Chapter 3: A Visual Vocabulary for Drawing

In a sense, drawing is learned by accumulating a visual vocabulary, just as speaking requires a verbal vocabulary. And as a certain amount of sentence structure, syntax and voice inflection must learned to communicate verbally, so must there be some rules of drawing that need to be learned and used to communicate the meanings of your drawings.

We think of communication as "normal," but in the distant past there were no words, and at that point man had limited ways to communicate his thoughts—simple as they probably were. Our present way of communication has evolved... and is still evolving. In our class we are attempting to make another leap in drawing communication by seeing the gesture at once and putting it down in all its freshness and lucidity.

Lines, Lines, Lines

In your business (animation) line is one of the most important elements. Line is a very exciting discovery that man (artists) has developed to a phenomenal degree. Drawing in line can be a real adventure and, when used skillfully, can be a source of adventure for the millions of viewers who see your work on the screen. Line is not just a tracing tool—it is a living, organic thing, capable of describing just about anything you can dream up.

There are many kinds of lines.

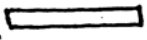
Short ones:

Long ones:

Curved lines: 

And some that get off to a good start but then seem to poop out:

You can do anything with lines. Years ago there was a silly gimmick that went like this:

Do you know what this is?  It's a T.V. screen for people who squint.

Know what this is?  It's a tornado with the hiccups.

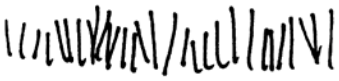
There are sturdy lines: staggering lines:  and lines that just

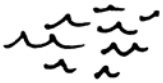
can't seem to get off the ground: There are obsequious lines that

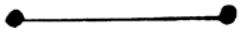
always curtsy:  proud lines with chests out:  obese lines: 

Normal lines: stretched lines:  and squashed lines: 

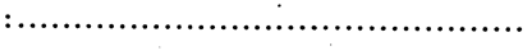
There are graceful lines:  ugly lines: 

Gregarious lines:  loners:

Choppy lines:  continuous lines: 

They are the shortest distance between two points: 

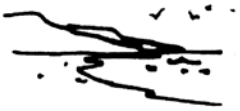
They make music possible (with the help of spaces): 

There are dotted lines to sign on: 

A line of bull:  a sky line: 

 Invisible lines like the equator:

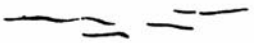
There are shore lines:



airlines:

Scrimmage lines:

fishing lines:



The moon, prima donna of the heavens, in its proud fullness took its place on the stage of night, and performed its slow, graceful way across the dark blue, speckled sky in a costume of borrowed light.

Poetic lines on a page:

and the lines of old age.

Rebellious lines,

lines that obey,

leftover lines to be thrown away

And if you're a theatre goer--lines in a play:

Lines that soldiers form while they're on duty,

and last but not least, lines of wondrous beauty.

A Simple Approach to Drawing

For those in my class who have had little instruction or experience, I would suggest adopting a very simple approach to drawing. Even those who are experienced but have neglected working from a model can benefit from this.

The most logical approach when faced with a model is to lay in the basic pose with some simple elemental shapes. Ignore the details of the costume. First study the pose for the gesture—you may have to add a little of your own thespianism—then look for weight distribution and over all abstract shape (silhouette), ignoring all particulars like muscles or other detail, and go for the general, overall generic gesture. This gives you the opportunity also to concentrate on relative proportions. Proportions are important and you must develop sensitivity to them—Mickey, Roger Rabbit, the Mermaid, Eric, Sebastian—all with distinct proportions.

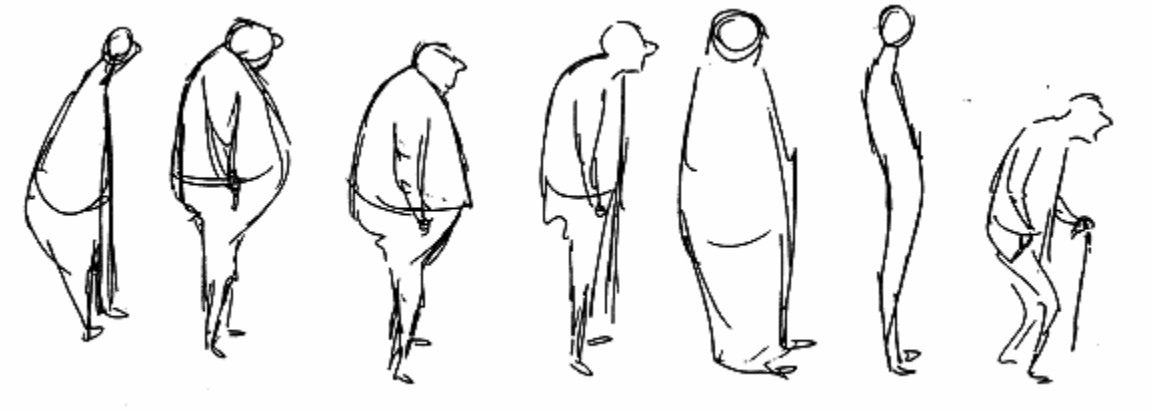
Here are some suggestions for a simple approach. You'll not be encumbered or confused by a multitude of superfluous lines and puzzling shapes. Once you have the pose captured, the costume will be easier to put on. And using the known facts about wrinkles, you will be able to pick and choose the appropriate wrinkles from the model or make up some of your own. Let me suggest that in working out your "shorthand" body-shape, when the chest and hip are twisted, they can be handled as separate shapes. That way you can more easily draw them facing in different directions. When they are not twisting, the chest and hip areas can be treated as one shape.

Here's a suggestion from Lariar's book, *Cartooning For Everyone*, on how to lay in a cartoon figure. He had no explanation for this illustration but you can see, he worked from the general to the specific.

Finding the Abstract

I keep searching for a shortcut to learning how to draw, but as Ollie Johnston used to say of drawing in general, "It ain't easy."

Try to look for the overall abstract shape. I use the word abstract here in the sense of a summary—a brief statement of the essential elements. I sketched these abstracted shapes of some familiar (male) body types. If when drawing from life you can spot one of these shapes (or one of your own design) in the character you are drawing, it will save you the agony of searching for lines on the model to copy. If you know the overall abstract shape you are dealing with, it will be easier to apply that to the gesture.



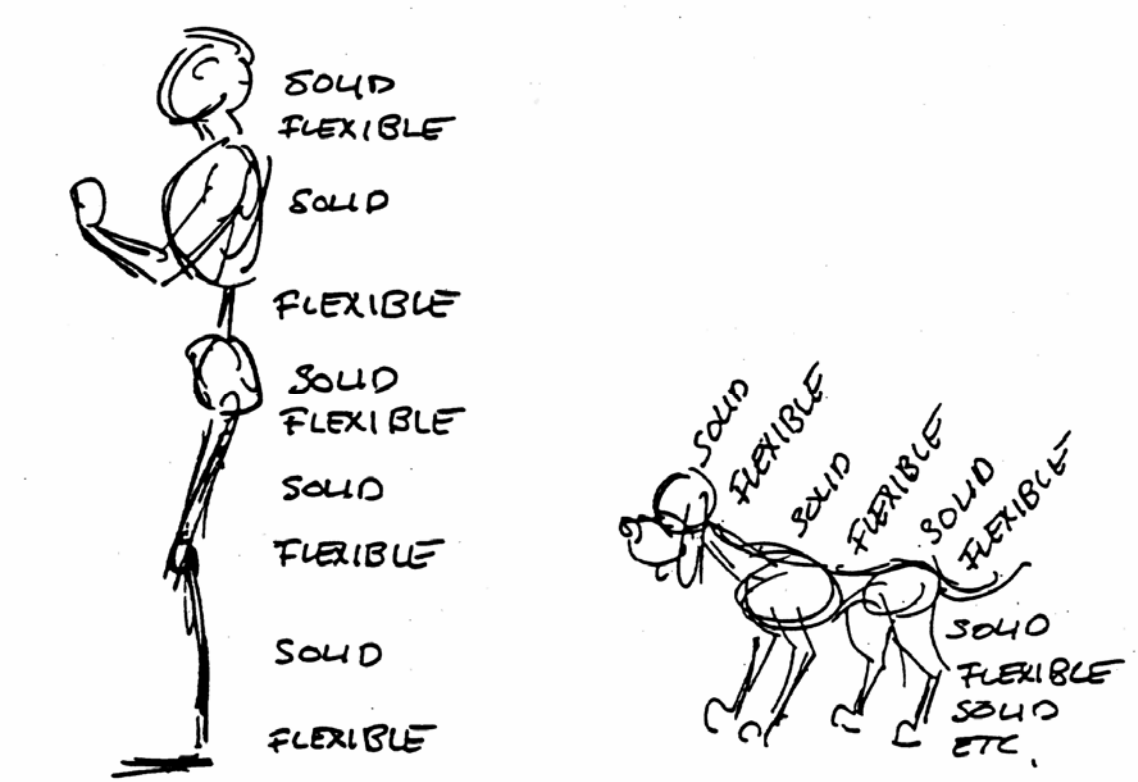
Finding the abstract in the gesture itself will help too. Take a moment to study the type of body build, forming an abstract shape of it in your mind, then do the same with the overall pose. It simply means dropping 90% of the detail, and seeing only that 10% — that essence of the pose.

