

The MyLargescale.com: Figure Class!

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Chapter 2 Refining the Basics

Yes, I know this chapter was supposed to cover the seated figure, but things change! After some discussion in the figure class chat, I got the distinct impression that people wanted a little bit more information on some of the aspects of the basic figure; namely hands and heads! So this chapter will cover the details and options of making the heads and hands. These really are the two most difficult aspects of a figure to master... that is, once you've got a handle on the basic proportions!

This chapter is more of a ramble through various hints and tips than a lesson plan, so get ready to hop around a little here. I also have to apologize for the quality of most of the photos in this chapter. My camera and I had a terrible disagreement along the way and so most of the photos suffered. But I hope they are good enough to give you an idea of what I'm trying to show you. But first we'll talk a little more about tools. Our first figure was made using an ordinary toothpick and that toothpick is a fine tool. I still use one. But I also have a few other tools that make a difference in the amount of fine detail I can give a figure. Here, I'll show you:

TOOLS: WARNING! WARNING! WARNING!

Got your attention? Good. The warning is simply DON'T spend good money on tools that you will never use. The vast majority of commercially available sculpting tools fall into this category. They look great and are really tempting when you see them in the art supply store. They're sooo... professional!

Here's a selection of commercially available sculpting tools; Wood tools on the left, a sculpting needle in the middle, and loop tools on the right.



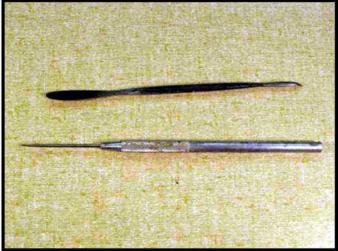
But these tools are really designed for much larger size work and are awkward and cumbersome when applied to a skinny little 3-inch figure. What we need to do is to tailor the tools to the job at hand. And this job is completely in hand; it's small work so we need SMALL tools! Even most of the commercial tools that are small just aren't small enough for our purposes. There are a few worth mentioning. (END WEB PAGE 1)

SCULPTING NEEDLE (See photo below):

Normally this tool is used for fine detail on larger sculptures and is a bit long and slightly too thick for most of what we're doing, but if you don't want to make your own tools, this one might come in handy. It's good for dragging lines in the clay and generally for moving little bits.

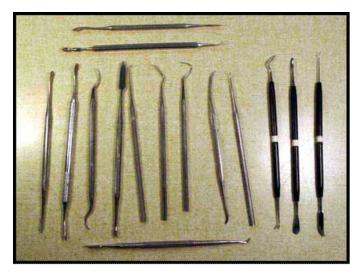
SPATULA:

There are a lot of different versions of this one and it pays to be choosy about picking one. Paint knives are sometimes sold as sculpting tools but are usually too large for our needs. Dental spatulas are often the right size, but are often very rigid... no good. HOWEVER. There is one tool that I personally prize above all. This one;



My favorite tool is on the top and a sculpting needle

I've been in love with this tool for many years. Sculpting tools are always a matter of personal preference and this one has always been mine. It's tremendously versatile. The spatula end is flexible and springy so it gives a good feel of the pressure you're applying. And the curved, sharp end is great for making folds or cutting detail. It's a bit large for small figures, but I have done entire figures with just this one tool. The bad news is that it's not a cheap tool and it's not easy to find. It's hand finished in Italy and is probably around \$20 or more these days. Ceramic supply houses occasionally carry this line of tools, but supplies seem erratic. I guess what I'm saying is that if you come across one of these accidentally, it's probably worth the price.



There are a lot of dental tools and jewelers' tools available with various shaped tips that are small enough for this work. I have a lot of them.

To the left you can see small selection of dental and jeweler's tools. You may find something that works for you here... maybe.

I <u>never</u> use any of them. Never. Not for figures and not for polyclay. I'm not saying that you won't find exactly what you need among them; all I'm saying is that I haven't.

Loop tools. These are tools that have a loop at one or both ends made of wire. They get pretty small, but don't bother. They are wonderful tools for oil and water based clay, but poly clays don't behave the same way.

The tools I use for making figures are homemade and simple. By far the tool I use most is this one;

It's pretty much the same as a toothpick, except longer, sharper, thicker, and metal. I use several in different sizes, but the one I use the most is made out of the axle from a broken toy truck. Others are made from nails, heavy coat hanger wire, brass rod...well, you get the picture. I like longer ones, but that's because they fit my larger hands. I suggest you try and make one of these if you can. I use a bench



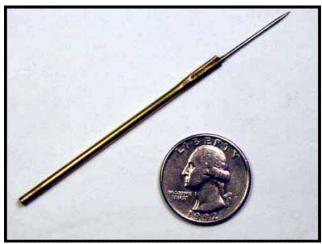
grinder to make mine, but if you've got the time, a set of files will do the job.

The pointy end is formed in a curved, conical shape. This shape is very important. A straight cone simply won't provide the gently control when rolling the tool from the tip outward.

The round end is just that, nothing special. Just be sure to get the surface even and free of burrs. Any flaw will be translated to the clay.

I made this one 3-1/2" long. It's a comfortable length for me and it also just happens to be a height gauge for my 1:20.3 figures! A less durable version of this tool can be made from a common bamboo cooking skewer, but be sure to sand the surfaces as smooth as possible. I normally soak my wood tools in oil before using. (END WEB PAGE 2)

The Very handy Needle/Tube:



The other tool I use, though nowhere near as often, is this.

It's a 2-1/2" length of 1/32" I.D. brass tube with a 1-1/2" heavy pin glued and crimped in one end. The pin sticks out about an inch. I use Goop to glue it then crimp it with a set of strong pliers. The pin end is for very fine detail work around the eye especially. The open tube end is great for making buttons or even eyes if you like.

These two homemade tools have been what I've used on the majority of my figures. In fact more

of my figures have been done with just the metal toothpick tool than anything else.

Having said that, though, I must say that tools are very personal, individual preferences. It's what you feel will do the job for you that counts, so there's no "must have" tool.

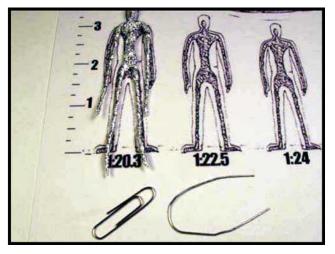
The key to success with tools is understanding how to use them. The best tool in the world is useless and an encumbrance if you don't know how to use it. And as we've seen, ordinary objects, like our toothpick, can do the job well if we use them properly.

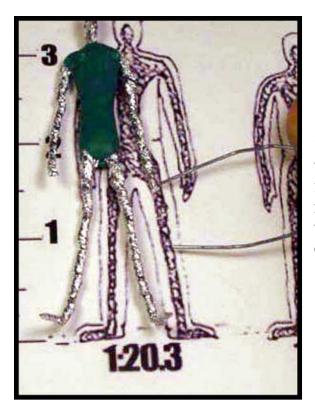
Calipers:

If the basic proportions of your figure are still a challenge to you, a very simple set of calipers may be of some real help. Calipers don't need to be hi-tech digital dial style tools. The traditional set of calipers for sculpting is a pair of curved, claw-shaped pieces of flat metal or wood hinged at the wide end with a wing nut or something similar to set the distance between

the thinner ends. It works like a crab claw that you can lock at any given position. You measure the length you need to repeat, lock the calipers at that measurement and simply hold that against the section you need to work on to match it. Simple. But there aren't any sculpting calipers made to work this small. Dial calipers will work, but so will a bent paper clip. Like this;

Simply take a normal paper clip like the one on the left in the photo to the right and unbend it into a horseshoe shape like the one on the right. Any piece of stiff wire will work as well.



