# Bonework

## Integrating the Fascia of the Bones

2019

Sharon Wheeler

# BONEWORK MANUAL

by

Sharon Wheeler

This Bonework Manual is the current summation of my inquiry into the plasticity of the fascia in bone tissue. The phenomenon of "Bone Change" and the collection of "Bone Rolling" techniques were both encountered and developed while working on my clients within my private practice of Structural Integration.

Bone Change was first observed in 1973 and is detailed in the story "The Boy from Bolinas" included in the back of this manual. The method of discovery was lady luck followed by years of observation and experimentation. As far as I know this information is not a hybridization or adaptation from other systems or disciplines.

It was not until about 1990 that I began to take Bone Change seriously. I had reluctantly relegated Bone Change to the "strange things happen to small children category. But I could not forget how it felt and by 1990 I was using it more and more often to effect some remediation for damaged bones. I began openly discussing the phenomenon with my colleagues and I attempted a pilot study. I ran a series of cranial workshops exploring the Bone Change technique Two Handed Torque in 2007. The goal of these workshops was to get some numbers.

We collected 32 sets of measurements. While some of these sets echoed the quantity of change we observed in private practice, a friend was correct in

warning me that what the study would really show was how poorly we were able to measure.

"Bone Rolling" is something I had been doing for quite awhile and did not realize it was anything unusual until a former scar tissue student came to my scar tissue workshop the second time for the express purpose of "learning that thing you did to my shoulder". Her interest made me realize that indeed I did have a "thing" I did for shoulders and in fact I had "things" for most of the bones around the body. I collected all of these similar techniques under the category of Bone Rolling. Adding Bone Rolling to the phenomenon of Bone Change makes a nice workshop of new information.

2010 was the year of the first whole body bone workshop teaching Bone Change along with Bone Rolling. The significance of this early workshop for me was that these techniques and methods were teachable and that other people could produce similar results.

## ❀ BONE CHANGE ❀

It is possible to remediate damaged bone tissue. It changes in volume and contour towards normal within a field of manually applied pressure.

The bone problems that respond to bone change have distortions in the configuration of the shape and contour of the bone; bent bones, badly healed lumpy breaks, and bone over expansion due to swelling from infection or bone over-production during healing.

Bone changing techniques are direct.
I use the following general method to address bone fabric distortions all over

the body. Most of the time at least some good can be done, and often quite a bit of help is possible, especially over time.

To start, I ask them tell me what I need to know. I ask about the history of the damage, and I find out what I can from any medical images and reports. I have them demonstrate any functional problems - like lack of range of motion. I look at them from the traditional Structural Integration four sides and have them walk and move around some.

It is nice to document all of this information before and after.

I have the client lay down and I start exploring with the sense of touch. I am looking for the most tension and distress and disorganization in the tissue; any irregular consistencies. I experiment to find a way to use two hands to apply deep surrounding pressure precisely into the distortion of the bone. When I am ready to apply pressure, I grip with each hand and then I push my hands together creating a pressure "surround" around the damaged area of bone. I think of putting "spring" in the bone.

I wait - holding steady and really still and quiet (as still as a mouse - without an agenda). The steady quiet holding of deep pressure should last between (approximately) ten seconds to half a minute. I am waiting for the bone change vector to start.

Precision in the placement of the pressure and how still and quiet I can wait seems to make the change start a few seconds sooner. Most of the wait time is fairly short and not beyond an average practitioners ability to hold pressure while waiting for the change to start in the bone.

When the fabric of the bone does change, it is often sudden and rapid. The bone feels like it is moving in a direction of it's own choosing. At times it

almost feels like the bone is dissolving and flowing - especially with a Bone Change technique like Cranial Torque. I follow the direction of the change while keeping the amount of pressure steady so the change can keep happening. This feels a little bit like body surfing an ocean wave.

The rapid change slows down after a few seconds and gradually it seems to slow towards a stop as the bone tissue shape and contour normalizes and "goes home". The pressure and the change should not hurt. Sensation is generally reported as an mild, odd sensation that feels good.

Besides the general application of the method outlined above, there are a few specific often used Bone Change techniques that have earned names.

