

The background of the cover is a dense collection of anatomical sketches of hands and fingers, drawn in a dark ink on a light-colored paper. The sketches are interspersed with handwritten notes in a cursive script, which appears to be a historical or scientific language. The sketches show various views of the hand, including the palm, the back, and the fingers, with detailed lines indicating muscles, tendons, and bones. The overall style is that of a scientific or medical manuscript from the 18th or 19th century.

ROBERT MASTERS

PSYCHOPHYSICAL  
METHOD  
EXERCISES

VOLUME IV



A DRAGON BOOK

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Published by  
KONTRAKUNDABUFFER CORP.  
P.O. Box 3300  
Pomona, N.Y. 10970

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A DRAGON BOOK

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Manufactured in the United States of America

Second printing

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FOREWORD

These volumes of Psychophysical Method exercises are being published as teaching and training manuals to be used by teachers and researchers experienced in that area of the author's work. The exercises are transcripts of sessions taught by him to his students and their use presupposes some knowledge of the work--timing, repetitions of movements, quality of awareness, etc. Without such a background of knowledge the exercises cannot be effectively done, much less taught.

Nevertheless it is just realistic to acknowledge that these exercises are going to be used by persons who have not had what should be the requisite amount of first-hand training. An absolutely minimal background, however, would need to include careful study of the book, LISTENING TO THE BODY, co-authored by Robert Masters and Jean Houston, and further careful study and practice of audiotaped Psychophysical Method exercises. Thus anyone wishing to acquire these volumes must acquire also, at the same time, a copy of LISTENING TO THE BODY and at least half a dozen of the exercise tapes selected to cover various aspects of the work.

The decision to make the volumes more generally available was made reluctantly and for two main reasons: first, as mentioned, there is no adequate way to limit their acquisition to trained teachers exclusively; second, it is of great importance that the work reach a wide audience. The risk that the work will sometimes be diluted and otherwise distorted is fully recognized and has been weighed carefully.

It should also be said that it is possible for largely self-directed students to achieve mastery of the work. Much self-discipline, rigorous and lengthy practice and various personal qualities and perhaps gifts are required for such achievement, but it has been done by some and will be done by others. The author will always be most pleased to certify as a teacher any individual who, by her or his own efforts, achieves a proficiency equal to that demanded of those who participate in teacher training programs.

Finally, acknowledgement is made to those who have been of particular importance in shaping the philosophy, psychology, and other knowledge and techniques of Psychophysical Method. These range from disciplines stressing "mindfulness" and "awareness"--Egyptian, Buddhist, Taoist--on to such modern and contemporary teachers as G. I. Gurdjieff, F. Matthias Alexander, Milton Erickson and Moshe Feldenkrais. Those sources should be explored by any serious student.

There is also a Psychophysical Method one-on-one "table work" that can only be learned directly from a teacher. That work, however, must always be preceded by re-educational "work on oneself," including mastery of the exercises.

Robert Masters, Ph.D.  
Pomona, N.Y., 1983

## 1) LEARNING TRANSFER AND SENSORY DISCRIMINATION \*

Stand with your eyes closed, and we will do a little experiment as a preliminary to the next exercise.

Direct your attention to your brain space. Look up into that space with your eyes closed. You can make circles in it with your eyes. Image making circles as you actually move your eyes. Go up into the top of that space.

Focus your awareness inside the skull where the brain is until you feel you begin to sense something up there. Keep your attention focused up there. Think about making circles with your eyes, circles that begin around eye level, and then go up towards the top of the head so that you circle over every part of it. Also make circles at angles. Breathe freely.

Try to bring yourself to a condition where it seems to you that you can feel your brain. Doing that, see if you can get any sense of the two sides of it. Think about what it looks like. Then, when you feel that space where the brain is, shift your attention just to the left side.

Focus on the left hemisphere and bring that into a much sharper sensing than the right side. Use your eyes to do it, and the focus of your consciousness to do it, until you are much more aware of the space on the left side than on the right. Then maintain that awareness on the left side, the area of the left hemisphere.

Slide your left foot back and forth in front of you. Slide it forward and bring it back. Keep your focus up there on the left side of the brain. Then slide your right foot back and forth. See whether one foot moves more easily than the other. Try it again with the left foot. Be sure that you remain focused on the left side of the brain. Then move the right foot again.

Now shift your awareness to the right hemisphere. Allow yourself plenty of time so that the image and sensation of the left side fades and is replaced by a much clearer sensation of the right side.

Maintain the focus on the right side. Slide your right foot forward and back, and then your left foot. Maintain the focus on your right side. See if one foot moves more easily than the other. Try doing that, switching them back and forth, a few times. Switch back and forth with the foot, not with the focus on the brain. The focus remains on the right side of the brain.

See whether the foot moves more easily on the side opposite the side of the brain that you are focusing on, and try to understand why. With most people the foot will move more easily on the side that they are not focused on. Try to understand why that is. See what you are doing with your body that might make one side move more freely. Is it enough of an explanation

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\* Teaching time: about 90 minutes

that movement occurs on the side opposite the hemisphere, or does it matter also that you shift your weight on the side that you are concentrating on so that that inhibits the movement? See what else you can discover for yourself.

Then try still concentrating on the right side of the brain. Breathe into it to achieve a clearer and clearer focus. When it is very, very clear speak a few words just loud enough for you to hear.

Now shift the focus to the left hemisphere, and maintain and increase it until the left hemisphere is definitely more clearly in your awareness. Then say a few more words. See if you notice any difference in the speaking when the awareness is focused on the left hemisphere and on the right. Then sit down.

It is a subtle discrimination, but generally you will find that right-handed people will find it actually easier to speak when they are focused on the left hemisphere and left-handed people when they are focused on the right hemisphere. With some people it is much more pronounced than with others, depending partly on how well they are able to concentrate their attention as directed. There also seem to be other factors, but this has not yet been investigated. In fact, I do not think anybody else knows about it. It is part of some new experimental work that I have been doing.

Now, as our main exercise, we are going to do a number of movements on one side and then transfer over to the left side what the right side has learned. We could also do different movements with the left side and create a clarity of body image on the left side that is greater than the one on the right. Anyway, it would be interesting to also do a series of movements on the left side and then do imaginary ones on the right, trying at another time to discover for yourself whether the images affect the right or left side more strongly in your case. Which side learns better with images? Which side requires the objective movements? By making a set of distinctions like that, you increase your powers of self-observation and become better able to do the work in general. Now, however, we will only work with objective movements on the right side.

Put your feet on the floor in front of you. Let your right arm hang at your side and just let it swing to and fro. Try to sit over enough to the right side so that you do not make any contact of the hand with the chair. Sense the movement in the shoulder joint. Sense the contact that the inside of the arm makes with the rib cage. Sense the hand and elbow moving through space. Bring the whole arm into your awareness as fully as possible. Then just let it hang there at your side.

Make a light fist with the right hand. Let it hang there and make a fist. Then rotate the shoulder in and bring it back. Continue doing that very lightly with the fist, but not a tight fist. Be aware when you rotate the shoulder of where the palm of the hand faces.

Then, instead of rotating the shoulder in, rotate it out and back.



Again, be aware what direction the palm of the hand is pointing in at the end of the movement. The arm continues to hang at your side. See if, by taking the shoulder back a little farther, you can change the way that the palm points so that it points a little further to the side or to the rear. Then rotate the shoulder forward again. See where the fist goes. Then rotate it forward and in and out and back in one continuous movement. Sense clearly what happens in the shoulders. Then put your right hand on your right thigh and rest.

Close your eyes and examine your body image. Compare your awareness of your right shoulder with your awareness of your left shoulder. Then examine the entire arm and hand. Compare your awareness of your hand and arm on the right side to the left. Also notice which eye you sense more clearly and whether your head is turned somewhat to the right. If you feel your head is turned to the right, put it in the center. If you do not know, open your eyes and see whether you are looking to the right and discover in that way whether the head is turned.

Now slide your right hand down your right leg. Go down to your foot by bending and then come back. Bend at the waist. Do it without bending the elbow. Sense what happens in your shoulder as you do that. Extend your right leg and go down. Pay attention to the feeling in the palm of the right hand and in the right shoulder.

Then sit up. Once again, with the palms on the tops of the thighs, sense the two sides. See if now, not just the arm and hand and eye are more clearly in the body image on the right side, but you can sense the whole side. It may feel as if you are almost divided right down the middle now so that you sense the right side distinctly while the left is vague, a blur, by comparison.

Then just rap with your right heel lightly. Breathe easily as you do that. At the same time, rap with the heel of your hand on your knee. Then do it so that the heel of the foot goes down as the heel of the hand goes up (so that they move in opposite directions.) Try to make that a very simple, coordinated movement. Breathe freely. See how quickly and lightly you can do it.

Then raise the ball of the foot and the front part of the hand. One is on the floor and one is on the thigh. Breathe freely. Then alternate them so that the fingers go down as the toes go up and the fingers go up as the toes go down. Do not hold your breath. Then make that movement light and quick. See how fast you can do it without getting into a state that feels rushed or compulsive, or that causes you to tense up.

For a moment, go so quickly that you can observe in yourself the feeling of tension that comes with doing more than you are easily able to do. It then begins to feel compulsive. You observe it before the movement starts deteriorating and your mental and emotional state with it. Then go back and find the place where you can eliminate all of that and yet move quickly and easily. When you make that kind of observation in your everyday life, it can be useful. Then stop.

Close your eyes and do another body scan. Notice if the work that you have done also has brought the right hemisphere, regardless of which hand is the dominant one, into the body image much more than the left one. You can sense now the right side of the brain better than the left, even though the left side of the brain may be the one that is most involved in the movement. In that sense, the body image may have overridden everything else.