This kind of thinking will lead to more expressive drawing, especially in animation where body language is so important. It will aid you in capturing the essence of a gesture, and with an economy of lines. My philosophy is: if you can draw it with 10 lines, why use 75? And who can argue with the philosophy: if you can draw it in 5 minutes, why take a half hour?

A loose style allows you to study and practice drawing action—something that is hard to do if you try to make a cleaned-up, finished drawing as you go.

The Solid-Flexible Model

Humans, most animals and to a degree cartoon characters are constructed on a solid-flexible basis:



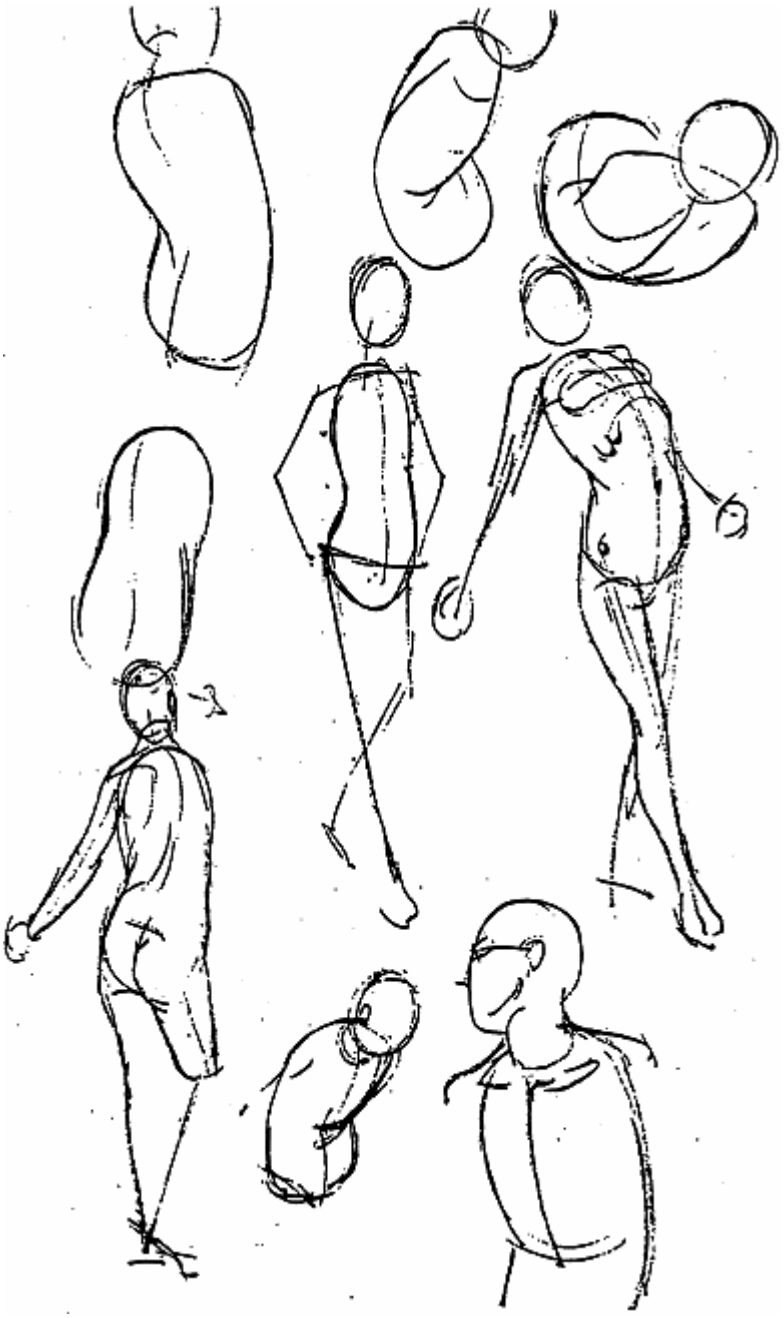
A cartoon character is more flexible, but the principle of solid-flexible is applicable because the same parts are there—they are merely caricatured.

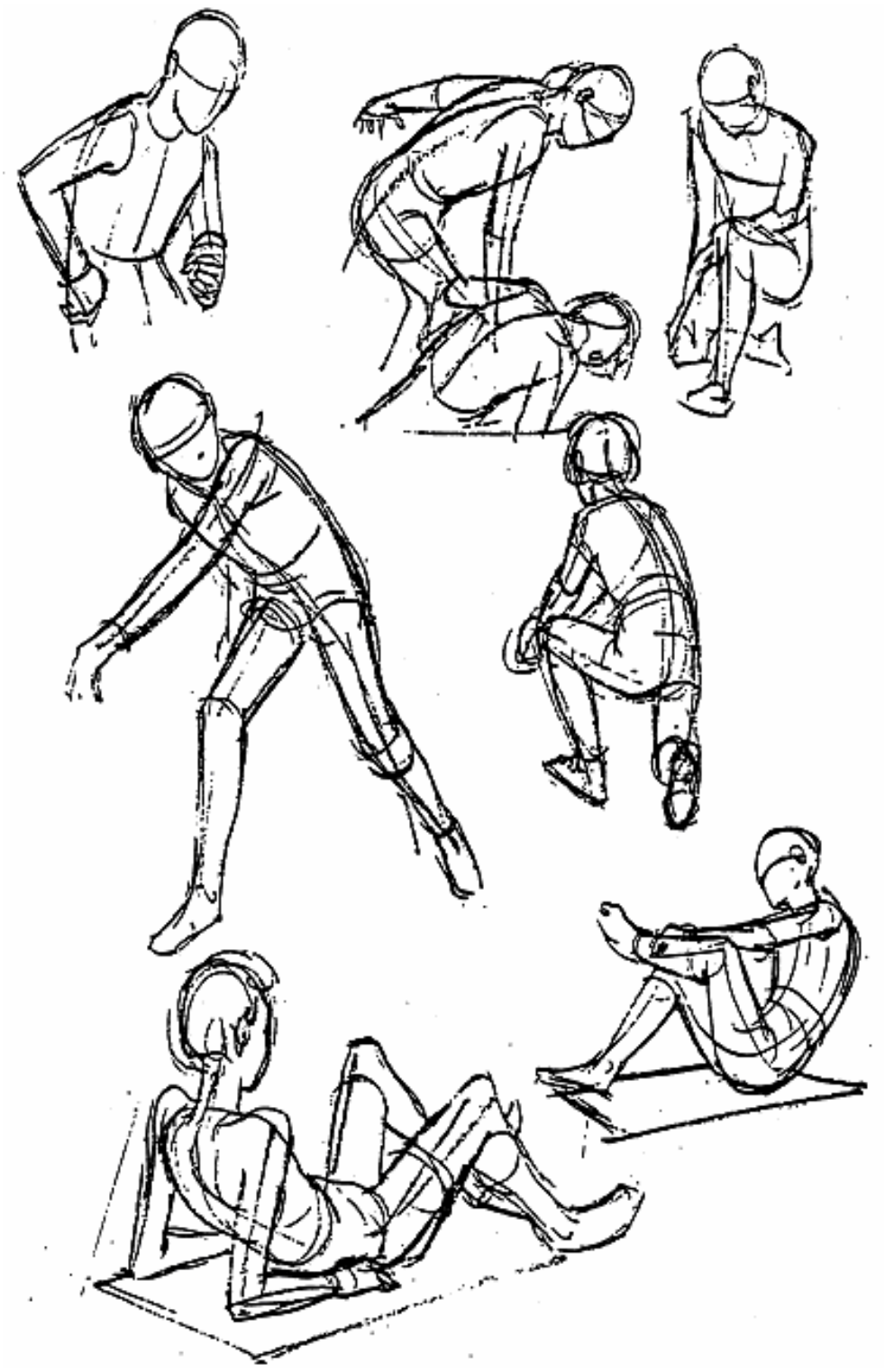
The solid-flexible concept is the basis for all the angles that portray the various actions, moods, and expressions that we are called upon to draw. Each section has a limited yet unique movement to perform. Those movements are the means through which we express all of our body communications. Try to relate some incident in you life, or mimic someone else's with your neck in a brace and your hands tied behind your back. You would make up for it by bending at the waist and the knees. You would make the whole upper part of you body do what your head normally does, and the bending of your knees take the place of hand gestures.