### ✿ The Push Pin

Using a thumb or all of your fingers bunched together looking like you are holding a push pin - push into the over-expanded bone to reduce it down to it's former shape and size. Over expansion can occur from swelling due to trauma accompanied by bone proliferation and swelling or infection. This technique looks like pushing in a difficult push pin. Use the push pin from a variety of different angles when taking down the bone. The bone diminishes a little bit with each push until it matches the undamaged side in volume and contour.

The push pin also works on donor bone sites - the chiseled areas on the ileum that are the result of taking large pieces of bone for grafting. Pushing into the surface of the donor site apparently stimulates the bone to grow and over time - a year or two with repeated work every few months and most of the lost bone fills in which produces a thicker rim and provides a better interface for tissue attachment.

The following bone change techniques are usually taught in separate a cranial

class. The inclusion of these cranial techniques would extend the Bonework class length. They are listed here to complete the collection or Bone Change techniques.

I use a variation of Drawing in Wet Sand for the long bones of the arms and legs. Two hands either side of the bone, pressure in and slide up the length of the bone which becomes straight and true after your passage. This is an interesting technique in that you cannot feel what shape you are evoking until you go back and feel it again. I can feel the change as it disturbs the bone configuration in front of my fingers, but not what it goes to since I am already by the change and moving on. I have to go back and feel what happened after it is done.

✿ Two Handed Torque - for the Cranium
✿ Upper Pry Bar - for balancing the zygomatic arch
✿ Lower Pry Bar - for balancing the back of the jaw
✿ Drawing in Wet Sand ~ for reshaping the eye sockets, balancing the zygomatic arch from the outside and lifting the frontal bone.
✿ Top of the Orbit
✿ Bottom of the Orbit
✿ Zygomatic Arch
✿ Frontal Bone
✿ Edge of the lower Mandible

# ❧✿ BONE ROLLING ✿❧

Bone Rolling is a collection of direct techniques for the remediation of the relative positions of bones through the medium of the deep fascia on the surface of the bone: the periosteum.

Positional bone problems like a displacement or rotation respond to Bone Rolling. Bone Rolling uses strong surrounding pressure and precisely placed shear to normalize bone to bone relationships.

In an accident, bones are often pushed to the extreme length of the ligaments - often with rotation. They get jammed and stuck in these extreme positions . It feels like the bones get stuck together at a single contact point somewhat like billiard balls. The contact point needs just the right angle and shearing pressure to unstick the "kiss" of the bones. Once the contact point is released, the bones rapidly move back to a better position. Sometimes they go an impressively long way - which inspired the term “Rolling".

Bone Rolling has five major elements; Prying, Grips, Surrounds, Waiting, and Following.

✿ Prying ~ I pry at the connections between the bones using whatever is convenient. Any fingers, lines of fingers, or hand edges that are available to work towards unsticking the bone to bone kiss by digging (chunking) and prying at the tissue webbed at the between the bones to take down the adhesions around the contact point. I take down short pieces of the webbing and then I let the whole structure go to reset and take another short piece - sometimes it looks like I am wiggling or rocking but I am taking down tissue again and again to accumulate length and work my way down to be able to apply steady shearling pressure between the deep bone to bone adhesion.

✿ Grips ~ Grips are placed where needed - where ever the bones are stuck and are the most resistant to pressure and motion. As in Structural Integration, the location and direction of the pressure is head on into the most resistance. Fingers and thumb side of the hand are usually squeezing together along with downward pressure and I often try adding a sideways drag or shear. I think of my hand as similar to a "gator grip" tool with the many pins to grip being similar to the function of the fingers and thumb.

✿ Surrounds ~ Pushing with shear between the bone kiss. After I get the bone free enough with prying, and I have applied the grips, I also push my hands together to apply another vector for strong general surrounding pressure. I am directing all of the pressure from the grips and the surround to shear through the bone to bone kiss. When I get it just right, the bones slowly separate like velcro and then suddenly the adhesion is free.
Surrounds can be made using fingers, inside first finger hand edges, outside little finger hand edges, and even with your forearms. Most surrounds are diffuse in sensation. Clients say they don't feel anything specific - just a general feeling of pressure that is not the least uncomfortable, in fact when it is well done, they like it and can relax and let go into the pressure.

