

## Follow-Through

- \* Visual tension when an animated character comes to a complete rest.
- \* Tendency to animate all points stopping at the same time.
- \* All objects in movement have momentum.
  - \* Dependent upon mass and force.
- \* Forces need to be seen to be applied;
  - \* Starting
  - \* Stopping & Resistance
  - \* Maintaining
- \* Key frames exhibit positive poses, makes the movement unambiguous,
- \* Starting may result in anticipation, squash then stretch
- \* Car breaking may result in a strong opposing force resulting in squash.
- \* When comes to a halt, what is the sensation?
- \* The passenger lurches forward, objects roll about. Their momentum is conserved.
- \* If an emergency stop, objects fly forward, swerving to a destructive halt.
  - \* *The crash test dummy - is case in point.*

## Conservation of momentum analysed to five levels.

### 1) Appendages;

- \* Long ears, big tails, floppy coats, hair. (Anime, Boobs)
- \* Continue to move after the figure has stopped.
  - \* They **must** move in visibly plausible way.
  - \* Continue in their original direction, flowing into any parts that have.;
  - \* Already halted
  - \* Still in motion themselves.

## 2) The body does not move all at once.

- \* Stretches, catches up, twists and turns.
- \* Contracts as the parts work one against the other.
- \* Various parts may not be moving together.
- \* Hands may move after a final position is reached.

For example;

- \* Head, chest and shoulders might stop.
  - \* Audience focuses on the face and upper body.
  - \* Why? The upper body is the centre of identity.
- \* Character strikes the final position
  - \* Establishing gesture is an expression of emotion.
  - \* Rest of the parts gradually come to a final position.
- \* The final pose, a "*held*" position.

## 3) Loose flesh moves at a slower speed than skeletal parts.

- \* "*Drag*".
- \* Baggy cheeks, long ears, wobbly bellies, bottoms and boobs trail behind the action.
- \* Emphasis on the organic form of the character, soft outer parts, fleshy and tactile.
- \* Only needs to be done subtly.
- \* Enables the animator to provide an extra dimension, confirms the character really does have mass.

Characters are dynamic entities, not single frames frozen in time.

*"..Gestalt is something that you see or think of that has particular qualities when you consider it as a whole which are not apparent when you consider only the separate parts of it.."* in other words this is a holistic idea - the whole is greater than the sum of it's parts.

#### **4) Completion of the action tells us more of the process than the event itself.**

- \* For example explosive events, too short to see, but effects apparent;
  - \* A burst balloon.
  - \* Someone who has fallen down on a banana skin.
  - \* Slap on the face.
  - \* Kick up the backside.
- \* Early animators only worked on the action.
- \* No follow through nor anticipation.
- \* Animation is the Drawing of movement, Cause and effect.

#### **5) Moving Hold.**

- \* Employs Overlapping action and follow through.
- \* Character arrives at the main pose
- \* Pose held for 3 - 8 frames,
  - \* Not the same frame but an "*extreme*", same pose slightly extended,
  - \* Returning to the final pose.