We'll see more of the solid-flexible model later in animating squash and stretch.

Figure Sketching for Animation

Here is a sheet of figures drawn by Glen Vilppu, life drawing instructor and layout man. This is an excellent simplistic approach to sketching the figure for animation purposes. I suggest you study them and try to emulate them.

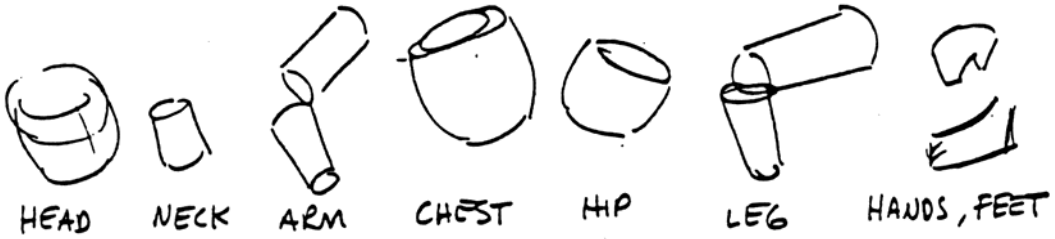




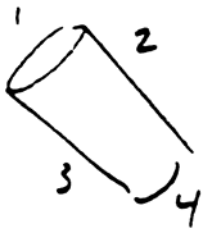
The Pipe Model

There is another approach to drawing the figure that may seem a bit bizarre at first, but is worth your consideration. It is especially helpful when working out a difficult foreshortening problem. The method merely employs pipes, or cylinders, as parts of the body.

When cylinders are used to establish the basic shapes, their angles, directions and relationships, then it is an easy matter to add the details. Again, the details only after the basics are well established. Don't be impatient—the foundation first. To avoid 'doodling' while practicing this form of study, confine yourself to these shapes:



There are only four lines per cylinder and if it takes you twenty lines to make one—you need help!

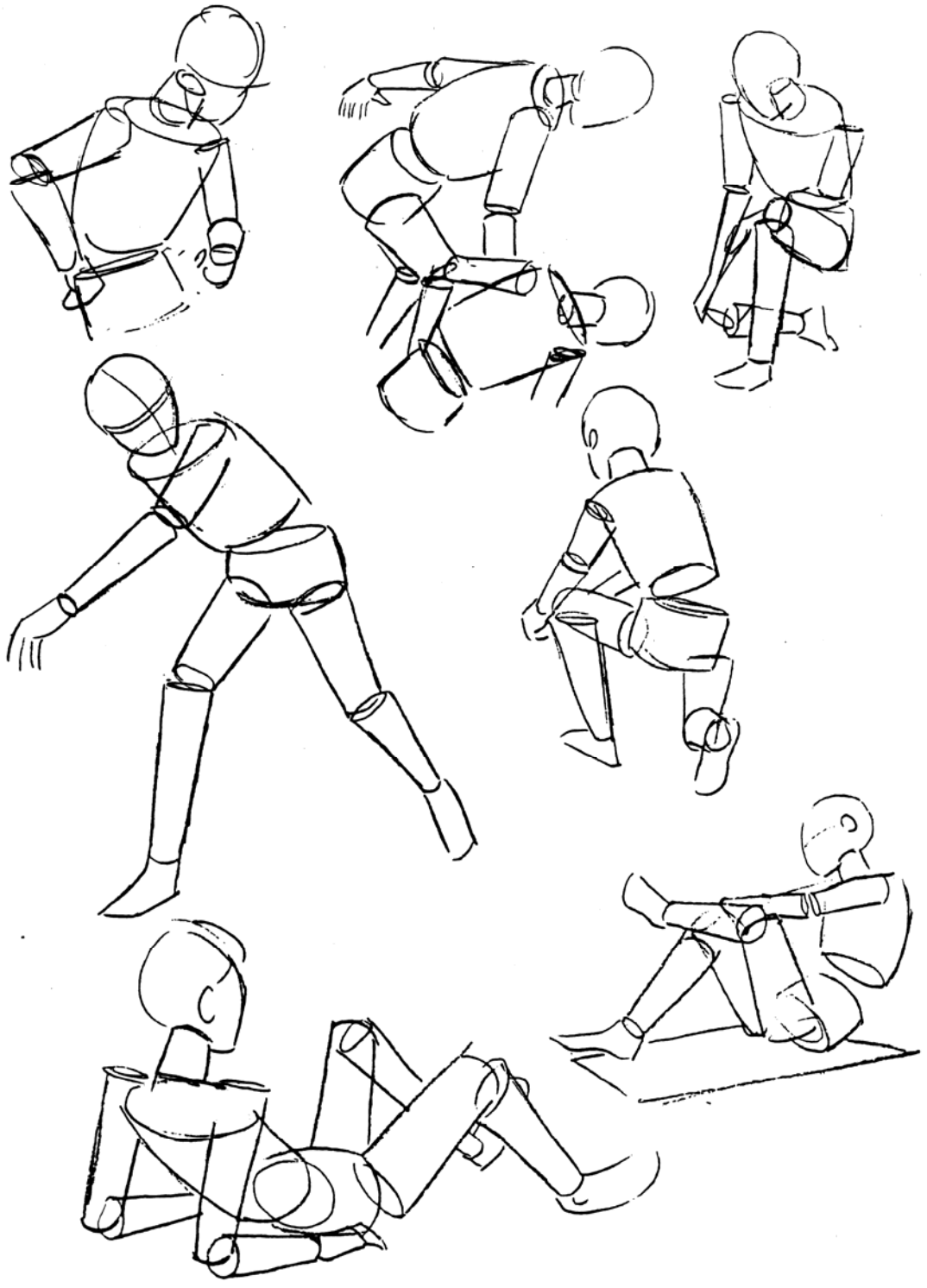


See the cylinder in space. Perhaps envisioning an arrow inside each one will help capture its direction and angle:

This will help you establish the shape in space rather than on a two dimensional surface, and in the simplest of terms. Also, the bulk of the figure is automatically built up and available for further delineation. If you have a difficult time seeing these shapes in space and relating them to the over all pose, sketch in just enough rhythmic gesture lines to suggest the pose. Then before getting too involved with them, "throw" on the cylinders with gusto and bravado and watch the figure take shape. Remembering of course, to embellish them with some suitably angled hands and feet.

This basic drawing with its "essence of pose" can then be humanized or cartoonized according to the needs. If it's a nude you are working on, add flesh, joints, wrinkles, etc.,

if a clothed figure, add clothes, costume, features, wrinkles and other detail. If a cartoon-caricature it accordingly, add costume, and win yourself an Oscar.



Try combining the cylinders with the solid-flexible concept described earlier.

Seeing in Three Dimensions

The ability to see in three dimensions is fairly near the top of the list of requirements for the animator, assistant animator, and the in-betweener. Most of us come by this knowledge only after years of observation and practice. The more I've thought about it, the more I've come to believe the rules of perspective ought to be called the "all encompassing principles of drawing." I never make a drawing without being conscious of them, and when I am having trouble with a drawing, I delve into those rules and they are a sure help.

As artists we see through eyes that constantly search for shape, gesture, color, contrast, and so on. When we draw from the model (or from life in general) we have a tendency to feature shape. A thing is either round or oblong or rectangular or some combination of each. These in turn create the two-dimensional negative space that forms a relationship between one or more objects or parts of one object. It requires an extra nudge of observation to see things as three-dimensional, and two extra nudges to translate that third dimension onto a two-dimensional surface. Since we see things as basic shapes, we must think of the shapes as being three-dimensional.

For instance a rectangle  is as flat as the paper it is drawn on.

But add the rule diminishing size and we get a somewhat 3D shape. 