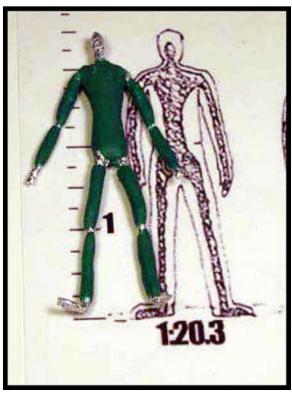


Simply bend the wire to the desired form and use that to keep the lengths balanced between legs, arms, and feet... whatever. This can come in very handy to measure the thickness of arms, legs, and especially torsos, which we often simply don't make wide enough.

Jointed Armature:

Here's another help if you're having problems keeping the proportions of the arms and legs right. Once you've made your foil armature, just cover the main areas with your first layer, leaving all of the joints free of clay.

Use your paper clip calipers to check the lengths of each section of arm and leg against each other and make the adjustments necessary before baking. On the next pass, position the armature the way you want and fill in the joints and bake. Your form should now have good basic proportions overall! (END WEB PAGE 3)



Hands:

Yes, hands; the very thing we use most to make our figures is one of the very most difficult things to master. It's <u>the</u> most difficult for me, hands down, to use the expression. The human hand is an extremely intricate and dexterous mechanism that is forever changing its shape to conform to its momentary use. Human hands, much like humans themselves, come in all manner of shape and size. Darn it.

We can't hope to capture the involved and subtle forms of the human hand in the scale we're working in, especially in the material we're using. Polymer clay is a wonderful, versatile medium, but it has its limitations. It will only "hold" a certain level of detail, far less than would really be there. We' can't put in all of the tendons, veins, knuckles, wrinkles, lines and forms that should be there. But we can suggest some of that... if we really want. What most of us want out of our sculpture is simply to look okay. We want the different parts of our figures to be recognizable for what they are; an eye should look like an eye, a foot like a foot, hair like hair, and a hand should look like a hand. Easier said than done, but there are a number of ways to skin this particular cat, so let's take a look at some options. Some or all of these may work for you and become part of your library of techniques that you can apply to different situations. Or maybe only one of these will work for you and that's all you'll ever use. Doesn't matter. This is about finding a way to do hands that you like and feel comfortable doing. I don't really prefer one way to another. Many have specific advantages that are perfect for some applications and not so good for others. I usually do whatever is quickest and easiest, but sometimes the figure needs something special, so here's a selection that you should be able to find useful. Try one, try them all. It's the only way you'll know for sure.

The Basic Mitt Hand:

The mitt hand is the standard method for doing hands on small figures. These hands tend to be thicker and more solid, hence stronger and this method is also the easiest.



Here's a woman with the need for a mitt hand. She's holding her hand up in front of her face in a gesture of shock at the startling piece of gossip she just heard. Begin by forming a blob of clay on the armature and flattening it front to back. At the same time form the oval outline that will become the hand.



I usually wind up pulling a little piece of clay off the tip of the hand, especially for ladies hands. This helps me to get the fingers thinner and gives me the center point of the fingers.

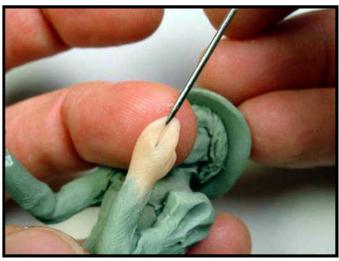


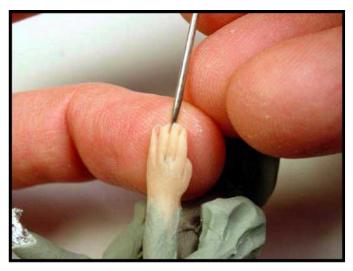
Use a pointed tool and find the middle of the back of the hand. Now draw a line to the tip of the hand. You now have a thumb and two wide fingers! You may need to use your thumb to brace the hand as I have done here. If you do, moisten your finger first with a bit of water or alcohol first so the clay doesn't stick. I have a confession to make here as well. While I tell you to use water or alcohol, I myself use a little bit of spit. It's not only more readily available; it actually does work a little better! (END WEB PAGE 4)

Form the thumb by first marking the tip of the thumb. This point is usually about three fifths of the way from the base of the hand to the tip. Draw the thumb from that point, both on the palm and on the back of the hand.



Now even out the area so that the hand looks like a gently pointed oven mitt.





Now is a good time to make sure the size and shape of the hand are correct. Use a sharp blade to trim away any areas that have gotten too large.



Split each one of those wide fingers down the middle again and you now have a thumb and four fingers. Take the tip of your pointed tool and press right through the tips of the lines to separate the fingertips.



Next, trim the fingers to length and shape if necessary. The middle finger should be the longest.

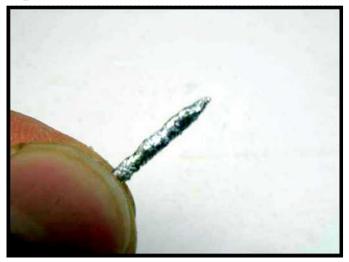
Now that we've got things in the right shape on the back of the hand, let's get the palm side up to speed. Use the pointed tool or knife to do the fingers lines on the back. Don't cut all the way through unless you really want to separate the fingers fully.





GENTLY brush out your figure with alcohol. Use only a very small amount on the brush. The hand is delicate and too strong a brushstroke will tear it apart. When it looks good to you, well, you know what to do; Bake it! (END WEB PAGE 5)

Separate Hands:



Form a blob of clay the mass of the entire hand or slightly larger.

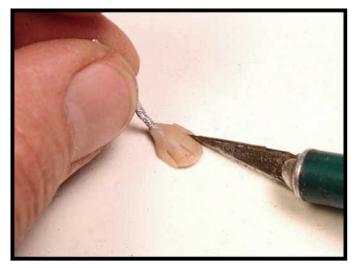
I wish this were a clearer shot, but now do the lines of the palm of the hand. Use your own hand for reference. This step isn't necessary, but it's good practice and makes your figure that much more convincing.



For those of you that really have a hard time working on hands on the figures, try this technique for making hands separate from the figure. I found this to be a really good way to do hands anyway!

Start with a thin piece of armature foil about an inch in length.





Next slice out very thin pie wedges of clay to separate the fingers. I found that I didn't need to cut a slice between the two middle fingers, but each blob of hand clay will be different!

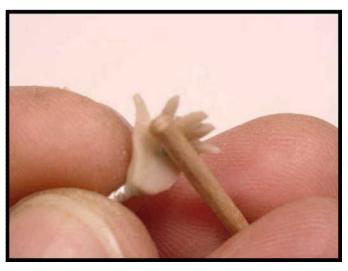


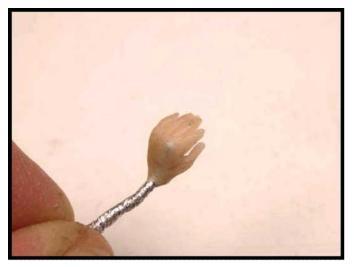
Use your toothpick or something as thin to gently roll the fingers into a more natural position.

Flatten it out on a moist, non-porous work surface. Use a knife or needle tool and divide the outer edge of the hand in half (the center mark in the photo). Then cut the separation for the thumb (the left cut in the photo). Then, if necessary, trim away any excess as I'm doing in the photo.