Now just blink many times with the right eye so it opens and closes and you have a clear sensation of blinking. See, for a moment, if you are aware of what you do with your left eye as you blink the right one. Keep your eyes open as you do that, because it is much easier to tell what you are doing then. You should observe that you are blinking your left eye also, but not as much, since it continues to see while the other one cuts off the vision. It may feel to you, until you become aware of that, as if you are only blinking with the right eye. In fact, you will find them always moving together. Then stop and rest a minute.

Scan your body image again. See now how you relate to the external world on the two sides. See if your awareness of the floor is greater on the right side, if your awareness of the chair is greater on the right side. Some of you may even discover that your hearing is better on the right side. Pay close attention to whether more sound comes through the right ear. Also pay attention to your breathing. If the nostrils are not clogged, see whether you are breathing now more through the right side of the nose than through the left. Then put the right finger alongside the left nostril and close it. With your eyes closed, breathe through the right nostril. Direct the breath up into the right side of the head and down along the right side of the body. It is as if you can breathe in through the bottom of the right foot and out through the top of the head on the right side. Then stop.

Again scan the body. Sense your right ear. Then, a few times, extend the leg as much as you easily can and go down the right leg with your hand. Go along the top and the right side and the left side and on the back side. Try to sense every part of your right leg with your right hand. Alternate between paying attention to the sensations in the leg and the sensations in the hand. Do a number of movements of the leg and then do a number where you focus on the sensations in the hand. With practice, you will begin to find it rather easy to shift back and forth so that you can determine whether you sense the one or the other, and this is true also in dealing with inanimate objects. Are you focusing more on the object with your tactile sense or more on the part of your body that is touching the object?

Then, when you feel that you can go back and forth between sensing the leg and sensing the hand, see if you can arrive at a balance where you are sensing the hand and the leg equally, where one has no supremacy over the other. One of the purposes of this exercise is to teach you to make finer and finer discriminations so that your senses will be re-educated to tell you what really is happening, and to open up experiential options with your nervous system that it does not otherwise exercise.

Now try doing it just for a moment with the chair. Try it with the chair between your legs. Go back and forth between learning about the chair and paying attention to what your hand is experiencing. Then try to achieve a balance where you are not emphasizing one experience over the other. See if that is easier or more difficult than when it is your own body you are dealing with in sensing two parts of it. Does it make any difference if the movement is quick or slow? Then stop.

Put your right foot out in front of you and make a few circles with it. Leave the ankle on the floor. Rotate it one way and then the other. Sense the ankle, foot and knee. Hold the right knee in your hand as you do it. Also pay attention to what is happening in the hip joint on the right side. Note the contact of the underside of your leg and buttocks with the chair on the right side; the movement in your shoulder. Do you look right? See if you can feel the direction of your consciousness towards the right side as you do that.

There is almost a tangible sensation of the direction of your consciousness towards the right side as you do that, a pull to the right. Paying attention is a physical process as well as a mental one. See if you get any sense of that. Then without holding your breath, try to eliminate the movement in the hip and knee as completely as possible. Then just rotate the ankle. Go in one direction and then in the other. Then let the right foot stand alongside the left one.

Close your eyes once more and sense the two sides. Try to observe all the ways in which your orientation is now to the right. Not only is the right side much more fully in your consciousness, but the body is somewhat drawn to the right. See if you can feel that in the interaction of the consciousness with the body, the body wants to be where the consciousness is and tends in that direction throughout the organism now. You may be able to note it best in the shoulders or in the position of the head. With some people, the head not only tends to turn to the right in the way it would if looking right, but it also tilts a little to the right. The right shoulder may feel lower and the rib cage shorter on the right side. See what your experience is.

Now try to imagine what your right foot looks like with your eyes closed. Then try to imagine what the left foot looks like. See if there is a certain strain involved in that, that it is not easy to bring the consciousness over to the left side. You can feel that it has to pull from the right to the left. Then stop.

Get up and walk around the room. Pay attention to the two sides as you walk. Then come back and sit down.

Now we will change it to some extent, or altogether, by just doing some briefer image work on the left side. Then sometime in the coming week you should experiment and do physical things on the left side, and see whether you think you can transfer it with equal facility to the right side or whether the transfers are equally easy from one side to the other. Different

people will discover different things. It may have to do with something other than hemispheric dominance. If you can remember the same exercise, do it. However, do some fairly complex and different movements that include the different kinds of sensing. For instance, try to find the place where your behavior stops being free and starts being compulsive and stressful. As you increase the rate of the movement, remember that you can find a place where it starts to get stressful and you notice the muscles tense. As you continue with it, it will also get emotionally and mentally stressful. So you try to find the point where your performance is optimal with regard to speed but do not cross the line into the other. Be aware of that line. Try to find similar lines in other kinds of activities.

Now close your eyes. Sense the two sides. See if already, partly in anticipation of work on the left side, the left side is not as out of it as it was just a moment ago. Particularly sense the left hand. Let the hands rest on the knees or on the thighs close to the knees. Just imagine now sliding the left hand up and down along the left leg. Just imagine it. Do it many times. Also slide it on up to your hip and take it down.

Then imagine extending the left leg and, without bending the elbow, take the hand down as far as it will go and bring it back up. Slide it along the left leg.

Then imagine rapping with the left heel. At the same time, rap with the heel of the left hand. Breathe freely as you do it. As you continue to breathe freely, imagine that as the heel of the foot goes down the heel of the hand goes up. As the heel of the foot goes up, the heel of the hand goes down. Then move them alternately.

Then, instead of rapping with the heels of the hand and the foot, rap with the toes alone for a moment, and then just with the fingers. Then imagine rapping with both together and see if that makes it easier. Then, breathing freely, try imagining that as the toes go down the fingers come up and as the fingers go down the toes come up.

Now actually, physically, extend your left leg and let your left arm hang at your side. Imagine bending the leg so that the foot comes back to where it is standing on the floor. At the same time, bend the arm at the elbow so that your hand comes up towards your face. In other words, you are imagining bending both the knee and the elbow at the same time, drawing the foot and the hand closer to the body and taking them away again. If you have trouble with it, start by imagining one until that is clear. Then imagine the other one for awhile. Then bring them both together.

Then just imagine swinging the arm back and forth. Sense the shoulder. What is the sensation in the shoulder as the arm swings back and forth? Also, what is the sensation in the shoulder if you make circles with the hand-- that is, with the whole arm, like you were stirring something, keeping the elbow straight. Circle one way with your arm for awhile and then circle the other way. What does the shoulder feel? What does the hand feel?

Then, lightly, actually make a fist with the left hand. Let it hang there at your side. Imagine rotating the shoulder in and then rotating it back and out. Where does the fist go? In your imagination, bring your shoulder as far in and forward as you can and as far back and out as you can. Let your left foot stand on its bottom. As you continue to imagine rotating the shoulder forward and back, also imagine picking up the foot and putting it down. Quickly pick it up and put it down. What does the hip joint feel? What does the foot feel? Pick it up a couple of inches off the ground and put it right back down. Do it only in the imagination. Now stop.

Sense your body. Sense the left hand, the left foot, the left shoulder, the left eye. If the nose is not stopped up, see whether now the breathing seems to come through the left nostril.

Now, as you breathe, imagine that you are breathing through the bottom of the left foot and up through the top of the head through the left side. The breath goes up and down through the left side, going in and out through the bottom of the foot and through the top of the head on the left side. Really take the breath all the way up through the top of the head on the left side. Image doing it. Then see if, by doing that, the left side of the brain seems to come clearly into focus. See if you can sense that your eyes are now feeling as if they are looking up and to the left towards that space.

Then stop and sense the two sides. See if now you can feel the consciousness being pulled to the left side and not as strongly as it was to the right side before. It is a definite pull in that direction, and the body tends left.

Examine your body image now and compare the two sides. You may find that now you have a mix. Some things are clearer on one side and some are clearer on the other side, or you may have shifted over to the left side or the right side might still be dominant. When you do it on your own, continue until the left side has achieved a greater clarity in the body image without exception. See how long it takes you to do that.

Now get up and walk around. Notice what you feel. For a minute or two try balancing the body image by noticing where one side seems clearer and then directing your attention to that area on the other side. That is another little exercise you can image. You can scan it and then balance it. Direct the awareness to any part that is less clear on one side than the other. Then just sit down.

This exercise is called Learning Transfer and Sensory Discrimination. The first part was just a little experiment to demonstrate to you that you can have direct knowledge of hemispheric functions. That being so, it is a wonder that people did not discover it long ago. In fact, there are accounts by Darwin that indicate that people have had some awareness like that. They just did not relate it to the brain in exactly the same way that has been done in the last twenty years or so. If people sensed better,

scientific discovery would have been made much earlier. Of course, some knowledge about hemispheric functions dates back to the 19th century.

## 2) SEGMENTS OF THE SPINE \*

Now, lie on your back and do the body scanning. Beginning with the feet, examine the body image. Note where it is faint; where it is stronger; where it is easy to sense; where you cannot sense anything. Compare the feelings in the two sides. Do they lie the same or do they lie differently? Does one side feel longer? See if that relates to the awareness of the surface of the body, as you do the scanning. Also, scan for symmetry. Generally, a well-organized body will be a symmetrical one, if it has not been damaged so that becomes impossible. The joints will rotate similarly. The hips and the shoulders will lie in the middle, the toes and fingers will have similar spaces between them, and the hands will lie at the same distance from the body.