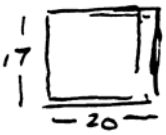
Add some bulk to that shape and the 3D feeling (or illusion) is augmented. 

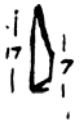
Add a slight angle or give it a twist and the illusion is even more apparent:

It is more difficult to achieve three dimensions with an orb or spherical shape, but it can be done with the aid of the rules of perspective. For instance when drawing a head, the nose, forehead, cheeks, ears and chin may be thought of as shapes that overlap other shapes.

If the model's pose forms a rectangle viewed straight on,  that rectangle, from a three-quarter angle, would look like this: 

The degree of diminishing size (perspective wise) would depend on how close to the model (or object) we are and at what angle we are seeing it.

If our eye is 1 foot from a rectangle measuring 17' by 20'  ,

at a 7/8 degree angle  the far side will appear to be about 7 inches high,

meaning that within 20 inches the upright line has diminished by more than one half. At 6 feet it is only 4 inches shorter, and at 12 feet it is only 2 inches shorter. So the ratio of diminishing perspective lessens as the distance increases.

So the factors that concern us are

- how far from the object are we and
- what is the angle of perspective; that is:

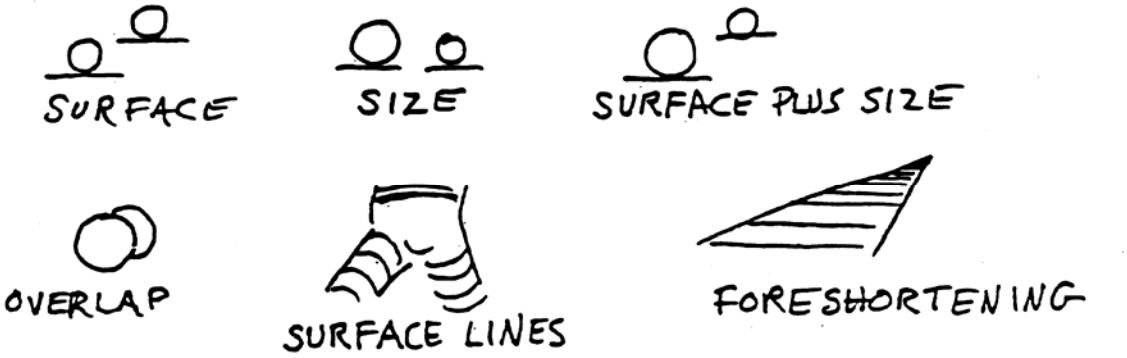
one-quarter, or 

three-quarters. 

The Rules of Perspective

Some years ago a simple little drawing book was given to me by its author, Bruce McIntyre. He had devised a sort of shorthand art course which he taught to young children and the results were amazing. His whole premise was built on six rules of perspective and an involved use of directional symbols.

The perspective rules are simply this:



Surface and Size

Take the one about diminishing size. That has to do with establishing a vanishing point on the horizon and having all things diminish in size from an established height in the foreground to that vanishing point. In animation we work with a layout that has that kind of perspective built in, so we have to draw our characters with a somewhat matching perspective. Let's consider how these rules may be used to accomplish a desired three-dimensional effect. This may seem like an unlikely approach, but let's take 5 dimes (minus the detail). Knowing they are all the same size, if we drew them all the same size, they would all appear to be the same distance from us.

If we varied the sizes they would appear to be at different distances from us (the "diminishing size" rule):

The first two rules, I think, are a preparation for the third one—surface plus size, a rule that is very usable in animation. For instance when working on a scene with a layout like this:

A character standing on that plain would have two feet fitted to that surface, creating not only a stable stance but also a third dimension:

and of course any props such as Apples, Cans, Bowls, and so on.

Overlap

If we put two of the dimes side by side, we create and are aware of the space between them (two-dimensional space).

Now if we place one behind the other (the overlap rule), plus making one of them diminished in size (one of the rules of perspective), we create a three-dimensional negative space:

The overlap rule is very important to all classes of drawing, especially when the illusion of third dimension is desirable.

Here is an outlandishly simple example where, in the first drawing, the whole head area is in front of the shoulders, and in the next drawing there is a complete reversal. In the first drawing, note how definite the overlap is depicted: the fingers in front of the jaw—the thumb behind; the left thumb in front of the elbow—the fingers behind. Being definite with overlap helps the drawing “read” clearly.

There will be numerous occasions where we can use the whole dime thing, for instance in foreshortening the figure at some acute angle, the head (one dime) in front of the chest (second dime), the chest in front of the hips, (third dime), and so on.

Those areas are easy to relate to a circle (whole dime) but when we are faced with longer and straighter shapes: an arm or leg or fingers foreshortened, that is when we can use what I once saw in a book on drawing, the "T" principle.

Using the "T" principle creates depth (one thing in front of another):

Without the "T"s, all those lines would run together, and depth would be destroyed:

Along these lines (slight pun intended) we might introduce the "L" rule. In cases where one thing meets another but is neither in front of nor behind it (changes direction but does not overlap), but where differentiation is needed or desirable—use the "L" rule:

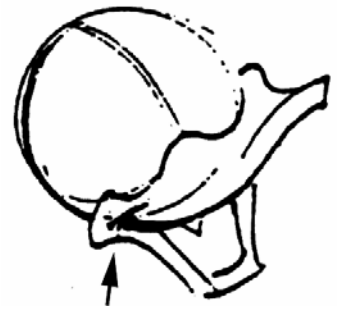
A *tangent* occurs when two or more lines meet or merge into one another so there is no differentiation between the parts which they describe. A simple example is two mountain shapes drawn with no overlap, which automatically creates a tangent and destroys any illusion of depth whatever:

The simple solution to this problem is to add overlap:

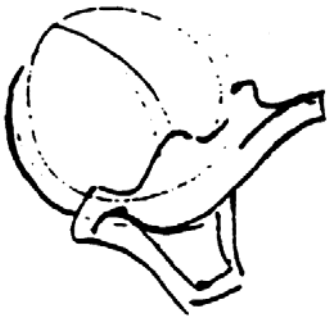
Making it very clear which hill is in front of the other. Then if you force the perspective by adding surface plus size to the drawing it will be more definite and read much faster.

Tangents also occur when one line ends at some point then seems to continue on at another point:

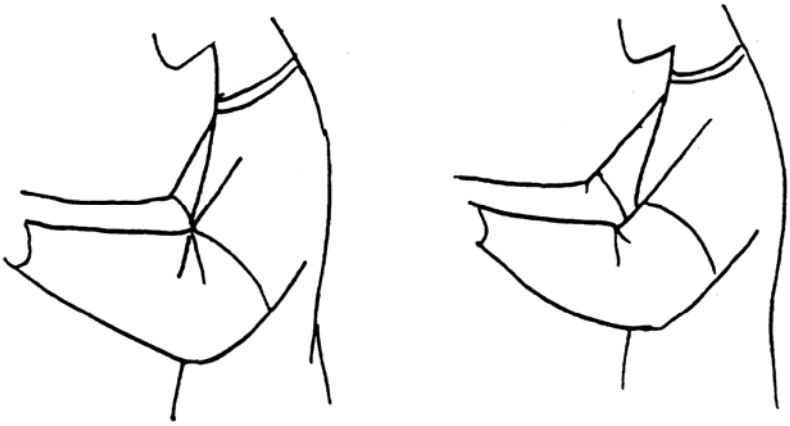
Here the head line seems to continue with the beak line:



By adjusting the beak line, we avoid the tangent:

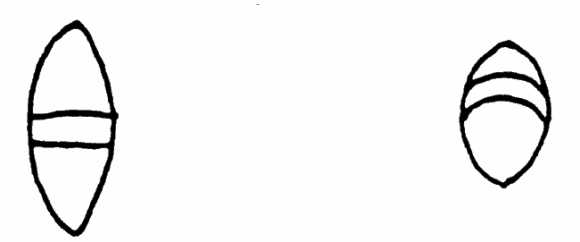


Here is an obvious instance of tangent trouble and a simple solution wherein a great deal of depth and clarity is achieved.