You can see just how quickly the basic hand comes together using this technique. (END WEB PAGE 6)



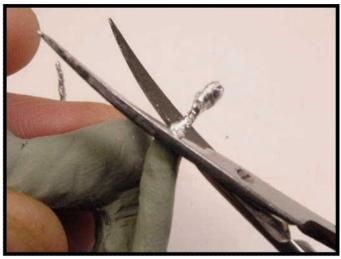


To prepare the arm to attach the hand, trim off the foil armature at the wrist.



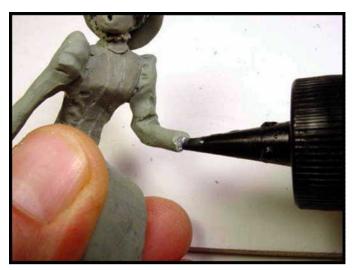
Now test fit the hand. I haven't done the end of this figure's sleeve yet, but it doesn't matter if you have. Make sure the base of the wrist is where you want it. You may need to twist the foil of the hand armature to get it thin enough to fit the drill hole. You may even need to trim the foil a little.

Finally, form your hand into the finished position. You can brush it out now or sometimes just dragging a toothpick between the fingers will take off the rough edges. BAKE.



Now drill a hole into the forearm at least 1/4" deep. Use as thick a drill as you safely can. DON'T use a power drill! The foil and the clay are delicate and drill easily. Even just a drill bit in your hand should do the job. (END WEB PAGE 7)





Put a little more Liquid Sculpey on the hand armature and insert it into the hole. Double check the hand position, make sure that the there is no armature uncovered and...BAKE!



Squeeze Liquid Sculpey into the hole. Premo can be used if you don't have Liquid Sculpey, but LS really grabs hold a bit better and the fact that it remains flexible is a big help.



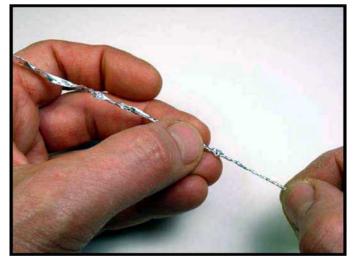
If any foil is still showing, you may want to add a little more Liquid Sculpey over the joint to strengthen it.

This technique will probably be the favorite of some people, simply because it's easier to concentrate your efforts on the hand without the rest of the figure in the way. But keep in mind that this technique can also lead to very oversized hands for the same reason, so it's particularly important with this technique to continually check your work, making sure the hand is the right size. (END WEB PAGE 8)

FOIL FINGERS:

This method has its pluses and minuses, most definitely. The big plus is that there is limited "pushing of clay" involved. Another plus is that positioning the fingers is more accurate. Negatives are that the fingers are not quite as strong as other methods and there is limited detail you can get. But it's a very simple and straightforward method that may be just what you need.

Start by cutting a thin (1/4") at most strip of aluminum foil.

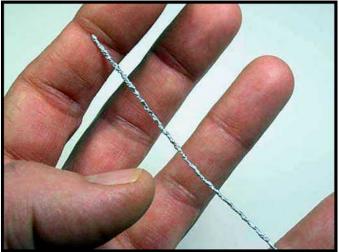


You should have a nice, thinner than finger width length of armature.





Twist it into a heavy wire thickness. Why don't we just use heavy wire? Because we need the surface texture for the clay to adhere to.



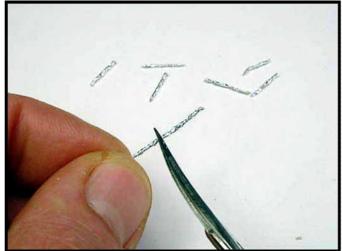
Form a blob of clay to be the base of the hand. (END WEB PAGE 9)

Cut your armature into longer than finger lengths. They get trimmed later, so longer is better than shorter here.

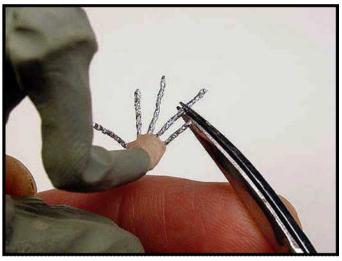


Trim the fingers to length. Notice I have to use my other hand to steady both the figure and the scissors!





Insert the foil fingers into the hand base. I love this shot. It looks like something out of cheap horror movie where the actress is terrified to see her mutated hand. Sorry, too many years as a monster movie fan!



Here they are trimmed to shape. You may need to squeeze the ends to avoid flat fingertips after cutting them. (END WEB PAGE 10)

Because it shows on this figure, I've sculpted the palm of the hand. You can bake the hand at this point or wait, your choice.

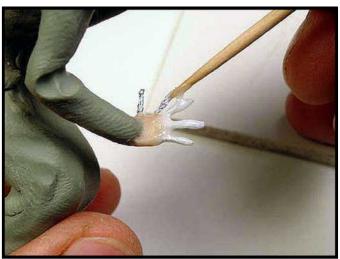


As you work the Liquid Sculpey on, make sure you cover the fingers all the way around and carry it onto the clay of the base of the hand.





Now for the easy part. Coat the fingers with Liquid Sculpey. Put it on heavy at first to make sure the foil is entirely covered. Again, you can use a toothpick or a soft brush to apply. Brushes should be washed with dish detergent to cut the oil of polyclay.



Make sure the coat of Liquid Sculpey is nice and even and that it hasn't pooled anywhere. When it looks good... Bake it! (END WEB PAGE 11)

Pre-Baked Fingers!

The title says it all. Obviously, getting the fingers right is what doing hands is mostly about. But fingers get really small on a 1:20.3 figure and much smaller than that in 1:29! Making these tiny fingers on a figure that is already small, manipulating the figure, holding the figure easily and steadily enough to work on are aspects that don't make it any easier. For some of you, making the fingers separately may be the answer.

Use Sculpey Super Flex for the fingers. You can use Premo, but I trust the Super Flex more for this. Roll a number of thin clay "worms" to the thickness of the fingers you need. I had to chill mine in the freezer to keep them from getting too soft to work with. Make them all curly and twisted and bake.

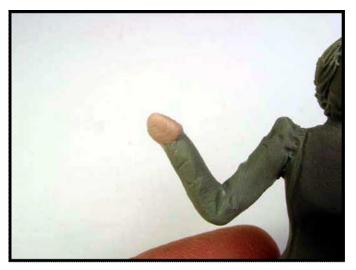




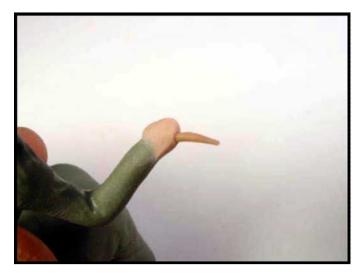
Once they're baked and cooled, use a sharp knife and cut them into slightly longer than the fingers you're after. The curls and twists, while not proper finger joints, will allow us to make hands that aren't simple flat and stiff looking. So before cutting your "fingers" to length, take a look at your own hand in the same position as the one you're modeling. Notice where the joints are and the curvature of the fingers. Now go try and find those same forms in the worms and cut them out!

Here's our subject ready for her set of hands. She's in the middle of telling some particularly juicy gossip and her hand position will help tell the story.





Pick five fingers from the finger library that look like they'll work for the figure.

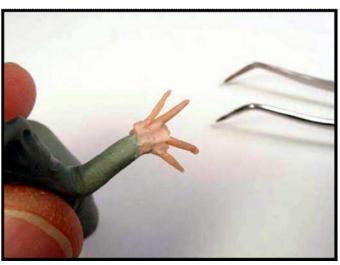


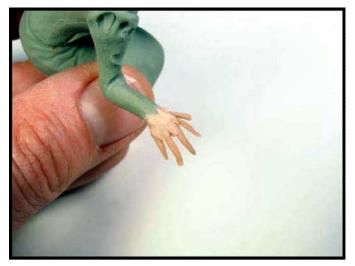
Continue adding fingers and start forming a little of the clay around the base of the fingers as you go. Some polyclays are stickier than others and this is one application where sticky is a good thing. When you come to the thumb, remember that the thumb starts at the bottom of one side of the hand unlike the other four fingers, which grow out of the top of the hand.

