE SHOULD REMEMBER WHAT THE OPIGINAL YOLUME OF A CHARACTER IS -AND NOT STRETCH and COMPRESS FORGETTING THIS VOLUME - SO THAT THE CHARACTER CHANGES OVERALL SIZE.

MILT KAHL SAID, "I KEEP THE SAME AMOUNT OF MEAT IN A TAKE."

BUT WE CAN PUSH IT AROUND LIKE MAD -

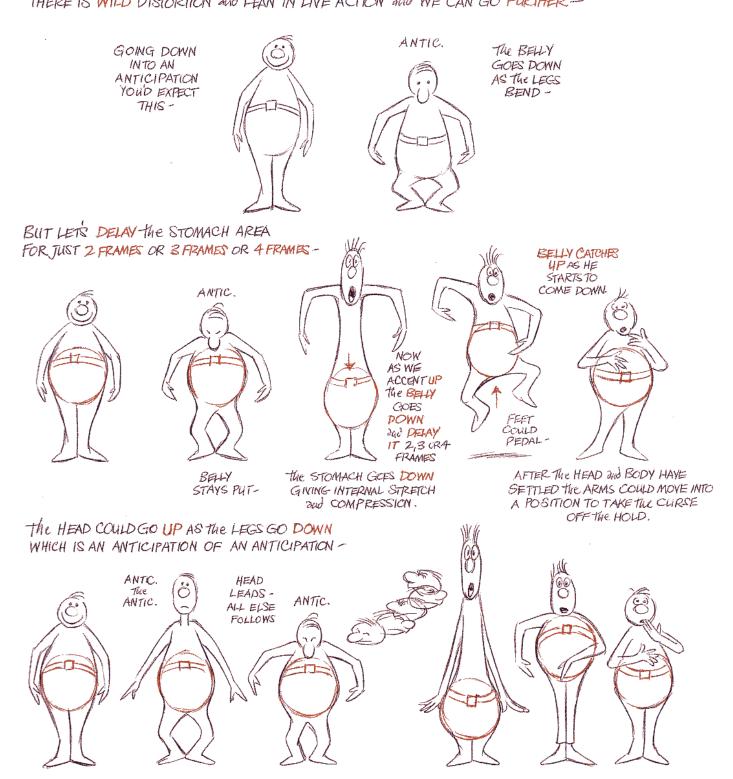


WE SHOULDN'T BE AFRAID OF DISTORTION IN THE INTERIOR OF AN ACTION.

OUR DRAWINGS OR IMAGES MAY LOOK STRANGE, BUT WE REALLY ONLY SEETHESTART 2010 END POSITIONS.

WE FEEL THE DISTORTION WITHIN 2010 THAT'S WHAT COUNTS.

THERE IS WILD DISTORTION 2010 LEAN IN LIVE ACTION 2010 WE CAN GO FURTHER.—

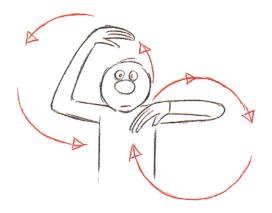


THIS IS HOW TEX AVERY DID HIS WILD, CRAZY TAKES — EXTENDING ON A SERIES OF COMPOUND ACTIONS - DELAYING BITS, OFTEN JUST 2 FRAMES APART — A SERIES OF ACTIONS = A CUMULATIVE RESULT:

ART BARBITT HAD A GREAT EMBELLISHING DEVICE FORTHE HANDS AT THE END OF A TAKE - WHICH LOTS OF ANIMATORS LITILISED -

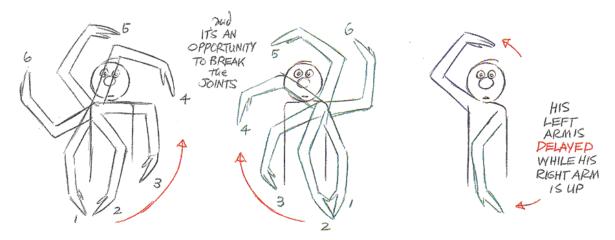
AFTER The TAKE, WHERE HE'S COMING BACK TO NORMAL (IF WE HAVE THE TIME FOR IT) HAVE THE ARMS MAKE AN ELABORATE FLURRY -ON CHES. - VERY FAST.