Surface Lines

The importance and usefulness of the surface lines rule can only be hinted at. In a rendered drawing or painting, the artist has untold nuances of color, shading and rendering to emphasize the depth. The animator has only line, plus, of course the rules of perspective. As for surface lines, there are usually very few in a line drawing. Using a cigar with its surface lines (the band), the importance of using them for direction and depth can easily be seen:

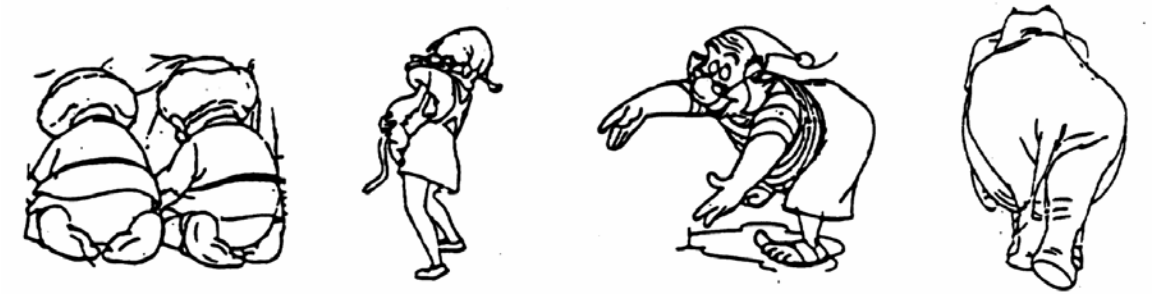


There are few areas on cartoon bodies that can be used like the cigar band. If none at all, the two objects would look like each other only one smaller than the other.

So the artist must use whatever suggests itself. A sleeve for instance:

or a pant cuff:

or a belt, collar, hem line, pattern on the material or wrinkles in cloth:



The "T" principle, described earlier, also coincides with the surface direction rule. To show surface direction on a foreshortened object, we just think of the stem of the T as the vertical angle and the cross as the horizontal angle. Thus:

We may be tempted to think of surface lines as belonging only to striped blouses or trousers, but actually everything has surface lines, though not always visible.

Take the mouth for instance. It is situated on the head (a modified sphere) and changes its "surface line" as the head is tilted up or down. Likewise the eyes and the ears:

Even the line of the nostrils does the came thing:

Likewise the brows, cheeks, and so on. Anything on a curved surface will do it.

Surface lines on a flat surface work differently. When they are tilted they simply get closer together:

In the case of heads, the basic structure has to serve as a surface line. For instance the eye, nose and mouth lines—unseen, but implied and depicted by the placement of the eyes and mouth and the direction they take when the head is tilted:

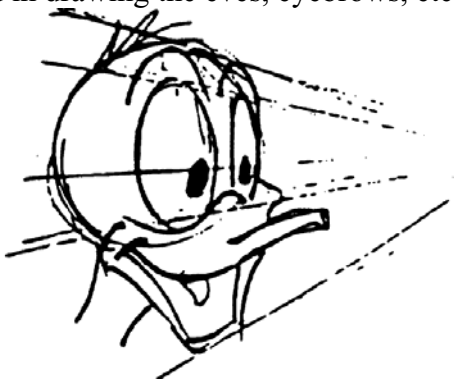
Along with these “unseen” surface lines, there is overlap such as (in this case) the hair, first being seen somewhat behind the forehead then reversing to be in front of the forehead in the second drawing. The ear employs another rule: Foreshortening. The other rules—surface plus size and perspective—would have come into play had the head turned to the side:

And though the other ear is not seen so cannot be compared with the one seen, it will have grown in size as the head turns the ear towards you and closer to you, thereby giving even a better illusion of depth in motion than you would get from seeing a still drawing or the two ears:

That increase in size plus a change in shape (angle) plus following an arc (as if the ear were orbiting the outside of a sphere (the head) would give a maximum third dimensional effect).

Foreshortening

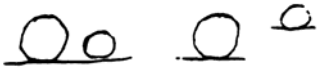
The last rule of perspective is foreshortening, which is none other than Italian perspective in a simplified form. It is used extensively in animation—by simply drawing things larger in the foreground than those of like size in the background. For instance on a head, "forced perspective" is used in drawing the eves, eyebrows, etc.



It is the kind of perspective you would get when using a wide angle lens on a camera. The difference being that the photograph appears distorted and unreal. In the cartoon it is acceptable, partly because we can adjust the whole drawing and make it plausible. It is defying reality but in a logical way. Using logics in animation is a powerful tool. That is how we can use such extreme action and pull it off as believable.

I came across this page in the book, "The Act of Drawing.", by Edward Laning.

He uses the principle of overlap to illustrate an example of foreshortening. What I am suggesting is: everything in a three-dimensional environment is one thing overlapping another in space, whether they are connected like the parts of a leg (or a nose) or are separate. Even then, nothing is really separate, for all things are connected by the matrix of space that they occupy. In painting we can use atmospheric perspective to show where the objects are in space if they don't overlap. In drawing with line we can use another of the principles of perspective: diminishing size or surface plus diminishing size:



Direction

Bruce McIntyre's system also involved directional symbols, consisting of simple arrows pointing in a number of directions. Each arrow and its direction had a code number. Their use was related to the manner in which Bruce taught drawing. I had never involved myself with his use of them, but the principle of it completely captivated me. It has influenced every drawing and painting I've made since being exposed to it. It has made me conscious of the fact that everything is pointing in some direction; pointing away from us or sideways to us or three quarters up at a certain angle; straight at us or slightly to the left or right or down. Most often these directional lines coincide with perspective lines and have a common vanishing point.

In the case of drawing a figure, the line directions are not random but have to do with the pose or action. To be conscious of the direction that arms, legs, fingers, and so on are pointing is the key to the three-dimensional drawing. It is the thing that reveals to us the six rules of perspective. For instance, if in drawing the legs of a character you find one pointing toward you and the other pointing away:

You know that the surface lines will be dictated by those directions and also surface plus size will influence the placement and size of the feet, overlap will be necessary to show the right leg is in front of the left leg. Foreshortening will be subtle but the left leg will diminish in size as it recedes from hip to ankle:

Difficult foreshortening in a pose can be more easily handled if one is aware of the direction the object is pointing in. For instance, a figure bending over toward you presents a difficult view. The problem can best be conquered by the awareness of what is happening. To you it looks like this:

From the side it would be a much more drawable view.

Merely being aware of the side view will help you pick the rules of perspective that are needed to conquer this foreshortening dilemma.

The surface lines of the chest and stomach will be almost circular; the arms, held slightly back will have a less circular surface line; one leg forward and one back will require opposite surface lines. The leg on the right would diminish slightly in size as it goes away

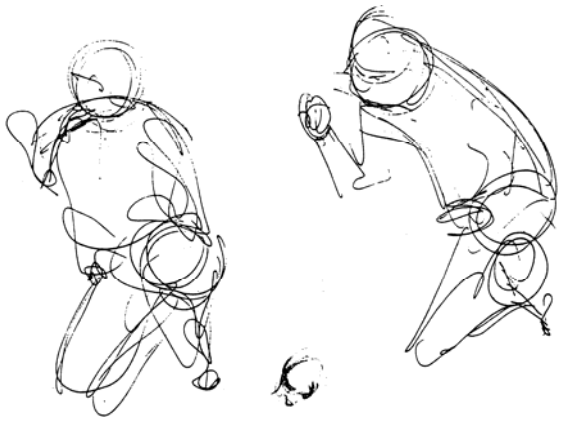
from you while the other increases; employing the foreshortening rule. The head being in front of the chest applies the rule of overlap while the rule of surface plus size is employed in the feet.

Being aware of these rules is a positive aid in drawing, allowing you to progress directly to the pose, rather than rely on a lot of doodling, pencil manipulation and haphazard accidentals.

This system will also help with all the other rules: Surface Lines, Surface plus Size, Overlap, and as mentioned above Foreshortening.

These ever helpful elements of perspective are present in every area of every drawing we will ever make. Being conscious of them will be a great help, plus a great comfort, in our quest for good draftsmanship. Not that draftsmanship is the ultimate goal, but it does take draftsmanship to express oneself in animation. Knowing and using these principles when needed is like having a good road map when traveling in unfamiliar places.

Here are two corrections I saved from the class. The rules of overlap and surface lines are applicable here. Notice how the male figure stooping over needed more angle to bring him forward at 3/4 view.



The head mass placed over the chest mass illustrates the overlap rule: 

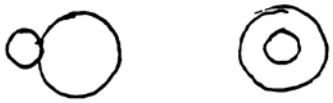
The tilt of his head illustrates the surface line rule. 