Cover the foil armature section of her hand with Premo or Super Flex. This will be the body of the hand. (END WEB PAGE 12)



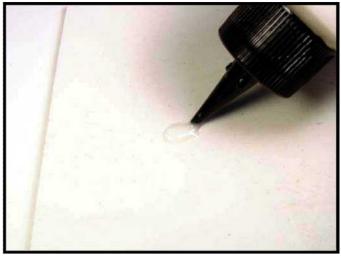
Insert one finger into the base of the hand. I like to work from one side to the other, but it doesn't seem to make all that much difference.





Now take your wonderful Liquid Sculpey and pour out a small amount on a washable surface.

Once you have all five fingers on the hand, get them all into the position you desire and strengthen that by working a little more of the unbaked polyclay around the bases. (END WEB PAGE 13)





Work the Liquid Sculpey over the entire surface of the hand to get a nice even look. If the ends of the fingers are too flat, just add a small drop of Liquid Sculpey to the end to round it off. Once the hand looks good... bake it! (END WEB PAGE 14)

Using a toothpick or a soft brush and apply a coat of Liquid Sculpey to the hand, making sure that you get it into every nook and cranny you can find.



Individual Fingers:



While the mitt method of making hands will most likely be the one used the vast majority of the time, there are times when seeing the individual fingers adds to the character. A figure playing the piano with mitt hands is less alive than a figure with separate fingers dancing lightly across the keyboard. The Prebaked finger method works in some cases, but doesn't offer the most control. The best way to do fingers individually is also usually the most demanding. Hands done this way require a more delicate, deliberate touch, but the effort is usually worth it.

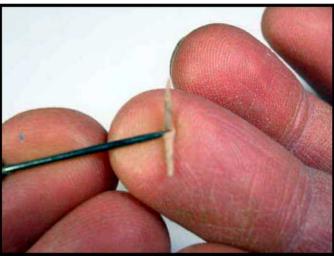
As with the pre-bake method, start by forming the base of the hand on the foil armature.



Sorry for the bad quality of the photo here! I used my needle tool, but any thin tool will do. Cut the worm in half.



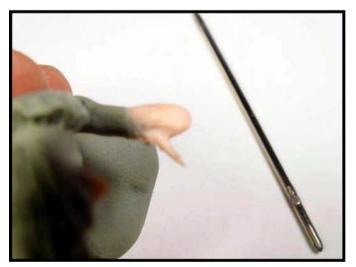
Now roll a small piece of clay to this general size and shape. Practice will tell you the size you like best.





You now have two fingers. (END WEB PAGE 15)

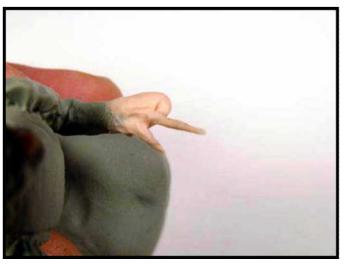
Begin applying the fingers to the base.



As you work in the fingers, start to suggest some form on the back of the hand. This will help you visually keep the proportions of the hand as you go along.



Make sure you blend down the edges of the finger so that it will adhere well when baked.





NOW move the fingers so that they are going in the right direction! Your hand should be in the position of a hand held wide open with all the fingers straight.



Time to trim the nails, and the fingers too! I'm using a pair of nail scissors here and they work very well, but any small scissors or knife will do.

You don't have to worry too much about the actual position of the fingers or the length yet. Your main concern is to attach them and align the bases so that all the fingers are growing from the right spots. (END WEB PAGE 16)



Gently position the fingers where you want them. I find that at least a gentle curve of the fingers really helps to give a more natural look.





The last step before baking is to recheck the finger alignment, making sure the position and length of the fingers are right. You can finesse the ends of the fingers by gently rolling them between your fingers if you have a delicate enough touch or do as we did previously, by adding Liquid Sculpey to the ends. (END WEB PAGE 17)

Bake:

These then are some techniques for getting presentable hands. As with most aspects of these figures, keeping the hands from "growing" is a prime concern. Work with the smallest amount of clay that you can to help keep control of the size. Draw a stick figure drawing of the hand the size you want it; it helps. Double-check the size against other figures as you work, and double check often. It may never come easily and it may always be the hardest part of making a figure (as it is for me), but you will get it with practice!

Now to move on to the most critical, and for many the most difficult, aspect of sculpting a figure....

The Face:



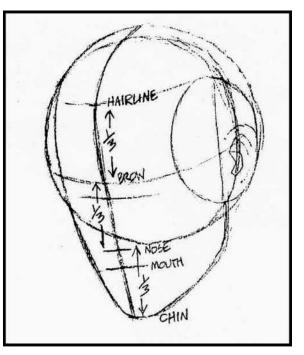
The face of your figure is almost always the most critical aspect for two reasons: Firstly, as in real life the face is the identity of the individual. We don't look at a person's feet to see if we know them or not, we look at their face. No other part of a person is as uniquely distinctive as his or her face. It's the same with our figures. We can tell a lot about our figures from poses, styles of clothing, general size and shape, but it's the face that we want to look at. The face, with all its variety and subtlety, is what draws us into a character, what makes us smile, laugh, or even feel sympathy for our figure.

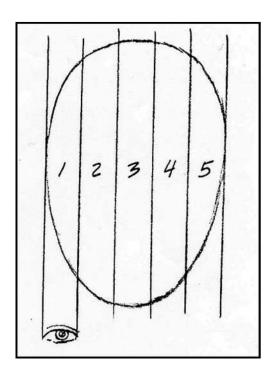
Secondly, the face is often the hardest part of the figure to get right! With all that we want to fit onto a face, it gets pretty cramped! Two eyes, a nose, a mouth, facial hair, wrinkles, etc.; no wonder faces have a tendency to get much too big! I have to admit that I make the faces a little large on my figures. I've done figures with "correct" proportions, but I like the character that comes from a slight exaggeration of the features. And given the fact that my figures are meant to be viewed from some distance, the slightly larger face reads a little more easily.

While I think my method of doing faces is a good one, there simply is NO right or wrong way of doing faces. You can start anywhere you want and finish up anywhere you want. But it may take some time before you get the feel of what works for you. So until then, try my style to help you find what you like and don't like when sculpting faces. That's what it's all about; doing it the way you like to do it.

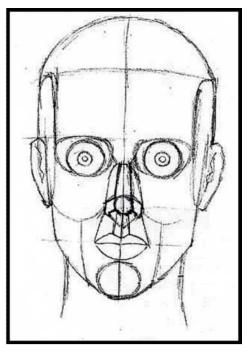
Here are a few basic considerations that may help you a little. But remember, these are guidelines, not rules.

Here's a drawing that will show you how the face is divided into thirds. Note that this is not the Head divided into thirds; it's just the face. The face starts at the hairline and ends at the bottom of the chin. The top third goes from the hairline to the brow; the middle third from the brow to the bottom of the nose; and the bottom third from the base of the nose to the bottom of the chin. Keep these thirds in mind as you work. Not only at the beginning, but all along the working of the face! (END WEB PAGE 18)





Here's one to keep in the back of your mind. Divide the front of face into fifths vertically. One fifth equals the width of an eye! The center fifth is for the nose; the next two out are for the eyes and the rest is history! Now you can just keep this in mind or you can actually draw the five lines if it helps!