✿ Waiting ~ I deliberately incorporate a time of waiting/stillness/listening into the work ~ I find that if you ask tissue where it wants to go, the tissues themselves will initiate exactly the right directional movement. This saves a lot of experimenting and hunting. Waiting without an agenda seems to be a necessary component. Without waiting/stillness, the change does not start from the client's side.

✿ Following ~ Once the tissues start reorganizing and going home, I keep the pressure coming along after them so I stay at about the same level of effort and pressure. I am Following the change in the tissue with the pressure so the tissue can continue to change and I can continue to follow. I am

directing shearing pressure through the bone to bone kiss to separate this adhesion between bones that should not be there. The change rate is slow at first. But when you do manage to shear all the way through the adhesion there is a noticeable release and the start of rapid movement. The bones may shift quite suddenly.

The sudden shift that can occur in the structure as the last of the adhesion separated concerned me. It felt a little like having the bottom drop out from under me. I worried that this kind of sudden give in the structure might surprise me and my already committed weight might drive the shift too far. I thought it possible that I might jam the bones up in another direction.

To protect my clients from this possibility, I started bracing the other side of their structure with my other hand. While doing this, I got better at feeling the moment of separation. Using pressure from both sides helped me to develop much better efficiency for the surrounds.

After the adhesion shears through, I keep my pressure Following and the structure moves home. This movement is so fast that I would have trouble keeping ahead of it to try to direct it. This rapid, big, and obvious movement of the structure going home inspired the word "Rolling".
There usually is a time when the rapid change rate slows down. If I keep going at this very slow rate I only get a little more change, so I stop working. If the bone needs more work, I find another angle.

When a big adhesion release is successful, I like to let everything go and keep my hands off of my client for a few moments. They get a break from my touch, a moment to integrate, take a deep breath, and feel any changes.

You get to rest your hands and arms and get ready for the next piece of work. I watch them while my hands are resting. I look to see what has happened

and I look for the next place to go.

I will work until I have a reasonable amount of change and then I integrate the change into the rest of the structure as well as I can.

Time in-between work is beneficial. There is a positive integration and good development between sessions with Bonework. People grow into the work and the bones remodel in the traditional slow medical sense. This growing into the work gives me new better structural base to stand on and get another big boost of remedial change with Bonework. Working over time at the pace of a few sessions once or twice year does a lot more good than I would have ever imagined.

Grip, Grip, Push, Wait, Then, Follow.
GGP-WTF

From Rosemary Pharo

# ❧✿ Techniques ✿❧

The Bone Rolling techniques are mostly organized in a list in spatial order from the toes up to the atlas/axis.

## ✿ Toes

For the right foot
Your client is lying on their back
Approach from below

Toes are similar to fingers... with two methods that work.

For my left hand, I use my thumb on the top and the first and maybe the middle finger from underneath the foot. My right hand reaches around the rest or the toes with the thumb on the top and the first and middle fingers on the bottom of the foot. Grip push wait and follow.

The second option for the right foot toes is approaching from top and bottom. My left hand is the bottom of the toe, probably using finger tips to push up into the joints and I use a thumb pad palm brace with the opposite hand. Grip, surround, wait then follow.

## ✿ Bunions

For the right side
Your client is lying on their back
Approach from below
Usually in a bunion the first toe metatarsal medial edge is rolled towards the

outside of the foot, carrying the big toe joint with it so the big toe turns towards the little toe side of the foot. I like to turn the metatarsal first and then deal with other problems. Easing out the rest of the metatarsals and the big toe beyond the metatarsal is good to do.
Place the right fingers and thumb under the big toe metatarsal between it and the navicular, and the left hand in a palm brace. Grip and push hands together. Use a similar grip for the distal end of the big toe metatarsal. The toe itself may require some easing using a toe surround.
Sometimes the second toe metatarsal is rolled the body midline in an opposite twist towards the first big toe metatarsal. This requires simultaneous opposing directional vectors to get them to move.

## ✿ Calcaneus Surround

For the right side
Recipient is lying on their back
Approach from below

The left hand thumb and first finger edge line up along the calcaneus articulation with a flat pinch grip. The thumb of the left hand is on the lateral side of the foot, the fingers are on the medial side. The right hand is a palm brace on the top of the foot. Grip and push your hands together in a surround, wait then follow. As you follow the rolling, try dragging a bit downward and pull backward to create space for the change.