The work we are now going to do is a little different from most of the exercises. We are going to examine many of the ways that the different segments of the spine can be moved. To know how to move the spine in a great many ways is very valuable. It will allow you to release a large part of muscular tension in the back and to free yourself of back pain--whether it is lower back, upper back, neck or wherever it may be. It is also extremely important to have a spine that is supple, with vertebrae that are differentiated. The brain and the nervous system do not have a chance to function optimally if the spine is distorted.

It is very easy to work on the cervical spine (the spine in the neck) and the lumbar spine (the lower spine.) It is much more difficult to figure out ways to move the thoracic spine (that part in the rib cage,) and you will find the same thing is true when you are working on the body with your hands. Until you have learned the knack of it, it is very hard to find ways to get the thoracic spine to move with anything like the same kind of freedom that the cervical and lumbar spine ordinarily move with. For the great majority, when lying on their backs, it is virtually impossible for them to move the thoracic spine without moving the lumbar spine. If you know where those segments of the spine are, you can try it. See if you can find a way to do it. Do not move the neck or the lower spine, yet try to move the thoracic spine in a way that is pleasant.

Now bend your legs so that the feet are standing. Take the legs from side to side--left to right. See if they go over all the way. Observe how far they go, always without forcing. Do it so one knee slides down the other leg and up it again as you go. It means you have to spread your feet some distance from each other. Now, move the legs from side to side, keeping them together as a unit. Begin to allow the head to move with the legs. Observe the effect of the head going in the same direction as the legs. Then oppose the head movement to the leg movement. Now, put your legs down and rest.

Observe how the lower spine lies in relation to the table. As you do that, roll your head left to right. If you do not require anything under your head, do not use it, because it will interfere with the movement.

Now, stop with your head in the middle. Draw your legs back toward you, so that the tops of the thighs approach the rib cage. Do not take hold of the knees with the hands. Being careful that you do not overdo it, take the feet from left to right (the lower legs remain parallel to the floor or approximately so.) Keeping the legs as close back to your rib cage as possible, swivel your bottom from left to right. Be sure you do not do it too vigorously or you may damage your spine. Now, swivel your bottom. Do not just go from left to right toward the floor. Put the left foot on top of the right when you do it. The movement should be mainly in the lower spine. You should feel it in the lower spine. Swivel, do not roll, from side to side. The pelvis swivels on the floor. Reverse the position of the feet. Let one ankle lie on top of the other ankle. Now, put your feet down and rest them.

Leave the feet standing. Sense the small of the back in relation to the floor. Raise your pelvis enough so that you can rap lightly with the small of the back on the floor. Continue to do that. Put the back down flat and pick up the pelvis. Put the back down flat on the floor and pick it up again. Put it down. Then, when you can feel that the pelvis is really down and the lumbar spine is really down on the mat as close as you can get it, try extending your legs while leaving the pelvis there. The most effective way to do it, is to place the small of the back on the floor. Then flex your ankles, and gradually extend the legs, while breathing out through the mouth. Make a kind of hissing sound. When the legs are extended, let the ankles go (you just slide the heels along the floor to extend the legs.)

Again, let the feet stand. Put the pelvis and the small of the back on the floor. Then, without lifting your feet off the floor, you flex the ankles, extend the legs, and breathe out. Try to sense clearly what happens in the spine, that you elevate it as little as possible. You just slide the heels along. If you pick the feet up at all, once the back is on the floor, you will arch your spine. You do not walk the feet along, you just slide them, both feet together. Try to sense to what extent you succeeded. If you take your hands and try to measure, that movement of itself will arch the spine, and you will not really know what you have done. As soon as you bend your elbows and put your hands there, you have already lost some of the extension of the spine that you have worked to achieve. It is not necessary to measure. When the body image is sufficiently intact, you will know where your spine is in relation to your table.

Now, draw your legs back toward your rib cage again, and feel what it is to have the lumbar spine in contact with the floor. In that position, everybody should be able to feel it. If you cannot bring your legs back enough, use your hands. Let your hands rest on your knees, but do not pull the joints in a way that is painful. Swivel the bottom from side to side, so the feet go left, then right. Do not roll. You are less likely, with the hands on the knees, to do it vigorously enough to hurt the lower back. If you take the hands away and swing, or swivel too vigorously from side to side, the spine can be injured. That part of the body is so big, powerful and heavy that, if you used it to its full power, the spine in no



way could resist the force that the lower body would apply to it. Swivel. Now, when your spine is really flat on the floor, put your feet down. Stand them. If you just suddenly extend, you lose it. Feel for a little while what it is like to have the spine flat on the floor. Then try again, by flexing the ankles and breathing out through the mouth, to slide the legs down slowly. Leave the spine down as much as you can. If the spine comes up, at least feel that moment when it comes up, very clearly. If you sense when it happens, that is already helpful, and will eventually eliminate the tendency. Now, rest and observe how you lie.

Next, bend the legs so they stand together, and take them side to side again, left and right. Let the lower back be free, and let the head turn with the movement. If the legs go all the way, let them go quickly and nimbly. Feel the movement of the spine in the lower back. A few times, oppose the head movement to the leg movement. Keep the ankles and knees together. Now, stop for just a minute. Let the feet stand, and spread them apart a little bit--about six or eight inches between the feet. Let only the right leg go over towards the floor. The left one remains standing. Then, bring the right one up, and let the left one go over towards the floor. Do that several times. Now, put the legs down and rest.

Put your left hand on your forehead. Use the hand to turn the head from side to side. Be sure that you do not do anything with the muscles of the neck or upper back, except what is required to use the arm. Do not turn the head yourself. The hand turns the head. Next, let the palm rest on the forehead. Then turn the head from side to side. Let the palm just ride along on the forehead. Be sure you do not use the arms to turn the head. Repeat this movement several times, then put the left arm down.

Now, do it with the right. First, use the hand to turn the head. Do that a number of times, making sure that you are turning your head side to side. The hand is doing it. Take it as far as it will go. Then use the head to give the hand a ride, as it will. Let the passive hand ride along on the turn of your head. Feel what is happening in your neck--the jaw is loose, the tongue is loose and the breathing is free. Always emphasize the quality of the movement, including the sensing. Be alert, so you do not begin to do it compulsively. Do not stop focusing on the sensations, particularly in this case the spine, but also everything else that is involved in the movement. Be aware that the breathing is never inhibited. Stop.

Put the arm down. By pushing and pulling with your heels on the floor, rock your body up and down so that the spine moves, especially the cervical spine. When you push, your chin moves up and away from your chest. When you pull, your chin moves down. You have to bend the legs a little to do it in the beginning. Find a position that lets the neck move most freely. You can do it by moving the knees up and down, but it is not necessary. The movement can just be with the ankles, or you can use the ankles and the knees. Try to find out how to do it to create the largest, freest movement in your spine and neck. Also, you will find that by doing this, you either

can or cannot arch the lumbar spine. Try to do it in such a way that you do not arch the lumbar spine, while at the same time you retain full freedom in the cervical spine.

I am going to show you, before we are finished, how many of the movements you are doing can be translated into work with a person on the table; also, how it can be done so that you will be able, with most of the movements, to move a three hundred pound man with ease, even if you are a very small person. The size of that other person will be irrelevant for most of the movements. You will be able to move that body very freely with almost no expenditure of effort, which is the best way to do it, not only for your personal comfort and economy, but because it allows you to work in a way that is subtle and without your senses being impaired by the use of powerful muscles. The more effort you have to exert to work on somebody, the less well you are able to sense what you are doing and what is happening with them. You always try to move yourself, or anybody else, with the greatest possible ease, in order to discriminate more and more clearly exactly what is happening.

Now, without tightening your neck, raise your legs and bring yourself up to a sitting position, using the legs just to swing yourself up. Do not bend them, just raise them up high. Bring them down so that you bring yourself down into a sitting position without stiffening your neck. Now, sit however you are comfortable. Make circles with your head. You can think of circling with your nose, or with the back of your head--whatever facilitates the circling. If you go around too many times in one direction, you will get dizzy. Sense clearly the sensations in the neck. Put your hands behind you on the floor and do it. If you find you can make much larger circles, more easily, the head can go further back. Then, instead of circling, just raise and lower the head. Put your arms wherever you like. You should balance, in any case, so there is no discomfort in the wrists, and not much pressure on the hands. The hands behind you do not have to bear very much weight, if the body is positioned right.

Now, as you do that, oppose the eye movement to the head movement. Look down as your head goes up. Look up as your head comes down. Do it without straining. See if you can sense that if you exhale as you lower your head and raise your eyes, that the breathing strains the eyes a little bit. Just doing it two or three times is not enough to damage it, but you can feel that the exhalation makes a difference. Just opposing the eyes to the head movement does not necessitate any strain, but the exhaling, as you lower the head and raise the eyes, lets you feel if you are able to sense well enough. Then, let the eyes and the head go together.

Now, instead of doing that, stop when the head is looking straight ahead. Turn it left to right, and maintain the neck position without inhibiting the breathing. Let the eye movements oppose the head movements. If the tongue is free, it will generally follow the direction of your attention. If you turn the eyes and the head together, the tongue will not go to the same side of the mouth that the head and the eyes go to. If the muscles in the tongue are too stiff, it will not happen but when you have

freed the tongue, you will find that it is so. If you oppose the eye movements to the head movements, you will find it is the eyes that the tongue will go with, rather than with the head. The tongue tends to follow the stimulation. It will go where the experience is stronger. In this case, the visual experience overrides the turning of the head. You will see, as we go along, that there are other linkages between the tongue movements and eye movements. So far as I know, nobody has ever discovered or written about them. You will also see why they are important. Probably, many people's tongues do not move in the beginning but, as they go along, the muscles become freer and then the tongue will move. Now, stop and rest a minute. You can lie down.