The ARMS EACH SWING AROUND IN A CIRCLE COUNTERING EACH OTHER

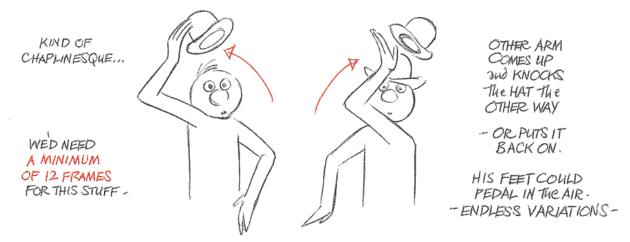


THEY CAN MAKE A FIGURE 8 AS LONG AS THEY COUNTER FACH OTHER.

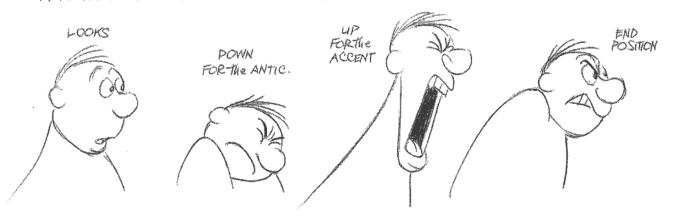
The LEFT ARM DOES THE SAME AS THE RIGHT - BUT STARTS LATER AND COUNTERS IT.



ANOTHER LITTLE REFINEMENT - THE ARM COULD KEEP KNOCKING HIS HAT OFF and ON AGAIN-



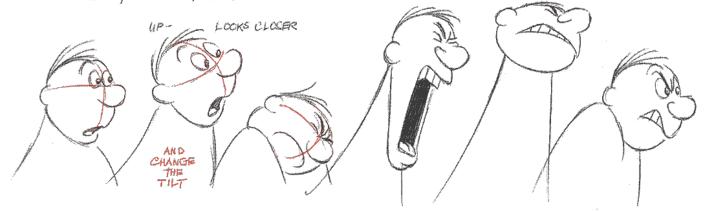
It'S A GOOD IDEA TO LOOK FOR AN EXTRA BREAKDOWN'-LET'S SAY A MAN SEES SOMETHING OUTRAGEOUS and YELLS "WHA AAAAAT?!!"



THIS WILL DO THE JOB OK - BUT LET'S LOOK FOR ANOTHER BREAKDOWN - ANOTHER. POSITION THAT WILL STRENGTHEN IT AND GIVE US MORE CHANGE - MORE VITALITY.



SO WE LOOK FOR WHATEVER CAN GIVE US MORE CHANGE OF SHAPE WITHIN THE ACTION. LET'S PUT IN ANOTHER ONE. HAVE HIM LOOK UP BEFORE TW. DOWN ANTICIPATION. AGAIN, WE ANTICIPATE TW. ANTICIPATION.

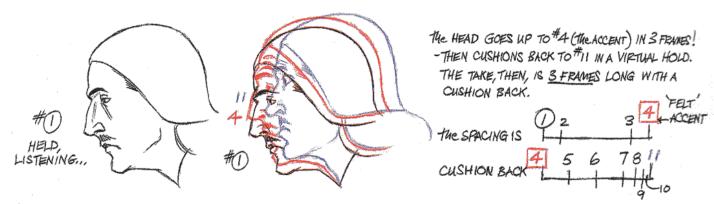


MAYBE WE'RE IN DANGER OF CVERANIMATING - OF GILDING THE LILY HERE - BUT ITS ALWAYS WORTH SEEING IF THERE'S ANOTHER MOMENTARY POSITION POSSIBLE TO CREATE MORE CONTRAST - MORE CHANGE WITHIN. (AGAIN, THERES NOTHING LIKE TRY ING IT.)

HAVING TOO MUCH ANTICIPATION CAN BE CORNY SOMETIMES and CRAZY TAKES UNNECESSARY, JUST TO CONTRADICT ALL THIS WILD, UP, DOWN and AROUND ACTION, ONE OF THE STRONGEST TAKES I'VE EVER SEEN WAS IN A FILM WITH BASIL RATHBONE AS THE VILLAIN, HE'S SMACK IN THE MIDDLE OF THE CINEWASCOPE SCREEN and HE'S BEING GIVEN INFORMATION BY AN AIDE WHICH SHOCKS HIM.