## ✿ Talus Surround

For the right side
Your client is lying on their back
Approach from below

Place the thumb and first fingers edge of the left hand behind the talus in a kind of flat pinch grip, and right hand first finger edge is on the front of the talus. Grip and push to make a surround with both hands, wait then follow.

## ✿ Interosseous Rotation Lower Leg

This is tissue work for the interosseous membrane between the tibia and fibula. It integrates the leg between the ankle and the knee.

Your client is face down

Be ready before the movement starts, if you are late you cannot catch up. Have them slowly bring their toes towards their head and using your thumbs and hands pull the tissues apart on the back of the lower leg. Get ready then ask them to bring their toes and foot slowly down foot-ward. Bring the tissues together towards the midline of the lower leg with your hands. The motion I use feels like I am squeezing my hands closed. This encourages the function of rotation between the tibia and fibula that is used in walking and running. The interosseous membrane controls the amount of rotation and stops it in both directions.

## ✿ Fibula rolled behind the knee

For either side
Your client is lying on their back
Approach from below

Grip the fibular head with fingers of left hand and try prying at long edge with fingers of right hand up and down the fibula, when you get a solid connection along the edge of the fibula, both hands grip, push your hands together to create a surround, wait, then follow.

## ✿ Knee Surrounds

For either side
Your client is lying on their back
Approach from below

Reach around the patellar tendon and put pressure into the joint. Brace with the other hand from the back. Grip and surround by pushing your hands together, wait and follow.
Another angle is to reach into the back of the knee at the top of the tibia while bracing with a palm from the front. grip and push hands together to create the surround, wait then follow.

## ✿ Hip Wrench

For either side
Your client is lying on their side
Approach from below.

The femur can turn forward or back in a fall. If it is stuck in either position, grip the head of the femur with the little finger edge of your hands, apply the surrounding pressure, wait then follow. I like using my little finger edge because I can get enough distance to see what I am doing. Some times it is more convenient to use your elbows to set the femur upright.

## ✿ Sacrum / 5th Lumbar / Ileum Surround

For the right side
Your client is lying on their side - right side up
Approach from the side and above

The right hand first finger hand edge comes over the top of the ileum to lie along the inside of the sacral joint in the front The left hand is flat along sacral joint in back. Push both hands together, wait then follow.

This is useful for freeing the 5th or 4th lumbar transverse process from the ileum. It also can be used to settle a sacrum in any direction and to unhook an ileum from a vertebra further up the spine.

## ✿ Spinous Process Adhered in the Spinal Groove

You can feel these if you run your fingers - the index and middle finger - or the thumb and index finger - or both index fingers - down the spinal groove on each side of the spinous processes. There will be a bump in the groove where the spinous process of a vertebrae is stuck into the groove on one side. Have your recipient sitting, and have them roll forward over their knees (like for standard Rolfing back-work) while you trace down the grooves looking for bumps. To release it, slide your finger up under it and push up. Do this all the time they are rolling down. The spinous process will usually release fairly easily.

## ✿ Safety Pin

for the 12th Rib
The 12th rib can get pushed forward to end up deep to the transverse process of Lumbar 2 (usually) Loosen up the strings and then push the rib forward, slide it forward and around to lie on top of the transverse process. The motion is similar to undoing a safety pin, especially as to keeping the rib moving in the right direction without slipping off of the surface you are using to move it.

## ✿ Cog Wheeling - for the spine

Vertebrae can get stuck like clock cog wheels that interlock with each other - both rolling towards the middle and jamming. This situation occurs when something punches into the spine, or the person lands on something sticking up. In this situation, pulling one way jams the problem more. To get the cog wheel moving out, both vertebrae must be pulled out in opposite directions at the same time. To do both, I line my hands and arms up with the spine. With my curved fingers, backs of the hands facing each other, I drag and roll the spine in both directions. I undo the opposing forces of the locked cog wheel by pulling my hands apart and levering my elbows down while pulling. I can't really get a hold of anything solid to grip. I just pull at whatever tissues I can with dragging and levering. This can be done in back-work position as their sitting curved over helps the cog wheel let go.