Now, lying on your back, interlace your fingers behind your head. Pick the head up as high as it is easy to do. Then, put it down again. Continue to do that, without any effort in the neck at all, but sensing what happens in the neck. Leaving the hands where they are, let the elbows lie out on the floor. Take the head from one side to the other, so that the ear approaches first one shoulder, then the other. You do it with the hands and the arms.

Now, take the shoulders from one side to the other. The elbows will move down as you do that. Both arms are moving simultaneously. Keep the elbows out as you do it. Do not roll the head from side to side. You want the neck to bend to the side. You will feel the rib cage shorten on one side and lengthen on the other as you do that. Leave the elbows down close to the floor and bring your shoulders and your ears as close together as you can get them without straining. Pick the head up a little bit. Leave the elbows out. Do not raise them towards the ceiling. Your elbows should point up as little as possible. The ear should come closer to the shoulder. Put your right hand down. Leave the left hand behind the head, and use it to bring the ear toward the shoulder. Now lie on your right side and do it. Just pick up the head with the left hand, bring the ear up to the shoulder, then let it down. Try to make the movement sideways, not forward or back. Now, lie on your other side and do it. You pick the head up now with the right arm. Find the position that the hands should occupy in relation to the head that makes it easiest to move the ear towards the shoulder.

Now, roll onto your stomach a minute. Let the forehead rest on one of your hands, one hand on top of the other, being aware of which hand you put on top of the forehead. Then very slowly try to bring the body up into, if you know Yoga, what is a variety of the cobra position. The head is up like a striking cobra. Try to do it vertebra by vertebra, in the spine. Do not just arch the lumbar spine and the cervical spine. You have got to try to also use the thoracic spine, bit by bit, as you come up. See how high you can come without straining. Then let it down the same way. In Yoga, this is supposed to be an exercise for the entire spine. However, if you watch, in ninety-nine per cent of the cases, the person will not use the thoracic spine, or use it minimally. They will just use the lumbar spine and the cervical spine, and the teacher will never say anything. He probably, often, is not aware of it. See what you do with it. Note that

there is a tendency to do it that way. Just arch the spine, the neck and the small of the back where it control of it. Move it bit by bit, so that the whole length of the spine is involved. Then, lie on your back and rest.

Interlace your fingers under your head again, leaving the arms on the floor. Slide first one elbow down, and then the other. Let the head move with that. Slide the arms and elbows along the floor, from left to right, so that the elbow approaches the rib cage on the left side. Then, on the right side, you can feel the spine moving and the rib cage shortening and lengthening. Now put your hands down. Let your head stay down and just slide along the floor. Let your hands slide up a little bit. Rest on your navel and do it, and observe that the spine is moving a little higher now than when the hands were lower. If you put your hands up around your diaphragm and continue to go side to side like that, still more of the spine will become involved in the movement. Then put your hands on your chest and do it and, when your hands are at that level, observe that the lumbar spine does not have to bend at all. Observe that you can immobilize it, and that the movement will all be in the upper spine, so that there is no doubt that it is moving.

It is even easier to do that in the beginning, with the hands on the shoulders. Let the back of your head slide along the floor and the shoulders, arms and elbows slide up and down. Do it in such a way that the lumbar spine does not move. Put your hands down below your navel again, and do it. Now, unless you do something that makes any great strange effort, it will primarily be a lumbar spine movement. The spine will bend at the level of the hands, and anything else follows after that. Let it slide quickly and lightly from side to side, with the hands around the navel. Then put the hands up on the shoulders and do it, and see the different part of the spine that primarily moves when the hands are down. Go back and forth, and also try it on the chest. At each level where the hands are, observe that the movement is different. As you go up, observe that the thoracic spine is quite clearly involved. Now rest.

If you need to, try to do a number of movements with the hands on the shoulders and the chest. Try to get the feeling of very free, extensive movement in that upper part of the spine which ordinarily never moves. If you go to it directly, without some preliminary work on the lower back and the neck, it will not move so well either. Give yourself as large an experience as possible of the movement in the upper spine, below the neck. Do this by placing the hands on the shoulders and chest, and over-doing it. Whenever a person begins to do a movement so quickly that they feel a little bit out of control, that is when compulsiveness has entered in and the movement becomes a potentially harmful one. By observing that, you can also learn to note that same compulsiveness in your everyday life. The feeling will be similar. So will the quality of drivenness that you will be able to recognize as soon as it begins to control your behavior. Do however much of the movement you can do that is pleasurable. Then stop and rest with your arms at your sides and your legs extended.

Now, roll your head from side to side and see how quickly and how far it will go. Then stop and bend your legs. Take the legs from side to side, sometimes letting the head go with the legs, sometimes opposing the head and leg movements. Also, try to let the eyes go with the legs, with the head moving in the opposite direction. If you are still having trouble letting the head and the legs go over all the way together, take hold of your elbows with your hands and take the arms together with the legs and the head. Do it by letting the hands slip down so that they hold the wrists, or let the hands hold the forearms, whichever works better. Let the head, arms and legs go together if you are having any trouble getting the legs all the way over. The forearms should be parallel to the floor when they are above you. Try doing just the head and the arms. Hold the arms very lightly, not moving the legs. The further your hands are down the arm, the greater the amount of freedom of the shoulder and the neck. Keep the arms up, so that when they are above you, they are parallel to the floor. Let the head go over all the way with the arms. Do it quickly, lightly and easily. There should be no effort in this movement.

When that movement is extremely clear, and the head goes all the way with the arms to the left and to the right, let the head turn as far as it will turn. With the arms, go onto its right side, and onto its left side. When the movement is clear, then let the legs go with it. Let everything go together. Coordinate it; synchronize it. Your timing must be such that the head, the arms and the legs all move simultaneously. You have problems if the upper body is not synchronized with the lower body. You will not get the benefit of what you are doing. Then put the arms down and just move the head and the legs. Feel the movement in the spine. Let the lower back and spine move more and more freely. Do not just roll from side to side. The movement is in the small of the back and in the cervical spine. Stop and rest.

One more time, just hooking the ground with the heel, push and pull so that the neck moves freely. The chin moves away when you push and comes back when you pull. Bend your knees if you have to, to get the head to move freely. If you do not obstruct the movement, the head must move. It is a completely involuntary movement, providing you are doing the right thing. You cannot just flex and extend your ankles. Push and pull on the floor, and bend your knees a little bit. The head is moving freely. Now stop.

Once again, put your hands on your shoulders and take the elbows up and down very quickly. Slide the arms up and down along the floor, so that the upper spine moves. See if you cannot move more freely than you could a little while ago. Bring your elbows practically down to your rib cage. At least, approach it fairly closely. You can also do that with the hands on the chest. Do not pick your head up enough to strain your neck. Breathe freely. Now, stop.

Bring your legs back towards you. Take your hands and let them rest lightly on your knees. Then, move your pelvis so that first your right buttock, and then your left buttock, slides down. Try to push the right one down and along the floor, and then the left. You will feel the movement

in the lower spine. You can see it is different than just swivelling the two legs side to side. You get a distinct feeling of one pushing down and then coming back as the other pushes down. Then just lightly swivel, taking the feet from side to side. Swivel, do not roll, your body side to side. Put the feet down. Lightly rap with the small of the back on the floor. Take the legs down, trying to leave the small of the back on the floor. Remember the way that it is most effective: flex the ankles and breathe out through your mouth.

Now a few times, as quickly, lightly and easily as you can, just roll the head from side to side and let the shoulder get out of the way of the head. Return by letting the arms slide down on the side that the head turns to. See how far now the hand can slide down along the floor, as the head rolls side to side. Continue to just turn the head side to side, but let first one arm and then the other slide down. Stop with the head in the middle, and try to sense your spine. Sense up and down its length. See if you can get an image of it. If you know what the pelvis looks like, come up from there to where the spine is free of the pelvis. Follow the spine on up into the skull. Image it, or visualize it, or think of it as a straight line. Then breathe up and down that line. Direct your breathing so that it feels as if you can breathe right up your spine and out the back of your head. Breathe in through the pelvis and up the spine and on out the top of the head.

Continue doing that, directing the breathing up and down the spine, but with the main emphasis on the upward breathing. Breathe up and beyond the top of your head, right out through the top of the spine and skull. Breathe up and out, and up and out. Then slowly, without stiffening the neck, and using the head first, roll to one side and get up. I will show you how many of these movements can very usefully and easily be done working with someone else on the table. In fact, you can achieve many things. By doing the movements this way, you can observe what the effects are on someone else. You also can learn what you can do for yourself. Walk around a little bit. If ever you ache, you have done it too vigorously. You have to always follow directions.

### 3) THUMB AND WRIST \*

Take a comfortable seated position, one that you can remain in for awhile. Rest your arms on your legs. Do it so that the hands hang down. Then move your thumbs up and down. Alternate them. Do one first and then the other. Try to observe the difference in the movement between the two thumbs. See if one moves any differently than the other. Note whether you can sense the difference any better with your eyes closed.

Now rotate your left thumb in a circle. See what direction you do it in. Then rotate it in the opposite direction. We are going to be working largely with the thumb in this exercise, but the effect will be not only on the thumb but very much on the wrist as well. Now stop moving the left thumb.

Do the same thing with the right thumb. Make circles with it. Do them in one direction for awhile, and then reverse and rotate the right thumb in the opposite direction. See that you breathe freely as you do this. Now stop.