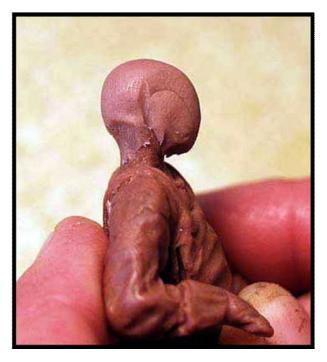
Here's a nice line drawing of a generic head and face showing the basic proportions and where everything goes. If it helps, shrink this down and print it out. Hold it next to the head you're working on and use the paper clip calipers to check distances between eyes, nose, etc.

Let's do another face! This is the same basic approach as covered in Chapter 1, but it bears repeating. Practice, remember? (END WEB PAGE 19)



I blend down the blob so that it adheres well and add any clay to the sides that might be needed.

We'll say we've gone through the figure process of making the armature, putting on the first layer, and building up the detail layer of the body as well as doing the hands. The only thing left is the head. We've already got our head armature covered, so let's take it from there: Put a blob of clay on! You can see that I like to cover the face and top of the head first.





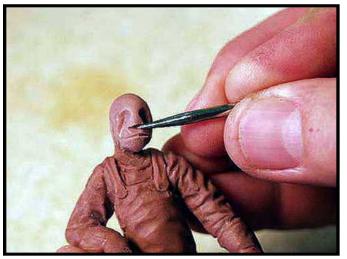
Here's the same point from the front. I've already done the pinch to narrow the front of the face.

With my hand-dandy metal toothpick, I press in the hollows for the eyes with the rounded end. These hollows don't need to be all that deep and if you're a bit timid at first, you can always make them deeper later on. You'll notice that I didn't make my two lines dividing the face into thirds on this one. I usually don't, but if you're still having trouble with facial proportions, you'll want to do the lines. (END WEB PAGE 20)





Now put the angled lines from the eye socket downward and out to either side of the nose area. Simply draw a line for the mouth. Not too deep yet, you're just placing the mouth here.



With a point tool, push up from the upper lip to create the base of the nose.

Now indent the bridge of the nose. (END WEB PAGE 21)





Remember how we pinched the face to get a direction for it? Well, we need to get rid of that on the forehead. Place the side of your toothpick tool across the bridge of the nose and gently roll upward across the forehead. This may take a couple of passes. What you want to do here is simple flatten the center of the forehead.



Here's where we start the chin. Drag some of the clay from below the mouth line into the form of the chin.



Draw in circles for the eyes. Don't worry about getting them too good at this stage. Two relatively even circles is all you need. (END WEB PAGE 22)





From the side it should look like this. If you need to add clay, simply roll a small ball of clay and plop it in place. Then use the round end of the tool to blend in the edge.



Now add the folds at the sides of the nose and mouth. I've also poked in the nostrils with the point. The nostrils can also simply be painted on if you don't want to deal with them sculpturally.



Both folds done and I've decided to give him a sour frown.



I changed my mind. He needs to be happy, so I'm giving him an open mouthed grin. Maybe he's singing. To give the mouth the impression of depth, I push the point in deep at either side and make sure to give the lips some overhang. That's simply a matter of gently dragging the point under the edge of the lip and not too deeply either or it will probably come loose when you brush it out!

Here I'm defining the eyes more by drawing the upper and lower eyelids and adding brow lines. (END WEB PAGE 23)



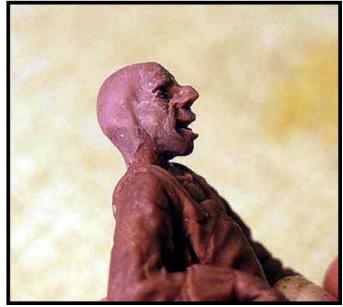


You can see where the alcohol has softened the overall look of the face. A good thing.



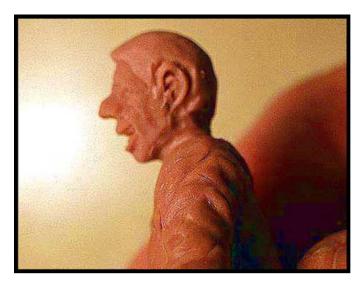
Once the clay covers the hair area including the sideburn area, draw the outline of the ear. (END WEB PAGE 24)

GENTLY brush the face with alcohol. The direction of brushing is very important. If you want to accent a line such as the eyelid, brush parallel to the line. If you want to soften a line, say the brow lines, you brush across them. This brushing step can achieve a lot of the balance in the features that you may not be able to reach with the other tools.



The hair. No, I'm not doing the ears next; I'm doing them as part of the hair. Squish a blob of clay on the top of the head and work it all around.





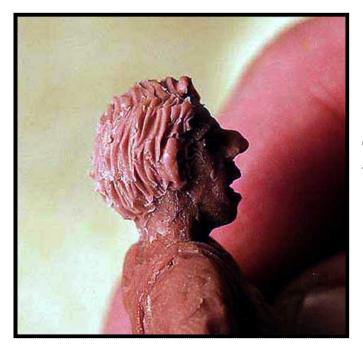
I know it's hard to see here, but you should be able to make out the wavy "S" line in the hair. This was covered in one of the figure chats. In essence you use opposing curves, like an S, to get away from the unnatural looking straight lines. So practice making fluid, wavy lines for a more natural look!

Really sorry for the fuzzy shot here, but you get the idea. Draw the inner area of the ear. A simple hollow will do, but I like to suggest some of the form of the ear. The ear is a very difficult feature to sculpt accurately in 1:1 scale, so don't even think about it on a little figure like this!

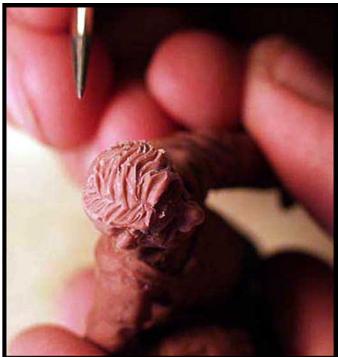




This is usually the hardest part of doing the hair because it often pulls the clay away from the head. A light touch here will let you know how much pressure you can apply while dragging the tool. After you've done the part, continue some of the lines into S curves to create a sense of the hair flowing.



After the hair is where you want it, brush it carefully, following the flow of the hair-lines. Then Bake. (END WEB PAGE 25)



Continue the lines of the hair and make sure to accent the back edge of the ears.

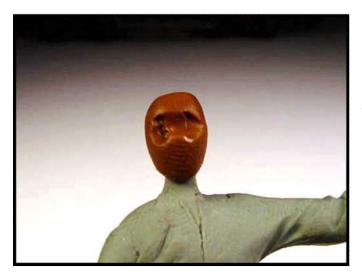


The Build-Up Face:



This is a more involved process with a lot more steps. Its advantage is for those of you who have problems with facial proportions or if your face "grows" as you work on it. By doing the face in smaller increments, you can keep each section under control much easier. The bad part about this technique is that you may not know what your face is going to look like until it's done! For that reason, it might help when using this technique to do a sketch of the face you want; that way you'll have a guide map to how the facial features interrelate. Take your time with this method and you should be happy with the results.

Start by getting a blob on the head section of the armature. Not too big and mostly on the front of the head where the face will be.

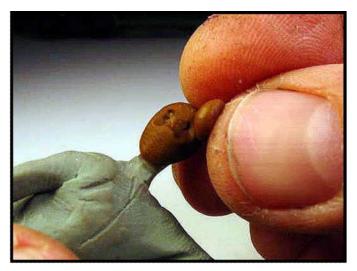


You can see on this side view how deep the depression is. Also note how little clay is on the back of the head. BAKE. This will form the under-skull for the face. (END WEB PAGE 26)



Now make depressions where the eyes will go. Continue it across the bridge of the nose. Think of this as really wide eye sockets.