## ✿ Wrist Surround

For either side
The recipient is lying on their back
Approach from below

Finger pinch all around wrist with both hands, one hand from the medial side and one hand from the lateral side of the wrist, grip, push hands together & roll.

Another version is to use the first finger edge of the left hand to go around the back of the wrist and a palm brace on the front of the wrist, grip, surround, wait and follow.

## ✿ Radius / Ulna / Humeral Surround

For the right side
Approach from below
Your client is lying on their back

Surround the radius with the fingers of your left hand and grip. With your right hand, come up from underneath onto the ulna with the thumb and middle fingers gripping into the inter-osseous space between the radius and ulna. Pull down and drag down with the left hand to see if the radius will roll down off the humerus - wait and follow.

## ✿ Elbow Surround ulnar / humeral surround

For the right side
Approach from below
Your client is lying on their back

Left hand on the bottom of the elbow with the fingers and thumb controlling the ulna. The right hand is placed opposite the left on the top of the ulna with the first and middle finger either side of the bone into the joint. Grip, surround, wait and follow.

## ✿ Interosseous Rotation lower arm

This is tissue work.

The Client is on their back with the hand palm up and off of the table so they can bring their wrist full range back in extension and forward in flexion.
Be in place and ready for the movement as you cannot catch up once they start to move. Ask them to slowly bring their hand into extension and pull tissue apart from the midline as they extend their hand back. Be ready again for the opposite movement and bring the tissues together as they go into flexion with their hand at the wrist. This balances the arm between the wrist and the elbow.

## ✿ Re-seating the arm in the socket

(I usually try this after I get the scapula into a better place)

For the right side
Approach from below
You client is lying on their side with the right side up

Place the thumbs into the armpit just like in two thumbs - but then move your thumbs little further apart and laterally. Place them close to parallel parallel to the humorous at an angle that gives you control of the arm. Surround the joint capsule so your pressure shears between the scapula and the humerus. Grip and push to form a surround, wait for the direction to become clear and then follow the humorous. I twist my hands so the thumbs lift up on the humorous and I can lift the humorous headward or pull it down if it is jammed up. I often roll it forwards and back to make sure it is loose.

## ✿ Two Thumbs in the Armpit - for scapula repositioning

For the right side
Approach from below
Your client is lying with the side to be worked on up -

Have the client help you get into position by raising their elbow up about half way to vertical. Take the left hand and put your left thumb into the arm pit pointing towards the surgical neck of the scapula. I slide my right thumb down my left thumb and find a place next to the left thumb at an angle to assist the turning of the scapula. Have your client relax their arm down against their body. Your arms should both be on top of their arm so they can rest against their side. Wrap the rest of your left hand backwards around the joint capsule.

The right hand frames the front of the joint capsule. The fingers from both hands should end up near each other, sometimes the fingers are overlapping depending on the relative sizes of the shoulder blade and hands. If necessary, I can also control the scapular angle with my left arm along the back. Grip with each of your hands and push in. Create a broad comfortable surrounding pressure. Wait then follow the resulting change with both thumbs, cranking the shoulder blade around. Usually the direction the shoulder will want to spin is up and back so the left hand thumb is the one to emphasize with the right thumb assisting when the angle becomes too great to continue.

## ✿ Separating the coracoid from the clavicle

For the right side
Approach from below
Your client is lying on their side with the side to be worked up

Surround the coracoid with fingers and thumb of the right hand in a gator grip and with the left catch the head-ward edge of the clavicle and pry bar and roll the clavicle up while gripping, pushing in and adding some drag to the forces on coracoid. Sometimes I use the left forearm to push and guide the scapula angle from behind. Wait then follow.

## ✿ Clavicle Rolling

For both sides of the body at once
Sit centered above
Your client is lying on their back

Medial end: With both hands - Pry your way in, then use your fingers to surround the medial end of the clavicle with the thumbs on the top. Pinch Grip the fingers and thumbs together and apply downward pressure for a surround

and sideways rolling shear, wait, then follow.