Put the two thumbs together on the inside so that the inside top joints of the thumbs are pressed against each other. Do it so that the left thumb presses against the right one for awhile, and then the right one presses against the left one. You emphasize the pushing coming from the left or from the right. The thumbs should be vertical as you do this. They should point pretty much towards the ceiling.

Then take hold of the left thumb with the right thumb and forefinger and use those fingers to rotate the left thumb for awhile. Rotate it a number of times clockwise and a number of times counterclockwise. As you do that, pull out on the left thumb so that you lengthen it. You pull out on it and rotate it at the same time.

Then, instead of rotating it, use the right hand to bring the left thumb over so that it touches the palm of the left hand (or comes as close to it as you can bring it.) Then let go of the thumb with the right hand, and do the same movement just using the thumb itself. Bring the thumb over towards the center of the hand and take it away.

Take hold of the thumb again with the right hand and just give it a good shaking. Shake out the left thumb. Shake it mildly to loosen it. Lengthen it a little as you shake it. Let the rest of the hand and the wrist move spontaneously, just whatever they do. As you shake the thumb, be aware of how the rest of the hand moves. Then just stop.

Put your two hands down flat on the floor. Rap with the left thumb. Then rap instead with the right thumb. See if you notice any difference in the agility or speed that the two thumbs exhibit in rapping on the floor. Be sure to rap with the thumb and not turn your whole hand. The movement is in the thumb. The rest of the hand does not move, or moves very little.

Then just rub the underside of the left thumb over the floor, the inside of the thumb. Sense what you are touching with it. Do the same thing for a minute with the right thumb. See if there is any difference in the sensitivity of the two thumbs. Remember how it is. Then try rubbing the back of the left thumb over the floor. As you continue to do that, also rub the back of the right thumb and compare. Compare the sensing. Rub the back of the right thumb over the floor--the top of it, not the tip of it. Then also take the very tip of the left thumb and move it across the surface that you are seated on. It is in a vertical position. Then briefly do the tip of the right one also. Then let the right one rest.

Draw circles on the floor in front of you with the tip of the left thumb. Circle in one direction for awhile and then in the other, using just the tip of the thumb. Then, instead of making circles, make X's with the tip of the thumb. To make the X's, you can use the top of the thumb and the bottom of the thumb, the sides of the thumb, the thumb nail. Try to use all those different parts of the thumb. As you do that, consider what finger it would be most natural to do that writing with. See if you feel that, as soon as you think about it, instantly the forefinger comes to mind. Almost no one will ever think of another finger. Then, still with your left thumb, do the alphabet. If you find that it is difficult to write, you can print a particular letter. See which letters are easier to write and which to print. Discover it by writing, and you should only print if it becomes too difficult to write that way. Keep your focus of awareness on the left thumb. Now, whether you have finished or not, put your hand down and let it rest. Let the left one rest on the floor.

As it rests, be as conscious as you can of the left thumb. The hand should be resting, palm down. Try it with your eyes open and with your eyes closed. Be aware of the thumb. Put the right hand down alongside it. Try sensing first the left thumb and then the right one. See which one you sense more clearly. Then just sense the left one again, and the finger next to it, and the middle finger, and the finger next to that one, and the small finger. Try to sense the thumb and all the fingers of the left hand and the wrist as well. Then include the forearm on up to your elbow in that awareness and sensing. Try to bring the whole thing in with your eyes closed. Sense the left hand, wrist, and the arm up to the elbow.

Then lie down on your back in the usual manner with your arms at your sides and your palms down. Compare, for a little while, the two sides of your body. Compare the hands, the arms, the legs, the length of the two sides, how the two sides make contact with the floor. Observe whether just working mainly with the thumb of your left hand has considerably altered the whole organization of the body and the awareness of the body image.

Now, as you lie, rap with the left thumb many times. Do it rhythmically. Rap once and then twice and then three times and then four times. Keep doing that. Rap rhythmically with the left thumb. Breathe freely. Rap rhythmically.

Then come back up to a sitting position. Make a little hole with your



right hand that the left thumb can go in and out of. Just make a loose fist with your right hand and take the left thumb in and out of that hole. It is going in between the four curved fingers and the thumb of the right hand. As you do it, sense what the left thumb feels. Then, for a moment, shift your focus and sense what the right hand is feeling. Then shift the focus back and sense what the left thumb is learning about the right hand as it slides in and out. Then focus instead on the sensations being experienced by the thumb itself. Orient your awareness towards learning about the thumb's feelings instead of what the thumb can learn about the right hand. Make the hole a little tighter, and then make it a little larger. Just keep the left thumb moving in and out of it as you make the hole as tight or as large as you can do, while still allowing the thumb to both move in and out and to preserve some contact with the right hand. See what pressure feels best to the thumb, when it is not only not too tight or too loose, but is an optimum kind of relationship.

Then just hold the thumb with the right hand and squeeze the left thumb gently a number of times. The right hand just gently squeezes the left thumb.

Then use the right thumb and forefinger to shake the left thumb again. Take hold of it around the left thumb nail and shake it and try to make the whole thumb ripple. Again, let the wrist and the hand move freely.

Next, use your right hand to bring your left thumb towards the finger next to it and take it away again. Keep opening and closing the gap between the left thumb and the finger next to it, using the right hand to move the left thumb. Just keep bringing them together and taking them apart. Be sure that your breathing is free. Then stop.

Take the fleshy part of your right hand, the part below the small finger, and insert it between the left thumb and the finger next to it. Slide the right hand back and forth in that space. Come down to the right wrist and then continue along the arm all the way to the elbow, so that the whole arm is sliding back and forth to the elbow between the fingers of the left hand. Let it slide as far up the arm as it will go and back down again. Sense the left thumb primarily. Then put your fist in the gap between the left thumb and the finger next to it. Rotate the fist from side to side inside of that space. Just rotate the fist from side to side. Let it be a loose fist so that it interferes neither with the breathing or the sensing.

Then put your two hands down on the floor again side by side. Sense the left hand and the right one. Compare them. Then give your attention back to the left hand.

Push down a little with your left thumb. Just gently, push down and make it a rhythmic pushing, doing it once and twice and three times and four times. Just push the thumb down. Do not do it too hard. Then, instead of doing it up to only four times, push once, then twice, then three and four and five times, then six times, then seven and eight and nine until you have gotten to where you are pushing down ten times in a row with your thumb.

Then rest the hand on the finger tips and push down with the very tip of the thumb. Then do that rhythmically, once and twice and three times and four times.

Then again rest the left hand on the floor alongside the right. Compare the sensations. Take note of the left and right wrists and whether one hand lies any flatter or closer, and whether one seems lighter or clearer in the body image.

Now bring your hand up in front of you again. Put the tip of the right thumb at the base of the left. Push in and press down with the right thumb so that the left thumb has to move down. The left thumb will move towards the center of the hand, which is down. Then, with your right thumb, come around to the outside of the left thumb and push in and down so that you work the thumb down. Instead of moving it towards the center of the hand as you did before, you move it towards the bottom of the hand and towards the wrist. Use the right wrist and the lower part of the hand. Keep doing that gently. If you position the right thumb correctly, you will not have any trouble moving the left one in that direction.

Now, with your right thumb, push against the back of the left thumb at its bottom. You push in and pull down so that the thumb has to come back a little. The right thumb is at the base of the left thumb on the outside, and you press in and down with the right thumb. That pulls the left one back. Then stop.

Now, just put the left thumb in the center of the palm of the right hand. Just let it rest across the palm. Use it to press against the right hand with its full length. It is the inside of the left thumb which is pressing against the palm of the right hand. All these light, easy pressures on different parts of the right hand are what we are doing. Put the hands on the floor again.

Make a light fist with the left hand. Close the left thumb over the outside of that fist. Just keep opening and closing the left hand, making a fist and exerting a slight pressure with the left thumb on the outside of the fingers that you close to make the fist. Observe closely that the instructions to make a fist will often tend to inhibit breathing. The fist is associated with fighting and making any kind of fist will usually engender enough of an emotional response that, if you watch, you will see at least some inhibition of the breathing. Now stop.

Shake out your left hand. Shake it a few times and put it on your leg. Caress your leg with your left hand, especially your thumb, the inside of the thumb, the outside of the thumb, the top, the bottom, the tip of the thumb. Keep on rubbing it against your leg. Be sure that all of the thumb gets to make some repeated contacts with the leg. Do the same thing with the floor. Rub the thumb all over the floor and let it sense the floor. Rub it very lightly and then with a little more pressure. Sometimes orient yourself towards sensing the floor and sometimes towards the sensation in the thumb itself.

Now take hold of your right hand with your left one so that the four left fingers are on top of the right hand. The left thumb can press against the palm of the right hand. Keep pressing into the palm of the right hand with the left thumb in many different places. Press at the base of the right thumb, the base of the next finger and the next finger and so on. Press at the base of each finger of the right hand so that it has to move up and down as you press.

Then just squeeze each of the fingers of the right hand lightly, using the left thumb and fingers next to it. Keep your focus on the thumb. Also squeeze the right wrist with the left hand, using especially the thumb. Keep on doing that, going all the way up the right arm to the elbow and the biceps and the shoulder. Then come down. Always squeeze lightly with the left thumb.

Do the same with your right leg, using your left finger and thumb. Then lie down and rest a minute.

Now rap on the floor with your left hand. Then rap just with the thumb. Make it as light and quick and agile as you can. Then stop and rest a little, just sensing the hand and the thumb clearly.