In the woman's head the same problem is present, and the same rules provide the solution—the forehead overlapping the cheeks, the cheeks overlapping the chin, and the ear, placed on a surface line, overlapping the jaw.

Problems of Drawing in Line

One of the problems in using line alone to draw with is that there are very few lines in nature. Even the outline of an object is not truly a line, since if the object were turned 1/4 on its axis toward us, what was the edge would now be the center.

If we think of that circle as a head and put a round nose on the profile, when it is turned toward us it will still be a round nose.

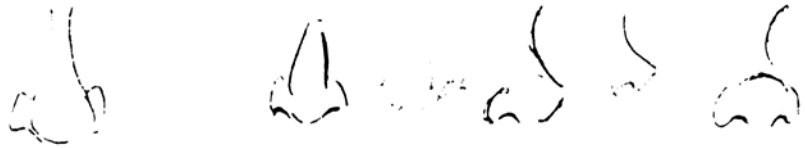


But if we have a real human head with a real human nose on it, the complex shape of the nose changes drastically as we look at it straight on. What was a line on the profile becomes a non-line on the front view. The principles of perspective help to overcome this dilemma. For instance the rule of overlap  tells us what is in front and what is behind, and helps us differentiate between the two and to draw them that way. The human face (head) is a very complicated set of planes with very few areas that can described by line alone. But if the areas that are in front (closest to us) are seen and drawn as such, then at least it presents something to work with.

A face viewed straight on is in reality is a conglomerate of planes molded on top of each other—very few lines. So for a line drawing we invent some symbols to indicate which shape or plane is closest to us and its general shape.

In animation, the symbols we use for noses are kept simple. The fewer lines there are, the less chance of jitters, and when lines have no anchor point, it is hard to keep them from "drifting". For instance a nose in rendering might be drawn this way:

While in line alone it might have to be done so:



…depending, of course, on the type of character being drawn.

Simplifying Heads

Often in animation, close-ups or waist-shots are featured. Because of this, it behooves us to spend sometime in a study of heads and the upper torso. The emphasis should still be on gesture, and as we do with the full figure, we should ignore the details as much as possible. A very simple symbol for the head shape, eyes, nose and mouth will suffice to "nail down" the gesture or expression.

We are all at different stages of drawing ability, so some may feel it unnecessary to start with simple shapes. If so, try to treat it like a refresher course and spend a little time at it.

I think it's pretty safe, if not essential, to think of the head as basically two oval shapes. Those shapes automatically suggest a kind of flat plane on the top of the head, plus that bump at the back of the head; a flatness for the face and a chin.

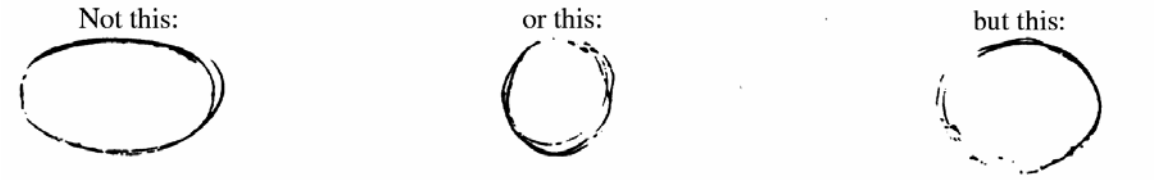
It even helps locate a place for the ear:

From the front, a circle for the top portion of the head and the oval for the facial area again automatically suggest a temple, the narrow facial area, and a chin.

It helps to talk your way through a drawing, because ordinarily we don't carry very many fancy descriptive terms in our everyday vocabulary. If we follow just the simple things we can describe, we'll have less trouble. For instance, for the animator a few words like "structure," "angle," "squash" and "stretch" will carry us pretty far into any drawing.

So you might say to yourself, "Okay, the head structure is basically this shape:"

This particular head is tilted ¾ to the left and is facing ¾ to the front, and since this is a ¾ view of the upper oval, it will now be halfway between an oval and a circle:

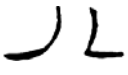
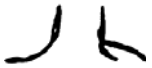
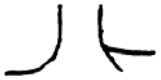
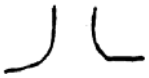


So I get something like this:

I see because the head is tilted to the left (observer's left) that the left side of the neck is going to be squashed while the right side will be stretched:

Now I need some shoulders to stabilize what I've drawn so since I know that the neck merges into the spine in the back and into the chest in the front (I will hook up my mental computer for a side view—Ah, there it is!):

I will now add the shoulders with that in mind:

Making sure to connect the neck gracefully to the shoulder on the left, and connecting the other shoulder with a nice strong angle to give it a three-dimensional look, because I know that this  puts the neck in front of the shoulder better than this:  or this:  or this:  or this:  or this:  .

The hair is quite a dominant feature on this person and since the head is tilted that way I see that the hair reacts somewhat like the neck. So I'll draw a squash on the left side and a stretch on the other:

I want to make sure I'm being clear (and simple) about the hair, and though on the model it sort of goes this way and that, I must be logical. So I will simply drape the hair over the shoulder on the squash side and let the hair stretch down past the right shoulder, and oh yes, making sure to use that principle of perspective (one object in front of another to create depth) by getting a good angle on the meeting place of the hair and shoulder.

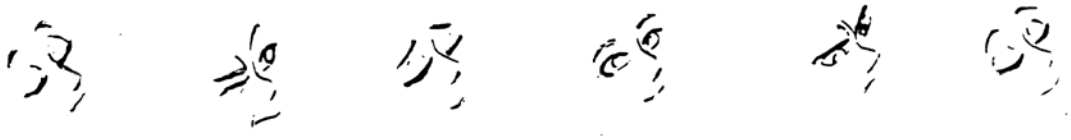
This:  rather than this: 

or this:  or this 

Also, regardless of how wind-blown the hair is or what the styling is, basically the top of the head is rather flat, the back of the head is rather like a skull, the forehead does a rather sharp turn then gently curves down to the chin, which is rather sharp, but sometimes a

little bit flat across the bottom and the jaw line is rather prominent as it curves back toward the ear:

So now I have just used up my four word drawing "starter vocabulary," and so far it feels pretty solid. Now, I don't know about you (you're still talking to yourself) but I think this is a good start and I think it might be time to add a nose and a couple of eyes, but of course not until I've gotten some simple shapes in mind—something like what I've done so far:



Caricatured Head Shapes

If the designs above are thought of as the basic head, then from there one can deviate for the cartoon, or the caricature look. The head may take on one of these shapes, as some of the characters of our former pictures have done:

Hidden in all the myriad poses and gestures of the various characters are those basic shapes plus the creative use of those four basic words: *structure*, *angle*, *squash* and *stretch*.

Head shapes vary in many ways, and once an individual's variances are discovered, they can be exploited to acquire a likeness or, if desired, carry them farther into caricature. A person's real head and feature shapes cannot really be known until we have seen that person from different angles and in different moods and circumstances such as laughter, anger, fear, clowning, seriousness, strain, etc.

In animation most heads have been built on the circle. Cheeks have been added or mouse ears or duck bills have been added and suddenly there is a universally appealing character. I said suddenly, but the truth of the matter is, many months of intensive search and experimentation have preceded the final acceptance of most character models.

Some, such as Mickey mouse and Donald Duck have been under continual evolvement for their entire lifetime Because many characters are built somewhat on the same basic formula, great care must be taken to retain the subtleties that distinguish one from another. Animation allows the characters to be freely caricatured in action but though the shapes are stretched and squashed to unbelievable limits, they must be recognizable as that character at all times.

A good model is one with shapes that can be animated into various poses and expressions without losing its character. The general shape of the head and its individual features must be established in its normal state first so that squashes and stretches will be recognized as such. In other words, a thoroughly recognizable norm will serve to emphasize any deviation from it, giving added punch and authority to special expressions.

On the other hand, since we have already enjoined the audience to suspend their disbelief in such beings as talking mice and temperamental ducks, it is important to sustain this newly created plausibility by keeping the characters consistent. Studying the model and people in general with this in mind gives us purpose and hopefully the added incentive to do so.

Try to keep from getting too serious while head sketching. After all, you are in the cartoon business and most of the Disney characters are somewhat comical, and if not comical then at least they are caricatures of serious beings. Usually when a person takes himself too seriously he is in our eyes a "comedian." He is ripe for caricature. So if cartoons are not somewhat caricatures of reality they may be taken too seriously and lose that special spark of humor needed in cartoons.