Lateral end: With both hands use your fingers to surround the lateral end of the clavicle, with the thumbs on the top. Pinch Grip fingers and thumbs together and apply downward pressure for a surround and sideways rolling shear, wait then follow.

✿ Bottle Opener - for the two or maybe three ribs… I use this for balancing in neck work at the end of the session.

For both sides of the body at once
Sit centered above
Your client is lying on their back

Make sure your table surface has enough soft depth to allow your wrists and hands to rotate. Usually a massage table top is too firm a surface. I would recommend at least three inches of foam rubber or rubber on top of a regular massage table so you have room to move instead of the weight of your client flattening your hand. If you have a regular massage table firm top you will be stopped from getting much help with this technique and you risk straining your wrist.

Set or wedge thumb web next to the neck surrounding the first rib near the spine. The fingers are pointing down the back palm up and the thumb reaches over the top of the first rib and nestles down along the front of the 1st and 2nd rib insertions. Flat pinch grip between the fingers and the thumb and push into them. Drop your wrist while the thumbs crank down and back, similar to the motion of the wrist when using a bottle opener. Wait for movement then follow.

## ✿ Atlas / Axis / Occiput Surround

For both sides of the neck at once
Your client is lying on their back
Sit centered above

The thumb edge is along the top and sides of the cervical transverse processes with thumbs angling down the spine. The first finger points down the spine with the palm up. The rest of the curled fingers line up reasonably symmetrically with the ring and little fingers at the occiput and atlas. Pressure is applied between the hands together like clapping - as well as each hand creating a flat pinch between the thumb and all the rest of the fingers together. I work the vertebrae with fingers from underneath, boosting up into back of neck a little like Zero Balance, but with more enthusiasm and greater expectations. The thumb edge on the top prevents pushing the vertebra too far forward. The odontoid process may be re-seated in any direction with this surround.

This is one of the more complex and most rewarding techniques.

## ✿ Two Handed Pelvic Lift

I have an old time Structural Integration table… 3/4 inch plywood with short 14 inch long pipestem legs. It is very solid and can take a lot more weight than a massage table. Don't try the two handed pelvic lift on a massage table, it is too much weight concentrated on the hinge and the cables could pop out of the wood.

Stand with one foot either side of the recipient's body. I ask them to just turn their tail up and lift up enough for me to get my hands under them. The first finger is at the sacrum/5th lumbar junction and the little finger is down the

sacrum towards the tail. The thumbs are on the side of the pelvis and they can control each of the pelvic wings. Pushing your hands together with palm pressure helps shift the pieces. You can use your knees to shift their legs if you need to. You may gimbal or tip the sacrum to any angle.

## ✿ Back Work (Back Stripes)

Your client is sitting off the end of the table or on a bench at the end of the table. I get up on the table so I can use my weight. I ask them to look at the horizon with their eyes. This has the tendency to level the skull. I ask them to roll over slowly with no pulling down or pushing back. The skull relaxes first to hanging and stays hanging as they go over. The spine should be hanging as well. I ask for them to let their weight go into their feet as they roll over so they have somewhere to go and so they use their whole body.

I start next to the spine in the spinal groove and go off the tail.
I move out a little to the margin of the longisimus dorsai and go along the sacral crests. I move out to go along the scapula on top of the spine of the scapula and the super spinatis towards the midline. As I get to the inner margin of the scapula, I turn and go down the inner edge of the scapula to the outside edge of the sacral joint.

The next one starts wide and is under the spine of the scapula. At the scapular margin I turn to go down before the edge and stay wide through the iliac fossa to end up going onto the ischial tuberosity.

To get to the latissimus, I ask them to bring their arms out so I can hook the edge of the latissimus dorsal and stay wide to go outside of the sacrum through the iliac fossa just behind the head of the femur and off the ischial tuberosity.

I work my way back in towards the middle with three or four more stripes ending in the spinal groove again. If there is any particularly stuck spot that does not release with the stripes, I cross fiber it until it lets go and then smooth it out with more vertical work.

*~ Disclaimer ~*

The purpose of this manual is to provide information for hands-on therapists on the subject of Scars. This manual does not offer medical advice to the reader and is not intended as a replacement for appropriate healthcare and treatment. For such advice, readers should consult a licensed physician.