THERE'S LOTS OF ACTION BEHIND HIM and AROUND HIM WHICH COULD DEFLECT OOR ATTENTION, YET HIS TAKE JUMPS RIGHT OUT AT YOU. HE HARDLY MOVES ANY DISTANCE AT ALL, YET YOU REALLY SEE IT! THERE'S NO ANTICIPATION DOWN and NO STRETCHED ACCENT. PART OF THE REASON WE SEE IT IS BECAUSE HIS HEAD IS FROZEN IN THE MIDDLE OF THE SCREEN-(THE SACRED' CENTRAL OVAL.) HIS HEAD MAKES A SHORT, SHARP MOVE UP, THEN CUSHONS BACK A BIT.

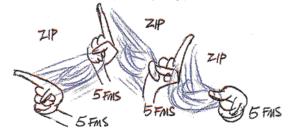


SO, IF WE DEFINE A TAKE AS A STRONG MOVEMENT TO SHOW SURPRISE OR REACTION, HE'S SUCCEPTED WITHOUT ALL OUR ANIMATION DEVICES. HOWEVER USEFUL THEY ARE TO US, LIFE DOESN'T FOLLOW OUR CONVENIENT ANIMATION FORMULAS. (JUST STUDY ANY LIVE ACTION.)

GETTING ACCENTS RIGHT WAS THE THING THAT GAVE ME THE MOST TROUBLE IN ANIMATING. I REALLY HAD TO WORK AT IT—IF IT WAS A SOFT ACCENT WITH A HEAD OR A BODY-OR

A SHARP, HARD
ACCENT OF A HAND
OR FINGER.
- PLUS HOW LONG
TO HOLD A
HAND OUTTHERE
TO READ?





TRY TO POINT 4 TIMES IN A SECOND = 4 ACCENTS.

It's PRETTY HARD TO DO. 4 STATIC HOLDS OF

6 FRAMES EACH - AND HOW DO YOU GET FROM

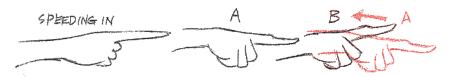
ONE TO THE OTHER? ANYWAY, I'VE FOUND THAT

YOU NEED AT LEAST 6 FRAMES TO READ ANY ACCENT.

TEX AVERY SAYS ITS 5 FRAMES, YOU
NEED A MINIMUM OF 5 FRAMES TO READ
A HOLD, TEXS STUFF WENT SO FAST
THAT I GUESS IT WORKS AS ENOUGH OF
A PAUSE IN THE CONTEXT OF ALLTHAT SPEED.

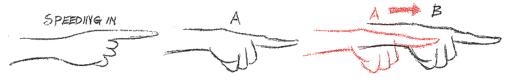
FINALLY I CAUGHT ON - AS USUAL, THE SECRET IS KIND OF SIMPLE! ITS JUST GETTING The DIFFERENCE BETWEEN A HARD ACCENT and A SOFT ACCENT

, A HARD ACCENT RECOILS - IT BOUNCES BACK-



TRY and POINT REALLY HARD and YOUR FINGER HAS TO BOUNCE BACK, OR GO UP OR DOWN OR SHAKE A BIT. IT WON'T STAY STATIC.

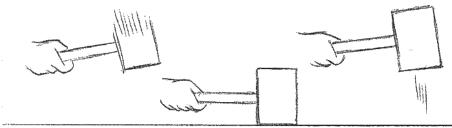
24 A SOFT ACCENT KEEPS ON GOING.



IF WE POINT MORE GENTLY The HAND WILL CUSHION AS IT SLOWS TO A STOP.

WITH A HARD ACCENT -

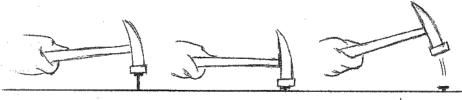
IF WE HIT AN ANVIL WITH A STEEL HAMMER, THE ANVIL IS OBVIOUSLY NOT AFFECTED BY the HAMMER and WHEN the HAMMER COMES DOWN IT BOUNCES BACK.