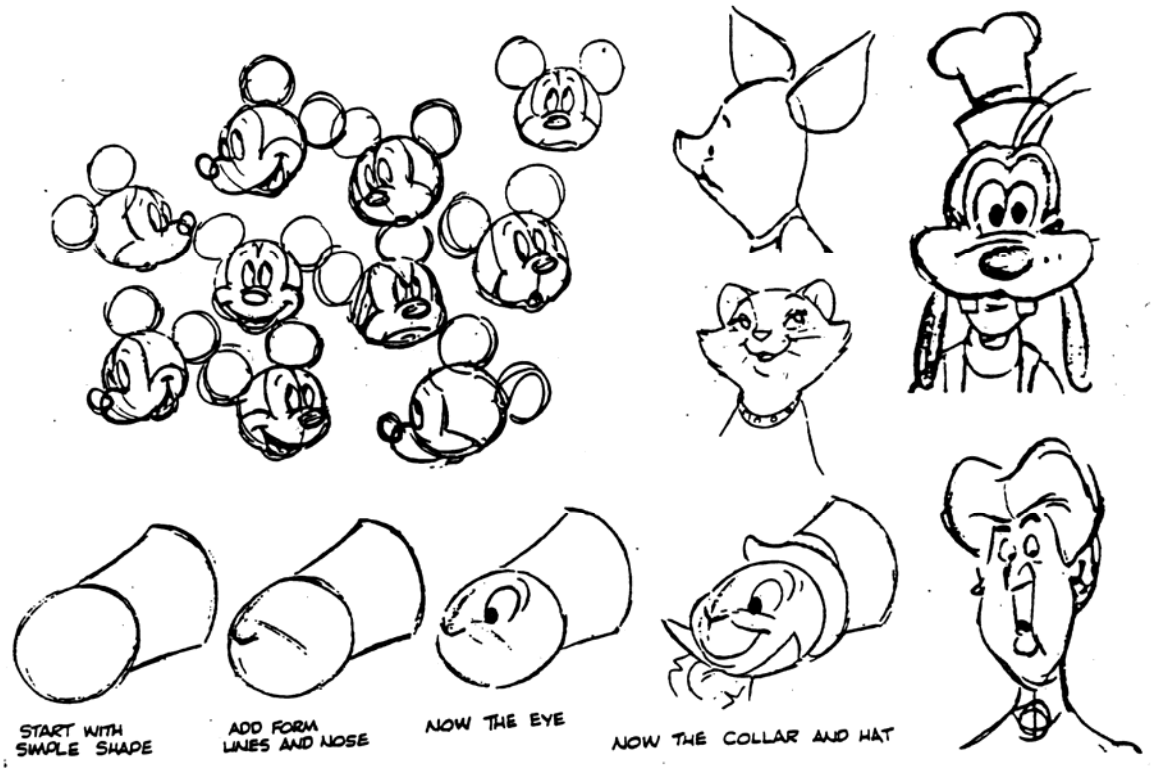
Museums and living rooms are full of serious portraits that are just dying to be retouched with a little humor. But, of course, portraits were not invented to make people smile—cartoons were. If you think the world is all so serious, you should be a historian or a philosopher, but if you desire to bring a little humor into the lives of those humor-hungry people "out there," then be a cartoonist and be serious about losing some of that seriousness.

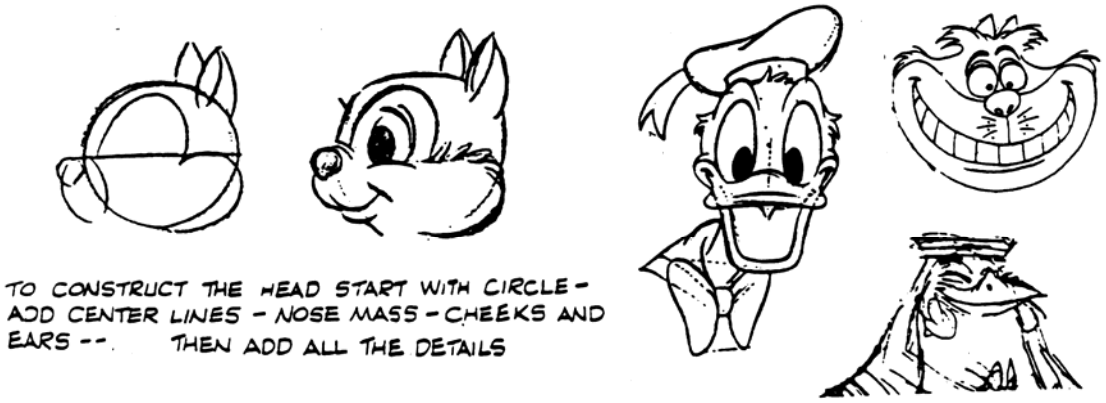
Very few, if any, of the animators I've known found drawing easy. One of Ollie Johnston's sayings, "It ain't easy," became a studio quip. Drawing funny cartoons was and is a serious business. It seems like the funniest scenes were the ones that were "sweat over" most. They were serious matters that required the animator to never forget (in all his groping and mental anguish) that the result he was after was to make the audience smile.

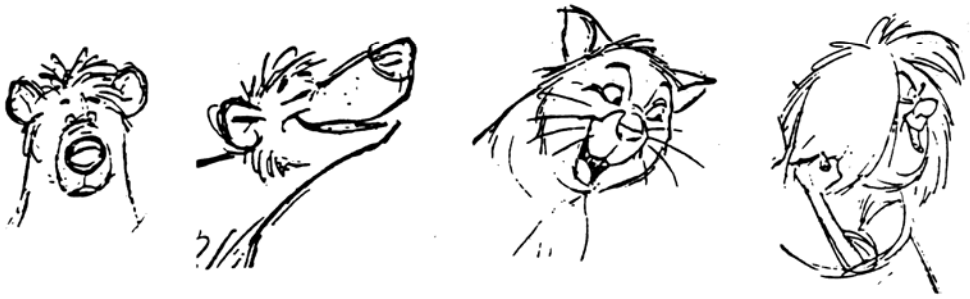
On the following page are a few of the characters from Disney features and shorts. They are all built on some basic head shape or shapes. After which the details such as features and so on are added. The shapes are flexible to a degree that is animatable, but never so

flexible as to take on the shape or personality of some other character. The skull is usually pretty solid, while the rest of the head parts do the squashing and stretching.

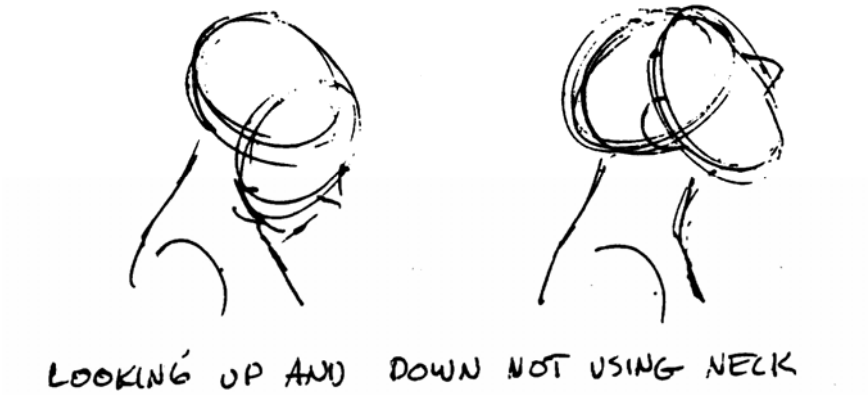
It's pretty hard to go wrong if you handle the basics correctly. It's the same in any activity—the basics have to be earned first. Then, and only then, may the details be added to complete the creative act.