This manual is intended for use with a hands-on training workshop.

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# ❧✿ The Boy from Bolinas ✿❧

a story by

## Sharon Wheeler

In the summer of 1972 I was living with Hector Prestera and his two kids in a house four miles up a dirt road on the mountain above Esalen. We became close friends with a family from Bolinas, California. They lived in a small house near the ocean that somehow fit them and all six children and the astonishing ensuing chaos.

They were fine friends, brilliant and singular. We shared many of our interests with them in those years. We had more fun playing with George Simon and his partner Christine O'Reilly and their Community for Conscious Evolution. We met about every two weeks - sometimes in Pacifica at George's and sometimes in Half Moon Bay near Chris.

They were our house guests in Big Sur. We were on staff at Esalen and could extend it's hospitality to them of endless baths, great food, and always something new and interesting happening. We especially introduced them to Structural Integration. After I had finished working on the mom of the family, she said to me that she had just the one for me to start on out of her six kids; her youngest- the four year old- who had a "gimpy" left leg she wanted some help with. The boy's leg trouble had started with an accident he had when he was two and a half years old. A big pack of his older siblings and their neighborhood friends were running and riding bicycles through the hummocky

grass that grows on the California coast near the ocean. He was too little to ride a bicycle, so he was running along with them. One of the children on a bike hit a grassy hummock with the front bike tire, and the bike swerved sideways and then the rider of the bike hauled the handlebars back up to save his balance. As he did so, the bike's tire climbed up this little one's left leg. When the tire got about half way up his lower leg, both of the lower leg bones, the fibula and the tibia, broke inwards, towards the mid-line.

At the doctor's office, the little boy was screaming, crying, and scared. Mom told me she thought the doctor was in a big hurry to get them out the door because she did not control her son and make him stop crying. The doctor put a cast on without straightening the bones out and sent the boy and his mom home. When the cast came off 6 weeks later, the leg had healed about 35 degrees off true. Noticing this very crooked leg, she asked the doctor what to do about it... and he offered to re-break it for her so it could heal again straighter. Her reply his offer was "Over my dead body."

Two years after the original break, this four and a half year boy had a crooked left leg about 35 degrees off true. When he ran, it looped around looking a little bit like a flipper. When I saw it I said to his mom that I would be a tissue worker and that was a bone problem and that I did not think I would be able to help. She said to me "You'll think of something." I answered her with a sarcastic "Yeah. Right. Sure I'll think of something. I don't think so! However, it won't hurt to give him ten sessions."

In order to work with him, I had mother and son form a communication relay team. If I was bothering him too much, he could tell his mom and she would tell me, and I could adjust my pressure. I had mom lay down on the table with him to stay close and be available for him for comfort and companionship, as well as the occasional shameless bribe of a cookie, water or juice or maybe even a story.

l worked along pretty well in this fashion, doing all right with the first three sessions of the ten series… and then it arrived: the fourth session in which I was to create a mid-line on the inside line of his legs. I was going to have to go right through the area of the break. I worried about getting him through his fourth session from the moment I first saw his crooked leg. I had visions of him screaming, and his mom protecting him - by tackling me to the ground swooping him up and leaving, never to talk to me again. One good thing about that forth session: it arrives reasonably quickly.

One general strategy of Dr. Rolf's was to start the session's work as far away as possible from the worst trouble to be addressed in that session. She thought that taking strain out of the better side would create some length or slack and help the work on the second side. It may also help the discomfort level of the recipient for the second side and the very least, the recipient will know what to expect - which eliminates some of the apprehension of the unknown for the most troubled side. So this is what I decided to do. Work on his right leg which had never been broken first, then work on his damaged crooked left leg second.

It was a very warm sunny day and by the time I was done with the first leg, both the boy and his mom were both sound asleep side by side on the table. I woke him up and got him to turn him over, but very soon after I started working on his second side he went back to sleep. I got all the traditional forth hour tissue work done on his left leg while he slept next to his sleeping mom.

Rather than wake him up when I was finished, I decided to look and see what else I could do for him while I had what Dr. Rolf would call my golden opportunity for doing him some good. I thought I saw that the left leg looked two or three degrees straighter and I wondered if Structural Integration could have actually influenced the straightness of the bone. I decided to see if I could sense anything in the bone.