Then see how quickly you can make and release fists with the left hand. Exert a little pressure on the fingers with the thumb. Then see if you can put the thumb between the middle finger and the forefinger. Put it in there and take it out several times. Then try putting the thumb between the middle finger and the ring finger. Do that a few times. Then see if you can reach on over and put the thumb between the ring finger and the small finger. Then come back to the space between the middle finger and the ring finger and then the space between the forefinger and the middle finger. Then move the thumb towards the palm of the hand and take it back again.

Sit up and rest a little. Make several more light fists with the left hand, sensing the contact of the thumb with the hand. See how many fingers you can lay it over, whether you can lay the thumb over the outside of all the fingers. Then let the left hand rest on the floor.

Press down a few times with the whole hand. Just press lightly. Then press lightly with just the fingertips. Then bend your fingers so that your nails are on the floor. Press down lightly with the nails, with the fingers of the left hand. Press down and then straighten the fingers. Press down and then bend them and straighten them and bend them and straighten them. Do it gently. Then press down the tips of the fingers again, and then the insides of the fingers near the tips. Do it very quickly. Press and let go, press and let go. Do the same thing with the whole hand. It is not a rapping, just a light pressing with the whole hand. The hand remains on the floor. You just lightly press and take it away. Leave the palm on the floor. Do not break the contact. Then shake the hand out again.

Once again, take hold of the left thumb with the right thumb and forefinger and shake it. Make it ripple. Also move it in circles, using the right thumb and forefinger to rotate the left thumb one way a number of times

and then the other way. Use very light movements. Take it over into the palm of the hand and take it away. A number of times, open and close the space between the thumb and the forefinger. Then pull the left thumb out as long as it will comfortably come, and rotate it at the same time. Elongate it as much as you can and rotate it a few times one way and a few times the other way.

Then, one final time, make light fists with the left hand. Squeeze very lightly with the left thumb on the floor. Then lie on your back with your palms down at your sides. Sense the left side and the right side, especially the left hand and the right hand, the left wrist and the right wrist, the left elbow and the right elbow, the left shoulder blade and the right one, the left side of the face and the right side.

Rap a few times with the left hand. Then rap just with the thumb. Shake the hand a few times. Shake it quickly. Then sit up and keep doing that. Then stop.

Put the two hands on your legs. See how the left hand and wrist feel and how the right hand and wrist feel. Rub the two hands simultaneously up and down your legs. Compare the touching. Remember always how they normally feel. With some, the right hand is ordinarily much more sensitive. Now shake the hands together. Shake them as fast as they will go. See which blurs and almost disappears. Shake them both as fast as you can. Compare the speed as determined by which blurs the most. Now stop.

Get up and walk around a little bit. Shake the hand out a few more times. See if you notice if the left thumb moves any differently than it did in the beginning. Be aware also of the wrists.

#### 4) IMPROVING WALKING BY WORKING MAINLY WITH THE BIG TOE \*

Sit down. Put your feet out in front of you where you can observe them. Put the feet flat on the floor so that they are standing. Raise the big toe of the right foot if you can. See how far it comes up, leaving the other toes down. Then raise the big toe of the left foot, however high it goes easily without strain. See if the effort to move one big toe causes movement in the other foot.

Arrange yourself so that you can take hold of the left big toe easily with your right hand. Rotate it in a circle. Pull out on it gently as you rotate it. Be careful that you neither tear the skin of your foot as you do these things nor damage the toe by pulling or pushing too hard. Go in one direction for awhile with your toe and then in the other direction.

Then, instead of doing that, just take it back and forth however far it goes easily. You can also do it by holding both the big toe and the one next to it. Move one forward as the other goes back in a scissors-like movement. Focus your sensing, as always, on the kinesthetic sensations of movement, the tactile sensations of touch. Know exactly what the toes are doing, where they are in space in relation to each other.

Then take the big toe as far towards the little toe of its foot as you can, so that the big toe crosses the tops of the other toes. Then take the big toe as far towards the little one as you can, moving it across the bottoms of the other toes. Keep doing that. Move it as if you would like to touch the small toe. In fact, as you try to bring the big toe over towards the small one from the top and then from below, also move the small toe towards the big one. Do them alternately, above and below.

Then, should you become convinced that the big toe and the little toe are never going to meet, try the toe next to the little toe and see if you can make contact. See if they will meet both above and below.

Then just enclose the big toe with the fingers of the right hand. Move the hand up and down over the encircled toe, using the toe to sense the hand for awhile, and then the hand to sense the toe for awhile. You enclose the whole toe with the hand, and the hand goes up and down on the toe. Then stop.

Sit and observe the foot as it is placed on the floor in front of you. Now raise the left big toe a number of times. Then raise the adjoining toes, leaving the big one down. Then alternately raise the big one and the other four. It will work better if the foot is on a floor or other hard surface rather than on a mat.

Now try, instead, to take the big toe out to the side. Widen the gap between the big toe and the other four. See whether if the space widens, it is because you are really taking the big toe away or because

the other four toes are moving away. Hold the four toes down with your fingers and try moving the big one off to the side away from them. Do it without holding your breath. The big toe moves out to the side along the floor, sliding out if you can do it. Widen the space between them. Take your fingers and do it. Just slide the big toe out and see how far it will go easily without any pain or risk of cracking the flesh. How big a space is it possible for you to have between the big toe and the adjoining ones without doing any damage to the toe?

Wherever you can move it with your fingers, there you have the capacity to move it also with your brain and by using the muscles in the foot and toes. Then, having established how far it will go, see if you can move it without using the fingers at all. At the same time see if your other foot moves.

Place the two feet side by side. Try moving the left big toe out and away from the others. You can also try moving the other toes away from the big toe. Breathe freely. Then see if you can do it without moving the right toes. In many cases, this effort results in contact being made with more primitive aspects of the nervous system. The feet are then not clearly differentiated, so that one foot moves when the other foot does. It is sometimes very hard to keep one foot and its toes completely unmoving while the other foot moves. For some people the primitive movements are very gross, while with others these are more subtle. But in almost all cases certain kinds of efforts to move the left foot elicit spontaneous involuntary movements in the right foot. Now stop.

Pick up the left foot with your right hand. Put yourself in some comfortable position to do so. Then from below, with the left small finger, run it in and out between the left big toe and the adjoining four toes. Do it approximately twenty-five times. Then do it, always about twenty-five times, first with the next finger, and then with the middle one. Then run the thumb in and out. Continue on down the thumb until you put the wrist through. You can shift hands and do it from both above and below. See which is easiest. Go as far down as you can, all the way to the elbow and even further if you are able to do it.

As you continue to slide the wrist, or the hand, in and out of that space, see if you can slide the whole arm up and down between the big toe and the adjoining ones. With some people it may be easier from above with one arm and with some from below with the other. Keep doing it and think of the space expanding. Take care not to crack the skin or force it prematurely. Let as much of the arm go between the toes as possible. Come all the way down to the wrist and then back up towards the elbow, however far you can go. You must have a bare arm if you want to do it right. Also, you must insert the arm repeatedly between each of the toes.

Then lie down for a moment on your back and rest. Let your arms lie extended with the palms down and observe the sensations of length on the two sides. See whether your left leg feels longer than your right one. Then put them together and see if that impression is correct. Then sit up.

Let your feet stand side by side on the floor. Bring the two big toes up as high as you can bring them; then put them down. Do that several times, just as high as they will go. See whether the left one now goes higher than the right, or relatively so, if you know how they were in relation to each other in the beginning. If they were about the same, the left big toe should now go considerably higher than the right one. Now stop.

Just slide the left big toe along the floor so that you sense the bottom of it. Slide it forward and backward along the floor. Alternately pay attention to what you can learn about the floor and then for awhile to the sensations in the toe itself. Go back and forth from orientations that are primarily towards the external world on the one hand and your own subjectivity on the other hand. It is always, of course, your experience.

Some physicist said that consciousness is always singular and never plural. When I was teaching philosophy we called that Solopsism. The further you go, however, in studying the brain and introspecting consciousness, the more difficult it is to avoid that position, so long as you do not insist upon the exclusiveness just of your own being. The idea of a truly shared consciousness or a really shared world is very difficult to maintain. By that we would mean that the perceptions are all alike. But each brain symbolically codes a reality of its own, and differences between individual "realities" can be extreme.

Continue sliding the left big toe back and forth. Pay attention to those two orientations. Emphasize self and not-self. Then, instead of going back and forth, circle with the big toe on the floor.

Then once again take the left big toe in one hand and let the other hand take hold of the other four toes and move them in opposite directions. Also bring the four toes towards the big toe and the big toe towards the four. Go underneath with the big toe one time and on top the next time. Alternate it. Bring all of the four toes in the direction of the big toe and the big toe in the direction of the four. Keep it a side-to-side movement as much as you can.

Be sure that when you take the toes away you take them as far as they will go in both directions without stretching or tearing. In other words, the big toe and the small toe approach each other as closely as possible from both above and below. Then they move as far apart from each other as it is possible for them to get by your hands taking them in that direction. Do it a little more quickly. The four toes go forward as the big toe goes back. Flex one as you extend the other. Then continue to do it, but treat the big toe and the adjoining one as a unit and the other three as a different unit. Then stop.

Make some circles with the left big toe, using your right hand to do it. Move it in a circular position clockwise and then counterclockwise. Make the largest and most perfect circles that you are able to make. Then, when you have experienced a larger number of circles, see if you are able to make a circle with the big toe by itself. It is all right to hold the

other toes if you think that will help you.

If you were an orangutan or a chimpanzee and could grasp the concept, it would be easy for you to do it, even circling in both directions. The musculature of the human foot is certainly not as well constructed for that as are the feet of some primates whose feet are close to the human, but still have that kind of flexibility and capacity to move that human beings once possessed and make regular use of. It is interesting that the foot of the human baby is a lot like the chimpanzee's in many respects. Then later it becomes more of a human foot.