THIS BOUNCE BACK IS the ACCENT. The SOUND IS HERE. I FRAME AFTER TOUBLIT IS WHERE WE GET the SOUND

CONTACT FOR I FRAME MO IT IMMEDIATELY (and SLOWS INTO A HOLD)

SAME WITH A HAMMER HITTING A NAIL - THE ACCENT IS NOT WHEN THE HAMMER CONTACTS THE NAIL.



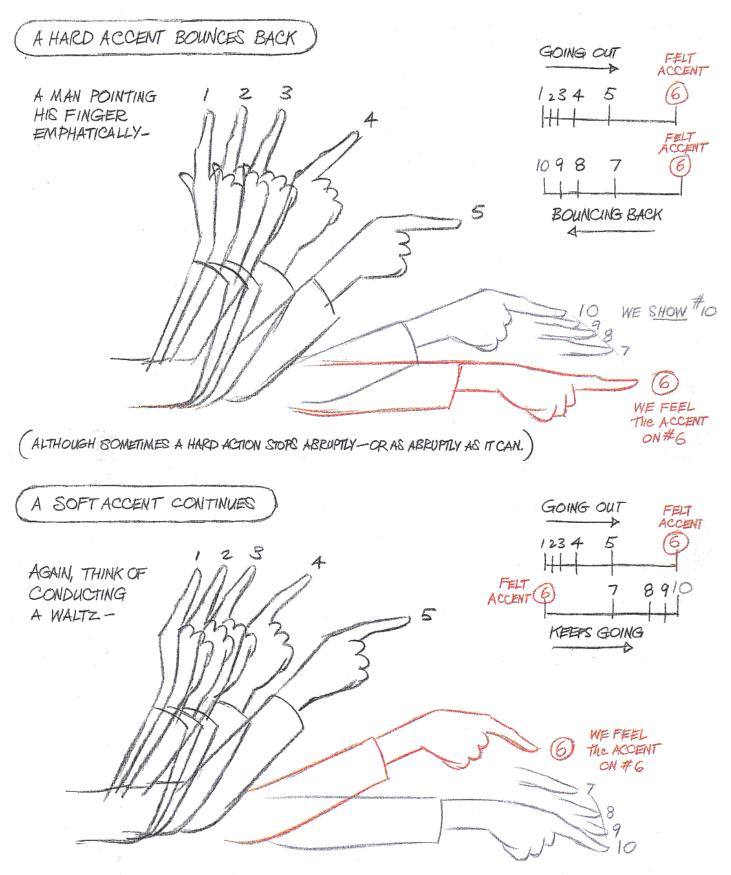
AGAIN, the SOUND IS ON The BOUNCE BACK - ONE FRAME AFTER THE CONTACT.

NO.

NOT EVEN THIS ONE.

IT'S THIS ONE.

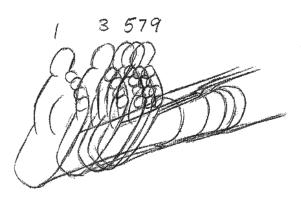




WE STILL SPEED INTO OUR ACCENT BUT THE MOVEMENT CONTINUES.

A KARATE FOOT, AFTER SNAPPING OUT, WILL BOUNCE BACK IN A HARD ACCENT.

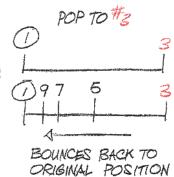




TAKE SOMEONE SHOOTING - DISPLACE The GUN FOR IMPACT



WE GET THE SOUND OF THE SHOT AS THE GUY POPS BACK WITHOUT ANY INBETWEENS and THEN SLOWS BACK TO NORMAL:





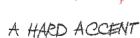


IMPACT BACK

A SOFT ACCENT

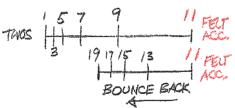






"WHY CERTAINLY"





COULD BE SOFT OR HARD...

"HI THERE CUTIE-"



BUT USUALLY HEAD ACCENTS ARE UP
SEE DIALOGUE!