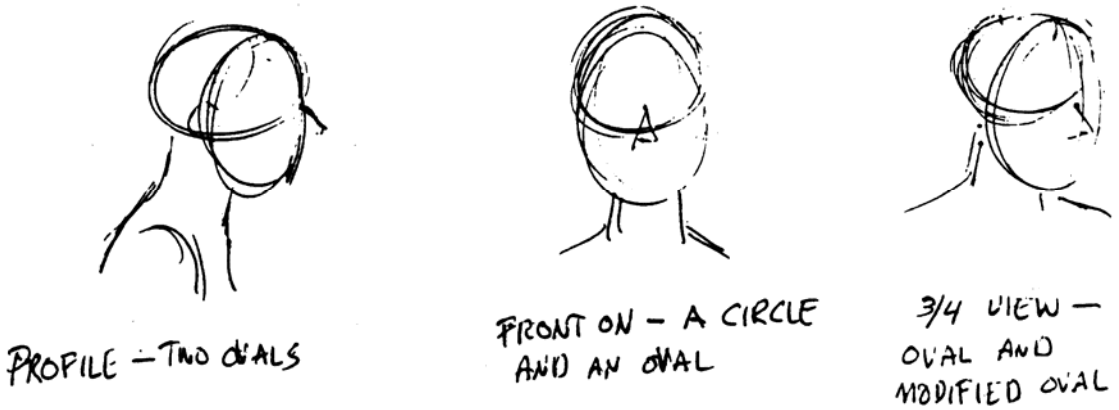

START WITH SIMPLE SHAPE
ADD FORM LINES AND NOSE
NOW THE EYE
NOW THE COLLAR AND HAT

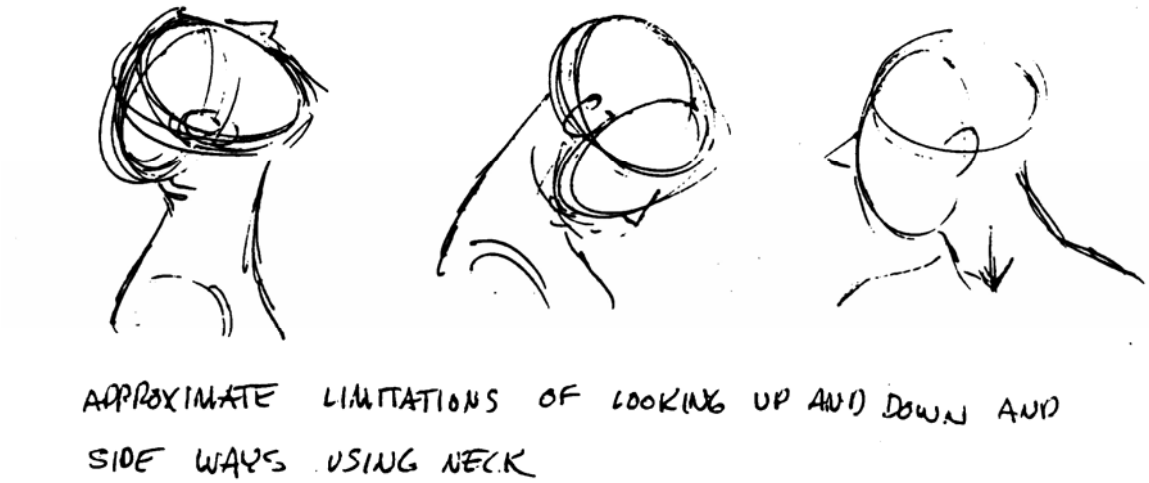

TO CONSTRUCT THE HEAD START WITH CIRCLE - ADD CENTER LINES - NOSE MASS - CHEEKS AND EARS -- THEN ADD ALL THE DETAILS



The Head in Gesture







Some of your drawings from the class are suggestive of the way I think the head studies might go. They are simple enough to allow the expression to beam through not weighted down with tons of ostentatious falderal!

A Simple Approach to Costumes and Drapery

The draped figure will be one of the many problems that will follow you like a heel fly throughout your career. Wrinkles, folds, seams, belts, pleats, ruffles and shirring [puckering or gathering of material with stitches] all seem so important and at times, downright overwhelming. Their importance cannot be denied, but their reason for being there and looking the way they do must be carefully considered.

Let's face it—clothes cannot act. If clothes seem to act it is because the body underneath is acting (posing or gesturing). The clothes will react in a like manner and will even

enhance the gesture. But if the drawing has not captured the gesture, all the manipulation of wrinkles, lumps, bulges, folds, and seams will not bring off the drawing. A real solid, expressive, sparkly drawing is one where the clothing is doing what the body is causing it to do.

The best thing for you to do (to keep your sanity) is strive to handle it in the simplest way possible. In animation, costumes may run from simple to complex in style, but they are all handled in a simple manner when it comes to folds and wrinkles.

It helps to mentally take the clothing apart to see how it is constructed. For instance a sleeve: how big around is the shoulder opening; how is it attached to the bodice; does it taper; does the shoulder seam attach at or below the shoulder? Ward Kimball's great observation is very apropos here. He said if he could take something apart and put it back together again, he could draw it.

For the sake of studying the figure for animation, lines of clothing should not be sketched in just for an impression—they should be logical. If you were to use that drawing in a scene, those drapery lines would have to animate as a secondary action—the primary action being the body itself.

Reasons! Reasons! Reasons! Always look for logical reasons for the shapes of the clothing or drapery—and the reason will always be found in the bodily gestures.

There is a kind of shorthand for drapery that is standardized for all characters. Most Disney characters only have wrinkles at the joints, and then only when there is pressure applied by bending or squeezing. So they'll occur at elbows and knees, and at the waist when seated. Women's clothes have wrinkles caused by pleats, gathers, puffed sleeves, etc., but you can always count them on two or three fingers. An excess of material will cause meaningless folds, bumps, and bulges.

This is not to suggest simplicity is easy—just less frustrating.

A clear understanding of drapery plus a general understanding of the types of garment construction would be helpful. There is a book called, *The Complete Book of Fashion*

Illustration, by Sharon Lee Tate and Mona Shafer Edwards (Harper & Row, publishers), that gives a very helpful view of drawing the figure with clothes on. I recommend it.

Glenn Vilppu has made a videotape on drapery wherein he simplifies it very succinctly [Ed. note: See http://www.vilppustudio.com/dvd.htm]. He has broken down the folds of cloth into seven basic categories, which should help you to make logical that which often appears to be haphazard.

No. 1 he calls the "pipe fold." It occurs when cloth hangs from just one point:

No. 2 is when cloth hangs from two points, causing a "diaper fold":

No. 3 happens when a hanging bit of cloth is allowed to fold up on the floor as the cloth is lowered at an angle, and is called the "zigzag fold":

No. 4 is a "spiral fold." This results from cloth as it wraps around shapes such as arms, legs or other parts of the body:

No. 5 is the "half-lock fold," which manifests itself at the knee when the leg is bent, also at the elbow when the arm is bent. When the knee or elbow is bent to more extremes there occurs what Glenn calls the "complete-lock fold":

No. 6 is the "falling fold." This will develop when some hanging cloth is allowed to bunch up on some surface:

No. 7 is the “inert fold”. This is the only fold that seems to have no potential for energy; it just lies there, inactive.

Being aware of these somewhat simple categories of folds will help you to interpret what happens to drapery under certain conditions. Also, the more complex actions and poses will cause those categories to overlap and produce a hybrid fold, which, without the benefit of knowing the origin of the contributing folds, might prove to be slightly bewildering.

So when you see a fold that is hard to categorize, with the help of this list, you can search out its origins and, lo, erudition shall prevail. Identifying the types of folds will be harder when drawing from the model, for natural drapery doesn’t always just lay it all out in simple terms.

However, when drawing on your own, such as in animation, you can use more simplified forms of drapery—those that match the action or enhance the pose. With the help of Vilppu’s list of folds, it will be easier to spot and identify such problem areas as you are forming your first impression.
It might also help to develop a vocabulary of drapery action terms such as: *hang, suspend, dangle, swing freely, be pendent, adhere to, sag, revolve around, drape, incline, bend, droop, descend, incline, sway, dip, settle, plunge, drag, trail, hang over, drape over, envelope, wrap, adorn, enshroud*. Each of these suggests an individualized action that helps to get you involved in what is happening to the drapery. It is good to be aware of the vast number of possibilities that are always present—especially if you are Academy-award winning scene-conscious.

Here are three extreme drawings by Milt Kahl. They show how directly he went at drawing the figure and they demonstrate how, in spite of using folds in the girl's skirt, it is basically treated as a shape. Glance from one drawing to another and observe how the overlap on the skirt embellishes the action.

It is important, also, to drape a figure to emphasize the type of character that is being portrayed. Is it a woman or a man; is it a neat person or a slob? Is the dress formal or casual; is it supposed to flatter the actor or make it look ridiculous?

Here's one example from class, where the artist got trapped into trying to feature the complications of the costume. The model was actually holding a very austere pose. There was a lot of cloth but it was wrapped tightly around the model's body, making a simple but dramatic shape. My suggested simplification appears on the right.

Here are some beautiful examples of how the clothing can be handled in a simple way, yet be effective in complementing the action.