Similarly, the foot of a gorilla is very much like the foot of smaller primates when it is a baby, but then because of its great weight it has to come down out of the trees and move on the ground, and the foot gets less flexible and more like a human foot. It has to make somewhat the same adaptation within the span of a single lifetime that human beings made over vast spans of time. Of course, it makes it much less well, but it is generally the same process. Anyway, see if you can make circles with the toe. Since it is so easy to move it in a circular movement with the fingers, quite possibly it can be done without using the fingers. But is it possible in both directions?

Now stop and put the foot down on the floor again. Run your fingers along the inside and the outside of the left big toe. Sense the toe very clearly. You can do it with three fingers so that one also goes over the top of the toe. One is on each side and one is on the top, sliding them back and forth.

Now once again simply raise the toe up high and put it down, however high it will go without strain. See if it will go almost straight up, however high you can point it towards the ceiling. Keep the other toes down.

Then just rap with the big toe a number of times. Then leave the big toe down and rap with the other four toes. Then alternately rap with the big toe and the other four. See how quickly you can do it. Breathe freely. See if you can make it a really quick, agile movement, the four coming up as the big one goes down and the four going down as the big one comes up. Then stop.

Lie down a moment. Sense your feet. Sense the left foot and the right foot. See where the greatest clarity is in the body image, in the toes, and in the feet. Do you sense the toes of the left foot with equal clarity or do you sense some of them better than others? Are any of the three middle toes of that foot included in what you sense? Perhaps you sense some of the middle toes but not others. See if you sense the toes of the left foot as well as the rest of the foot. Also compare it to how you sense the right foot, and compare the feelings of length on the two sides. Then slowly roll to one side and get up, without bringing the head up first.

Walk around, and keep walking. See what you notice now about what the



toes of the left foot are doing when you walk, and what the toes of the right foot are doing. See if the toes of the left foot are much more involved in the walking than the toes of the right foot are. Do they push up and assist the walking as the toes always should? Everyone should now be aware that the toes of the right foot do not give the same help to the foot that the toes of the left foot do.

Walk and really get a clear idea of what your nervous system absorbed, that lesson of experiencing a much better example of what the toes should do when you walk and how they can help. It gives a springiness to the foot and to the walking when the toes have become more functional. Next time you can work on the right big toe, and to some extent on the other toes of the right foot, so that it has the primary experience of participating in the walking much more as it should. Also it will be much clearer in the body image. Note also the increased involvement of the whole foot, which means that you come up more onto the toes as the foot leaves the floor.

When the walking is as it should be, the heel comes down and rolls over the bottom of the foot, which is flexible, and onto the ball of the foot. Then you come up onto the bottoms of the toes, and then onto the tips of the toes. The last thing to leave the floor is the tip of the big toe or, if you have a "Grecian" toe (the one next to the big toe is longer), the tip of that one will leave last. The tip of the longest toe will be the last thing to leave. Every part of the foot will make some contribution to the walking. Nothing will be left out or excluded. When all parts make their proper functional contribution, then you are likely to have a healthy foot.

## 5) FREEDOM THROUGH AWARENESS: A PRACTICAL DEMONSTRATION \*

The following exercise demonstrates in a practical way the importance of awareness for freedom. The power of focused awareness will be used to alter the self-perception, the organization, and the functioning of the body, making it more free. As usual, a considerable number of movements will be performed, and each movement should be repeated about twenty-five times. As far as possible, the movements will be simultaneous and identical for both sides of the body. As far as possible, awareness will be the only variable with which we work. This means that while the right and left sides of the body execute identical movements, awareness will be focused on one side only. The exercise should provide an effective demonstration for everyone, but the strength of the effects experienced will depend to some extent upon how well the individual concentrates or maintains the focus of attention. The greatest changes will, of course, be experienced by those who are able to maintain unwavering concentration on the movements and sensations as directed.

Now, before beginning, it is important to carefully observe your self-perceptions, your musculoskeletal organization, and your functioning as they are at present.

To begin with, lie on your back with your hands at your sides, palms down, and scan your body. Compare your awareness of the parts of your body. Compare the right foot with the left, the right shoulder with the left, and so on. Note how your body lies, and compare the two sides. Compare the contact with the floor. Flex and extend the various joints, continuing to make comparisons. Note how you breathe through your two nostrils, comparing, and whatever else you sense as you breathe.

Close your eyes for a moment. Leave the right one closed and open the left, noticing how clearly you see the ceiling above you, and your perception of the light in the room. Now open both eyes for a moment. Then close the left eye, open the right, and again note the clarity and light. Compare what you saw with each eye.

Rap with both hands on the floor and listen. Be sure the rapping is equal and try to detect if you hear the rapping equally. In any other ways you can think of, compare the two sides of your body. And now lie quietly with palms down at your sides. In a moment we will begin the experiment.

The demonstration should succeed to some extent in every case. However, the most dramatic results will occur when the concentration is good; that is, when close attention is paid to the designated movements and sensations, and the mind and the sensing do not wander. In other words, the quality of the awareness will determine the degree of the changes in self-perception, bodily organization and functioning.

Now take hold of your elbows with your hands and move your arms from left to right. Throughout the exercise you will pay attention only to the

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\* Teaching time: about 60 minutes

designated movements and sensations on the left side of your body. As you see here, the left side and the right side are executing virtually identical movements, but focus on the left side only unless told otherwise.

Pay attention now to the movement in your left shoulder joint. Go left to right, focusing on the movement in the left shoulder joint. Notice that there is also movement in the left elbow joint. Closely attend to that movement and the movement in the shoulder as well. If your head wants to go with the movement, allow it to do so, but let your awareness be as exclusively as possible of the left side of your head and neck.

With that, you continue to note the movements and sensations in the left shoulder joint and the elbow. Be sure that the movements you perform are identical on the two sides. This may become increasingly difficult as there occurs a differentiation between the functional capacities of the two sides. But try to keep the movement the same.

Now rest with your arms at your sides and with the palms down. Allow your left and right hands to move down and then up, the palms remaining on the floor. The hands slide down toward your feet and then slide back up toward your waist. The hands and the arms are extended so that the movement is, of course, in your shoulder joints. Pay attention to the movement in the left shoulder and the left hand. You do exactly the same movement on the right side but pay attention only to the movement on the left side.

Now stop and compare for a moment how you sense your left hand as compared to your right, your left shoulder as compared to your right, the length of the two arms.

Now bend your legs and let the legs sink to the left and then to the right but, as you do that, focus your awareness on the left leg. Notice that when you go left you go onto the outside of your left foot. When you come right, first the sole of the left foot rests on the floor, and as you continue you go onto the inside of your left foot. Continue the movement back and forth, noting how you move from the outside, past the sole to the inside of your left foot.

Sense also your left knee as it describes an arc through space. Sense the movement in the left hip and note any tendency to move farther to the left than to the right. If your movement has become more extensive to the left, equalize it so that awareness truly remains the only variable.

Try observing simultaneously the sensations experienced by the left foot, the knee and the hip. Try sensing the entire left leg as you move side to side. Is there any difference between the movement to the left and the movement to the right that now cannot be easily adjusted and equalized? Then stop.

Extend your legs, and rest, observing how the left leg and right leg lie. Note the contact each makes with the floor. Note the feelings of

length in the two legs, and the clarity with which you perceive them.

Now let both of your feet move to the outside and then bring them back to their starting point. But pay attention only to the left foot. Note that this movement is a rotation out, by the hip joints, and focus your awareness on the left hip joint. Deliberately initiate the movement from there, rather than thinking about moving the left foot to the left. Both legs continue to move but your attention remains with the left leg, the movement in the hip, and how the entire leg and foot feel. Is the movement more comfortable on one side than on the other? Is there any discomfort on one side that the other side does not experience? Again pause and rest, focusing very largely on the left side, though briefly noting ways in which it may differ from the right side.

Notice in what direction your eyes now are looking. Does your head lie on its back so that you face directly upward, or does it incline somewhat to one side?

Now bend your legs once again so they stand on the soles of the feet. Extend your arms above you towards the ceiling and clasp your hands. Take your arms over to the left, allowing the left wrist to bend as you do so but keeping the rest of the arm extended. Then go over to the right, keeping the arm extended but bending the right wrist. However, maintain your attention on your left arm and the movement in the left wrist as you do that. Pay attention only to the left arm, to the left side of your head and your neck if they join in the movement. And be sure that the movement is equally extensive on both sides and otherwise the same to the extent that is possible.

Now stop, and allow your palms to rest on your chest. Then bring the arms and elbows down toward your sides, and raise them back to shoulder height. Continue doing that, observing the movement in the left shoulder and arm.

Make circles with the elbows, sensing what you do on the left side. Circle clockwise and counterclockwise. And then stop, leaving the hands on the chest and the upper arms at shoulder height. And just lift the upper arms up and down in a flapping movement, paying attention, of course, to the movement and the sensations on the left side. Now rest with your hands down at your sides, palms down. Note how the left side is lying and then briefly the right side.

Rap with the backs of your knees on the floor, and focus on the bending of the left knee and its contact with the floor. Stop that and raise your hands towards the ceiling, arms extended, but wrists limp and hands and fingers dangling. And rap with the backs of the shoulders on the floor, noting what it feels like in the left shoulder, and the left shoulder's contact with the floor. And put the arms down.