Make sure the clay is pressed in well so that it adheres. Press down the edges, but don't worry about blending them down at this point.



Draw in one of the eyes. This should be a deeper cut into the clay. (END WEB PAGE 27)

Now take a small blob of clay and apply over the socket area. The clay should fill the depression and a bit more when flattened out. Like this;



Lightly, make a cross to designate the line across the eyes and down the centerline of the face (where the nose goes!). It doesn't need to be as deep as I've done here. It's just a visual reference so you don't forget which way the face is looking!





Draw in the other eye, you can see here that the work at this point can still be rough.



Now that you've balanced the eyes, you need to balance out the clay around the eyes as well. I'm using the point end of my toothpick tool to shave clay away to the right form. (END WEB PAGE 28)

Slowly draw the clay away from the outside of the eye. I find this is easiest to do using the side of the round end of my toothpick tool. By gently rolling the tool over the clay away from the face, you should be able to exert a good level of control.

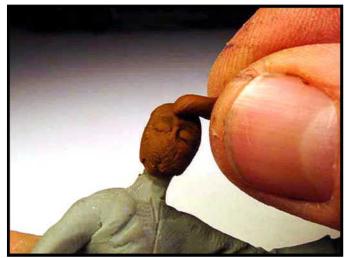


Now take a look at the size and shape of both eyes make any necessary adjustments to balance them. This may be as simple as drawing the circumference of each again or it may involve adding or subtracting clay.

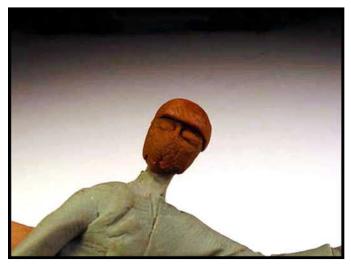




Your face should look like this now. I haven't brushed anything down at all, but I did lightly press my finger on any sharp edges. Don't concern yourself at all about the brow at this point. You should not be trying to form it from what we're doing here. That's the next step. At this point you can do any finish detail on the eyes you want or you can build up eyelids later on, as you'll see below. If you're going to build up eyelids, just brush out the eyeball themselves to remove fingerprints and bake. If you'd rather sculpt eyelids into the eye forms here, do that now and then bake.

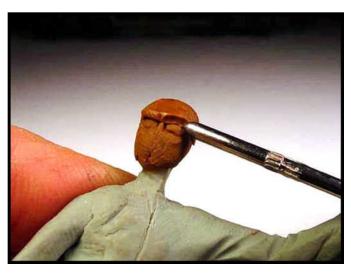


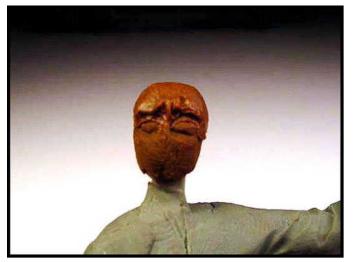
Here we add the brow, use a piece of clay that will cover the entire brow area. It's easier to use slightly more clay and then shave the excess off as you work.



Now we start the fun stuff! With the round end of your toothpick tool, gently work the lower end of the brow clay down into the depression above the eye. What you're doing here is creating the brow ridge while separating enough clay to make the upper eyelid. Serious detail! Do the entire brow ridge. (END WEB PAGE 29)

Round the top of the brow and blend it down well onto the under-skull.





Another bad shot, but you can see the brow ridge better here after I've brushed with alcohol. When it looks good, guess what? You got it... BAKE.



With my fingerprint on it, it looks even more like a dust mask! This step does not include the nose, so don't try and fit it in here! Round out the edges, but don't worry about blending them down; just press them down. (END WEB PAGE 30)

I wish this were a better photo, but hopefully you'll see what's going on here. As the character I'm doing will be a bit "under the influence" I chose to do a knitted brow, but what you really need to pay attention to here is the eyelids. I simply dragged the point end of my tool across the top of the eye until it worked the clay down onto the eye itself. I used the point end again to shave the edge nice and even for the lid. EASY.

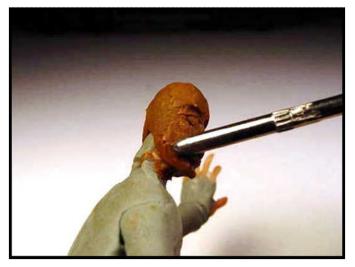


No, this is not a huge nose! Add a small blob of clay over the mouth area. Think of this as one of those white fibrous dust masks.





This step is to create the jaw line. Add a small blob of clay to the chin and begin to work it out to the sides. You may need to add or subtract clay as you go.



When the jaw looks nice and balanced, brush it out with alcohol and... BAKE!

I love this step. It looks silly. With your pointed tool, sculpt in the mouth. I've chosen to do a rather sloppy, lop-sided mouth. At this point, this looks more like a duck than a person. Don't worry, it gets better. When it looks good, bake it!



Using the round end of your tool, work the clay under the mouth down from the front of the face and work the clay forward from underneath the jaw. Once the chin is formed, work the clay back on both sides to create the jaw line. Now we start blending in all the clay.





NOW worry about the shape of the nose. I'm using my expensive Italian tool here, but a toothpick would probably work better. Blend down the sides and top of the nose first.



After you've done the sides of the nostrils, use the point of your tool to poke in the openings. Check to make sure they are both even and balanced... BAKE.

NOW we'll do the nose! Take a small piece of clay and pinch it in your hands to flatten it. Then press it into the nose position. Don't worry about the shape of the nose yet. (END WEB PAGE 31)



Blend down the bottom of the nose and create the nostrils by simple lines at the side of the nose.





I used the side of my tool to press the clay down. (END WEB PAGE 32)



The reason we don't bake that step is because we have to balance out the other side.

This is a little tricky, but only a little. A blob of clay on the cheek.

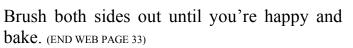


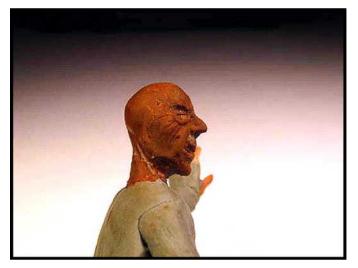
This blob of clay is not only for the cheek, but also needs to form the lower eyelid, any eye bags you want and also the naso-labial fold from the nostril down along the mouth. So take your time with this. Don't bake when you're happy on this one.





Make sure that the masses of clay balance out so that one cheek isn't too much bigger than the other.

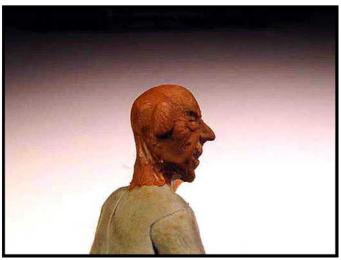


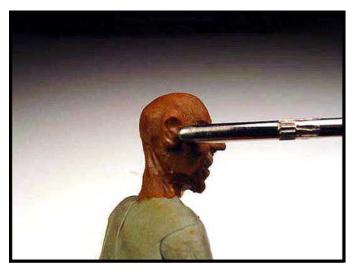


We'll do the ears separately. This is really getting off the subject of the face, but hey, close enough. Add a slightly larger than ear sized blob of clay in position, about halfway from the front to the back.



Now start building up the back of the head. I've done the neck here as well... Bake.