I walked over and stood next to the table. I put the palm of my right hand on top of the high point of the break on his left leg and my left hand on top of the right. Then I leaned my weight into his leg bones, slowly angling my pressure this way and that, then holding still and and listening for any hint of change. I was pushing into the bone and holding still pressure deep in one spot for much longer than I would have if either the boy or his mom had been awake. Most Structural Integration moves through an area and does not linger in one spot for a long time. But in this instance I must have held steady quiet pressure for between 45 seconds to a minute when I felt something big suddenly start to shift and change. Being well trained, I jumped on the change and I followed the direction of the release - it felt a bit like surfing. As I followed the change, that crooked little leg went from thirty five degrees off true to about four degrees off true in about seven to eight seconds. As the leg neared straight, the change rate slowed down and then seemed to finish up - stop and be done. I took my hands off and as I stepped back to sit down and look at what had happened I felt my legs go a bit wobbly and give out - probably from the shock. I had to reach behind me to catch the bench and lift myself up on to it to sit. I just sat there and looked at that boy's nearly straight leg for a long time. I remember feeling stunned. I then concluded that of course I was sleeping too and I proceeded to pinch and slap myself. If I had had a pin I would have stuck it in myself because quite impossibly, it seemed that I was awake.

The awful thought occurred to me that maybe his leg was now straight because I had just broken it. I went over and wiggled his leg from both sides of the old break to see if the two sides would move independently. It appeared to still be in one solid piece. There was also the fact that he was still asleep and had slept through the whole event, so it did not seem likely that it was broken. I decided to try to see about that last 4 degrees so I leaned into his left leg again. I think it went a tiny bit straighter- maybe a half a degree, but nothing at all like what had just happened. It seemed to be “done”. And what

was I thinking? it had just straightened out a good 30 degrees. I probably should not quibble about that last few degrees. I should be happy to call it a session.

Then I had the thought that I might have destabilized and weakened his leg and it probably would fold up and collapse under him when he put his weight on it. So I gathered up all my stuff and found my car keys because most likely we were all going to go to the emergency room.

I woke mom up first, gave her a glass of water and we talked for about fifteen minutes. Then she woke her son up. I made sure that I was ready to catch him when he stood up. But he was too quick for me. He scooted to the far end of the table, stood up and then he jumped as high as he could off the table up into the air and land on the floor. If his leg was going to break, it had it's chance right then and there. He leaped all around the room with abandon - jumping on the table and off the table over and over, even crawling under the table. He ran around and around with happy shrieks and bounding energy.

It was a pretty thorough test drive for his new left leg. He wound down after about ten minutes and started to get his shorts on to leave. I asked him to wait to get dressed for just a moment so he could show off his new legs for his mom. He kind of snapped to attention so she could admire him.

I asked his mom as casually as I could "Would you take a look at that left leg of his and tell me what you think?" She looked him over for a moment and what she said was: "Oh. That's better. Thank you." Like that was what she had expected me to do all along. What else was there to say? I said, "You're welcome". The rest of this little boy's ten sessions went reasonably uneventfully. I did try to straighten the leg a bit more in later sessions, pushing and holding from different angles. but I didn't get much more of anything in any of the times I tried. It did stay as straight as he grew up.

I immediately went to Dr. Rolf and told her the story, and I told all my medically inclined friends including Hector, John Lilly, and Fritz Smith of Zero Balance. I told all my Rolfer friends asking if anyone had ever heard of anything like this event. Dr. Rolf just shook her head and said she had no explanation and no one else I spoke to had ever any seen anything like this or had any explanation for what had happened except for the possibility that the young age of the boy was a factor in the straightening of those lower leg bones. "Strange things happen with small children" was the phrase I remember hearing.

Someone said maybe it had to do with the epiphyseal growth plates… but those are at the ends of the bones not in the middle of the lower leg bones where this change had happened.

I was willing to write this episode off as a singular mystery related to the boy's age except that since then I have found many other fascinating examples of Change in the bone in adults. And I have been able to apply the Bone Change techniques with good results to most of the bones in the body. I have also been able to successfully teach it to others. This suggests that Bone Change might be a property of bones.