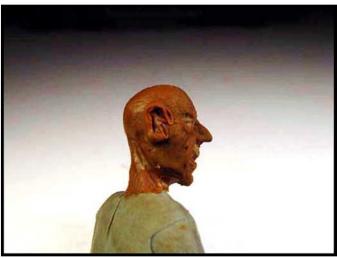




With the pointed tool, create some weird forms inside the ear. Ears vary widely in size, shape and configuration, so almost anything you do will be fine.



Blend down the edges so the ear doesn't pop loose while you're working on it. Using the round end of your tool, make a depression inside the ear.



Thin down the outer edge of the ear by pressing the outside down onto the head, in effect shaving down the edges. Blend down any loose edges and bake.

Unfortunately, the rest of the photos of this figure's head being completed were lost in a wayward computer/digital camera conversation, but the hair was done the same way as other figures. So try this method of building up the face more slowly. You may find that it gives you the edge you need. (END WEB PAGE 34)

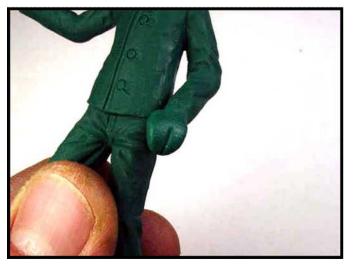
The Green Man:

Let's ramble a little further along now and do the same thing again a little differently. This fellow hasn't got a name yet, so let's just call him the Green Man for his green Premo.

This figure is built up on the armature used in the beginning of the chapter. I'm skipping all basic body build-up and going right to the hand. Unfortunately, most of the photos from the work on his right hand were destroyed in a digital debate between my computer and my camera, which is a pity, because that hand came out well!

But on to the left:

Start with a blob of clay over the armature and form it to a flat oval. Just above the center of the palm side, draw a line out to the fingertips. This line separates the fingers (excluding thumb!) into pairs.





Follow the line over to the top of the hand tot he base of the fingers.

Now make a dimple (indentation) where the end of the thumb should be.





Now draw in the other finger separations. The pointy tool (toothpick, metal toothpick, etc.) is better for these lines than a straight blade tool like an X-acto because the roundness of the toothpick will start to give a more natural edge to the fingers.



I've started rounding the thumb here. I usually start this step with the thumb because it's easier for me to define the rest of the fingers, but it really doesn't matter where you start.

Carry a line down from that dimple to the base of the thumb. (END WEB PAGE 35)



Your hand should look like this about now.



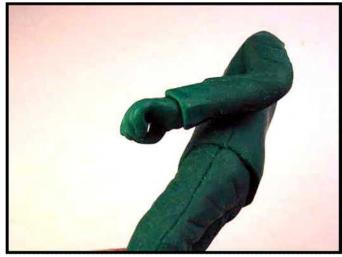


Make sure if you do this that you check that all of the fingers are doing their job!

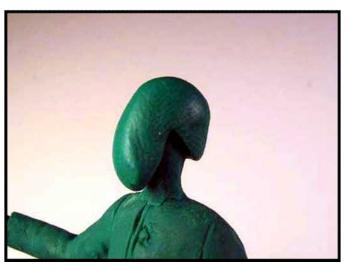


Add a blob and start covering the face and head. Make sure to seat this clay on the form with good pressure and by blending the edges all around.

Now I want to define the shape of the hand a little more. This guy is going to be carrying something in this hand eventually. I don't know what at this point, but I want his hand to look like it's actually gripping something, so I use the circumference of my pointy tool to shape the hand around. Make sure the tool is wet so the clay doesn't stick. (END WEB PAGE 36)

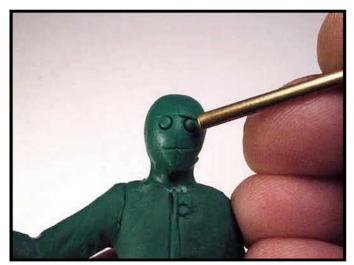


What this guy really needs is to get a head. So let's start with our regular blob.





Here's a line down the center so I know where the face is...facing. Two horizontal lines divide the face into thirds.



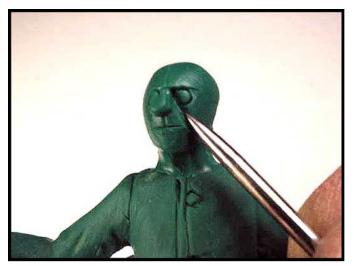
I've added clay for the neck here. (END WEB PAGE 37)



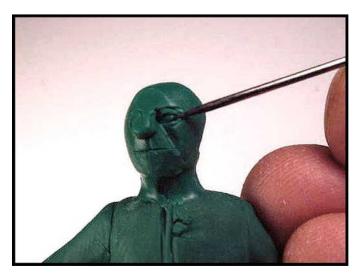
Now I use the end of the brass tube to mark the eyes! Can't get much easier than this!

A tiny blob for the nose. Simple.



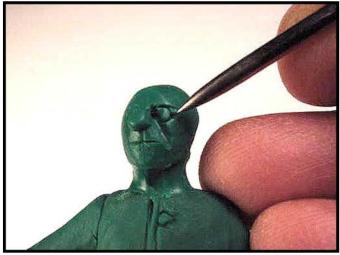


With the point of your tool, push in small holes at inner and outer edges of the eye. This will help you keep the size right. Notice I also rolled my tool from the top of the nose up the forehead to flatten it and give the forehead a little bit more of a face.



Now we'll change the look of the face a lot more by sculpting the nose and adding a little blob of clay for the chin. Just blending the blobs down should help define these forms a bit more.

Okay, there's a trick to finding this line on your own face. If you're like most people, you should be able to put your index finger right in the hollow on the side of your nose, between your nose and your eye. With a straight finger you should be able to line it up with the outside of your nostril and the outer edge of your mouth. This is the line you need to work in here. Push in on the inside of the eye and keep this line as straight as you can until you get past the mouth. (END WEB PAGE 38)



Now using those holes as start and end points, divide the eye into thirds, using crescent shaped lines. This creates upper and lower lids as well as the eye itself. Easier than it looks!





Here's a different angle on the same thing as I balance the left side of the face to match the right. You can see where I've sunken the cheek a little. The more form the face has, the more identifiable it is. So higher or lower cheekbones, wider or more narrow mouth, larger or smaller nose, etc. add up to the incredible amount of differences in the human face. So feel free to try different facial proportions to see the results. You might like what you find.



As this is going to be a cap, I trim away the excess clay using a sharp blade. This also creates the vertical sides of the cap.

Now here's some more definition on the face. I've added a furrowed brow and some cheeks lines and lips. When defining the mouth, it helps to push in the ends as in the eyes. This not only helps in the sculpting stage, but also when it comes time to paint. The dark wash will flow more heavily into the deepest recesses and define them more. (END WEB PAGE 39)

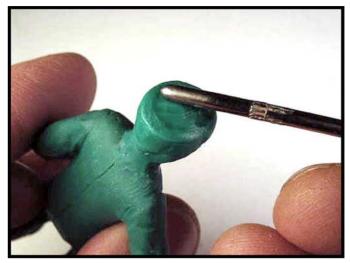


Just for the heck of it, let's do a hat. As we've already seen in the figure forum, there are a lot of different ways of making hats. This is just one way of making one hat. I put an oval blob of clay on the head...





Let's add some clay to the back. I know, I know. You're saying, "Chris forgot the ears!" Don't worry, we're doing them just a little differently on this guy.



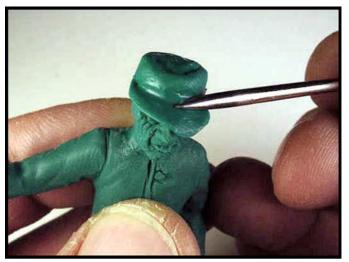
For the bill of the cap, I just form a little flat crescent of clay. It works just as well to roll to some clay and cut the form you need, if that's easier for you.

Yes, it does look more like I'm turning him into Frankenstein's monster! I've trimmed it a little tight so.... (END WEB PAGE 40)



Now I use the round end of the tool to give the top of the cap a little form. This cap would look fine if I just left it completely flat across the top, but it will be a little more interesting with some irregularity to the surface. This will also give the highs and lows that the wash and dry-brush need to provide dimension.





Make sure the hat is what you want it to look like, and then... Bake!



With either the end of the tube tool or the round end of the toothpick tool, make an indentation for the ear.

Stick the bill on and use the side of the point tool to press the bill on firmly! (END WEB PAGE 41)



OK! Let's do the ears! But let's make it easy on ourselves and to the hair at the same time. Roll a short worm of clay and wrap it from ear to ear around the back of the head. In fact, wrap it from sideburn to sideburn.





Using the point of your tool or a sharp knife, cut the top of the hair at an angle so that it looks like it's coming out from under the cap. The cut can go down as deep as you need.



Draw sideburns in with a point and draw a deep groove behind the ear! Simple! (END WEB PAGE 42)



Draw in the hair. Remember to use the S curve as we discussed in chat!

Ha, Ha, ha. You thought I forgot his collar! A simple band of clay will do the job. Then this head is done....





The trick with moustaches is to keep your tool wet and always begin by pressing the top of the moustache into position. This helps assure that the darn thing will stay on while you draw in all the texture! Draw your hair texture in a little by little and don't use too much force; it's pretty easy to pull a moustache off!



On second thought, after looking at him a minute or two, I think he needs a moustache. I roll a worm of clay to length, making sure the ends taper nicely. With a wet point tool I press the worm into place in the center.



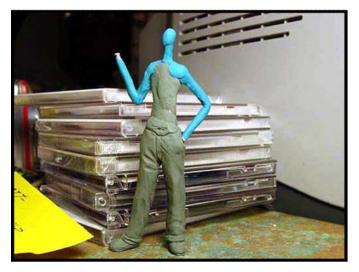
When he's all painted up, he'll be ready for service on the common carrier! (END WEB PAGE 43)

Mark Twain:

I recently did a figure of Samuel Clemens, AKA Mark Twain that was a bit of challenge for me. I'm not happy with the way it came out, but it's okay. Trying to capture the likenesses of real people is a very different experience from the freedom of sculpting imaginary folks. I thought you might like to see some of my trials and tribulations along the way!

Choosing a pose becomes a very critical factor when doing a famous person. Celebrities are very often known for a particular dress and stance that most captures their essence and makes them easily recognizable.

I chose Samuel Clemens' "Tall Tale" stance that he often adopted on stage. I was glad he had the good sense of keeping one hand in his pocket...less work for me!



Mark Twain would be naked without his cigar, so once the body was basically complete, I proceeded to roll a long cigar shape and bake it. I wasn't sure how long I wanted the cigar, so I cut it into two unequal lengths.



I won't go into detail on most of the figure. The two most interesting parts are the hand and the head so here goes.





I've added a finger here. It looks fatter in the photo that it really is!

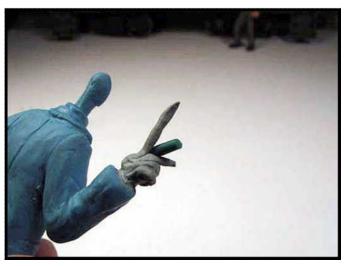


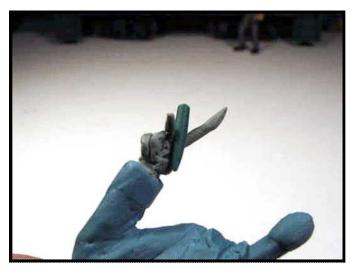
Now I've added the other two fingers. I've made them nice and long so that I can bend them around easier. I placed the cigar (I chose the shorter one) in position and gave the fingers a gentle squeeze to hold it.

Then I stated with the palm of the hand, giving it its basic shape and flatness. (END WEB PAGE 44)



Here's the pinky finger on the outside. When I added these two fingers, I didn't worry about blending then in at the knuckle, I just laid them down in place until I was sure that's where they belonged.





Once I had a good position for the cigar and two fingers, I trimmed the fingers down to the correct length.

Here's the same thing from the palm side. $({\tt END}\ {\tt WEB\ PAGE\ 45})$





It started innocently enough. I realized that I needed to approach this head differently than usual. Mark Twain's hair was such a vital part of his image that I felt I needed to do the entire head in one pass. I hoped this would give me more freedom to make changes. I blocked in the hair.

Next, I gently removed the cigar and stuck the thumb in place. Once that was blended in, I put the cigar back in place making sure that the position was correct. Then I baked it! THEN... I moved on to the head and everything went to pieces.





What I was really trying to do at this point was not to get a likeness, but only to get the right proportion to the mass of the face, hair and head.



As you can see, I did the face in passes from left to right. I blocked in the right half, and then followed through with the left. I then refined the right and followed through to the left. This doesn't work for everyone, but it's a fairly common procedure.

As I started to refine the hair forms, I began to block in the face roughly. (END WEB PAGE 46)



Once I felt I was in the ballpark, I quickly started defining the face. In this case, the "frame" of the hair helped a lot in finding the facial feature placements.

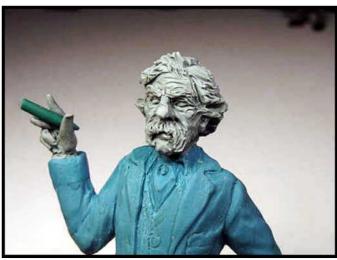




I started playing. I wanted to get more expression out of the face and so I tried a few things. This one got too snarly.



I started feeling good about the likeness until I looked at it from the side. The head was far too shallow. I started to add clay to the back of the head, BUT... (END WEB PAGE 47)



This one had a certain something; it just wasn't what I was looking for!

The wrinkled brow drove me crazy!





I finally decide to go ahead and finish off the wrinkly head after I'd done some additional changes. After I baked the figure I took a look at it and realized that the head was a little large.

I was feeling good about the look of the hair. Wispy, fly-away hair is the most difficult to sculpt, but fortunately Mark Twain had enough of it to make it doable. To give it dimension, i dug my metal toothpick into the hair mass and dragged it outward to break up the solidity of the mass. Then I used the point to draw thin, wavy lines (remember the S curves from chat?) for the hair texture. I used a variety of long and short lines to keep it from looking too regular. (END WEB PAGE 48)





You can see here that I added clay around the collar; thickened some of the arms; and redid both legs! You also may notice Mr. Twain has a new moustache!



I also had a time of getting the back shoulders to look okay and it took several tries to get it acceptable.

So you see, sculpting a figure isn't always a straightforward step process. Don't worry about going back and changing things. The important thing is to take the time to look at your work as you go along and make the changes you see necessary.

By the way, after I finished this figure, painted and all, I took another look at it, cut the head off and did a whole NEW one!



In Conclusion:

I hope some of these techniques can work for you to help you refine the head and hands of your figures. They are skills that need to be developed and can only be developed with... PRACTICE!

But as your skills grow, so will your enjoyment of the figures you make yourself. If you're unsure of your work, practice on separate pieces of armatures for the hands and heads. You can always adhere them on to a figure later! (END WEB PAGE 49)

See you next chapter! Chris Walas