Breathe in and out and focus your attention on the breathing in the left nostril. When you have focused on the left nostril you should be able

to feel the chest expanding on the left side, as the lung on the left side inflates. Also sense what happens on your left side with the exhalation. Inhale and exhale, focusing on the passage of the air on the left side and any and all movement on the left side involved in the breathing. Is there movement in your left shoulder when you inhale and exhale? How much of your back on the left side is involved? As you exhale and inhale slowly, look up with your eyes when you inhale and look down with your eyes as you exhale, leaving the eyes closed and paying attention only to the movement and sensation in the left eye.

Now rap with both hands lightly on the floor. Pay attention to the feelings in the left hand. But as you do that, notice whether you hear equally the sounds made by the two hands. Or do you hear more of the sound of one hand rapping? And what happens if you deliberately decide to hear better on the left side?

Now stop the rapping and slowly open your right eye and look at the ceiling. Observe what you see and also observe how much light there seems to be in the room. Then close the eye.

Slowly open the left one. Look at the ceiling. Note how clearly you are able to see it, and how much light there appears to be in the room. Try it with the right eye again, closing the left. Then close the right one and look with the left again. And do it several times. Is there any difference in the clarity of vision and in the amount of light perceived by the two eyes? Compare this with the comparison you made at the beginning.

Now for a moment take your two hands and make them into fists. Roll them outward and bring them back, focusing on the movement in the left arm. And do the same thing with the legs. Rotate the feet to the outside and bring them back, focusing on the left side. And rotate the hip joints and the shoulder joints to do it, simultaneously focusing on rotations in the left hip joint and the left shoulder joint. Then stop.

Finally bend your legs so that the feet are standing on the floor. And a few times take the legs left and right, paying attention to the movement in the left leg, foot and hip joint. Is there any difference in how you move to the left and to the right? Let the feet stand and clasp your hands above you towards the ceiling. Let the legs down and let the arms go left, with the left wrist bending, and then right with the right wrist bending, paying attention to the movement in the left shoulder, the left wrist, and the sensations in the left arm. See if the movement feels the same on the left and the right sides.

Lie quietly with your arms at your sides. Compare the contact with the floor on the two sides, the clarity of the body image on the left side and the right side, the left side of your face and the right side, your left shoulder and your right, your left hand and arm and your right, the left side of your chest, and how you breathe now. The left side of the pelvis and the right, the left and right legs and the feet. Then slowly roll to one side and stand up.

Sense what it feels like. Compare the contact of the feet with the floor. See where you want to place your weight. Do the two sides of your body feel equally alive? Walk around and compare the contact of the feet, the movement in the two shoulders. Stand still and try turning to the left and turning to the right. See if the turning is different in one direction more extensive, and if it feels better. Raise your left arm overhead, and then your right arm. Which arm feels lighter and moves more freely?

Walk again and compare the movements in the knees, the hip joints, and see if it is really clear to you now that the condition of one side of your body has unmistakably altered as compared to the other. If the body image is more clear on the left side, then the awareness has altered your self-perception. If the body feels longer, lighter, better on the left side, then the organization has been altered and with that the functioning, as you can see or sense, by comparative movements.

As an individual learns to concentrate better, these effects increase markedly. Awareness itself is a healing force as well as a force that brings about other improvements. But it must be a positive awareness if the effects are to be positive.

In exactly the same way a negative awareness of the self, the body, or parts of the body can impair self-perception, interfere with proper organization, cause functioning to deteriorate, and produce illness and even death. It is important to try to grasp the many implications of what you have just experienced.

Try to develop your understanding further, and find productive ways to apply such a fundamental and profound fact of your existence.

(This exercise, not previously published, was created by Dr. Robert Masters and is usually given to somewhat advanced students of his Psycho-physical Re-Education programs.)

## 6) BREATHING AWARENESS \*

We will do some basic sensory awareness training to test both your powers of self-observation and also to teach you some things about your functioning while sharpening the sensory perception. The emphasis will be on breathing--how you do it, how to do it better.

To begin with, sit up in a position that is easy for you to maintain. Place the soles of the feet together, if that is comfortable for you.

Just breathe up and down along the line running through the middle of your body. Think of a line that runs right through the middle from the crotch on up to the middle of the breastbone, on up to the nose and between the eyes. Breathe up and down and observe your breathing.

Then try breathing in to the count of five, holding for a count of five, and breathing out for the count of five. Try to make it an equal count so that the inhalation and the exhalation and the space in between are all exactly equal.

Then try doing the same thing, but see if you can breathe in to a ten count. Hold it for ten and breathe out for ten. Again, the breathing should be equal. See whether you can really double the duration or whether you have to do it by counting faster. Double the duration if you can. See if that also means that you double the volume of your intake. As you increase the intake, try to be aware of where the breath goes. Where does the additional expansion take place to contain that additional amount of air?

Then see if you can expand it to fifteen. If that increases the volume, try to be aware of where it goes. Just do whatever is easy. Do not inflict any suffering on yourself. Obviously, the greater the volume intake, the greater the change is in the expansion of the rib cage and whatever else you notice to accommodate that intake.

See if one part of this is more difficult than another. Is it more difficult to inhale to the count of fifteen, or to hold, or to exhale, or is it all the same? If the numbers get beyond your capacity, just continue doing what you can. If you can increase it even a little, do that. Just do what is within your own means. Do not worry about the quantity. Do not compete with yourself or anyone else.

Now try going to twenty. You must be sitting in such a way that your upper body has some freedom so that you are not tightening the rib cage. Try to be aware of what else happens. Do your shoulders rise and fall as you inhale and exhale? See if you notice movement in your hands. When you breathe in, the shoulders will necessarily raise somewhat and with that, your hands will rise. See if you can discern it.

Now, if you can, go on to twenty-five. I am going to stop at that

number, but when you do it on your own try to see how far you can go and whether, again, the inhalation, the exhalation and the holding in between are equal, or whether one is easier or more difficult than the others. Do it in such a way so that you do only that amount where it is easy to include all three within whatever number you are working with.

Now forget about numbers and just breathe in and out as freely and easily as you can. Carefully observe your breathing. Sense it as it comes in through the nose and see where you can follow that intake. Try to follow the air down into your body. Then try to follow it out again. See to what extent you can succeed in following it in and following it out, while noting what happens with all of your body as you breathe. Particularly, get a sense of what is your optimal breathing in terms of volume and where it goes, and what your rib cage does, what your abdomen does.

Then lie down on your back. Continue breathing. See how lying on your back affects you. Compare it with the breathing when you were sitting up. See whether, when lying on your back, the volume you take in is the same and the breathing is the same duration or whether it changes. Also observe where it goes and how that changes.

Then try counting for a little while. See where you go as compared to what you did sitting up. Try to keep the volume about the same in relation to the numbers.

Then, leaving your arms down at your sides, roll over onto your stomach. Just breathe. One of the things you may learn, by observing how you breathe in these different lying positions, is what is a good way for you to lie when you are sleeping, insofar as the breathing is concerned. You will see which positions inhibit the breathing most and which positions facilitate it most.

You can try turning your head and also putting it on its forehead or the chin. See how many counts you can take in, and where it goes. Continue to make those observations, putting your hands up at a level with your head.

Then put your hands above your head and see how that affects your breathing. Extend them a little and extend them more. Then, on the basis of this experimentation, place your hands and arms in the position that allows you to breathe optimally while lying on your stomach. What allows you the greatest volume of intake and the feelings of greatest freedom in your body? What is most comfortable?

Then lie on your right side. Observe how you can breathe in that position and how what you do with your right arm may affect it. Be aware of what parts of the body move with the inhalation and what parts move with the exhalation. Try to sense the breath coming in and where it goes, and how the breath leaves your body, and what position you might get into that improves it.



If you think of this just in terms of something that may improve your sleeping, you can see the benefit of making careful observations because your nervous system will remember what you learn. Also remember that placing the head on the arm, for example, is so negative in its effect on the circulation that it will offset any advantages you might get with the breathing. Actually, if you sense carefully, you will find that positions which are detrimental in one way will not really facilitate doing something useful or beneficial. The body will rarely ever work against itself in such a way that one thing you do will improve your health while also making demands that in some other way will cause you to injure yourself.

Now try lying on your left side. Compare that with the breathing on the right side. See if the same positions facilitate and hinder the breathing, or whether this side calls for a somewhat different arrangement. Once again, see how high you can count. Relate that to the volume of intake, not just how fast you can do the counting. Relate it to where it goes.

Once again, do it lying on your back. This time experiment a little in that position. Try it now not just with your arms down at your sides, but also above your head on the floor or wherever else you may try to put them. Try also to make the back loose and supple so it does not lie rigid against the surface underneath you and inhibit the movement of the breath into the back of your rib cage.

Hug your chest. Put your hands under your armpits and breathe so that you force the breath into the back of the rib cage and you can feel clearly that you breathe into your back. If the rib cage in the back was inflexible before, now by hugging your chest you begin to force the air back there and it begins to expand and move. You are aware of it. It should be a pleasant feeling, like a part of you coming to life that was dead. Put as much breathing back there as you can. You put as much pressure on the front of your chest, without it being painful, as is necessary to get as much breathing in the back as you can.

See if you can gradually release the pressure on the chest while retaining the movement in the back. Deliberately breathe into your back, directing the flow there with your consciousness. See if you can keep it, while gradually releasing the pressure on your chest. Sense just as clearly as you can the breathing in the back. It is very important to have that movement. When you do not breathe in the back, you deny yourself a very large part of the breathing capacity that you have and the whole organism suffers for that. Therefore, it is extremely beneficial to become conscious of the breathing in the back and make the ribs flexible there. That same flexibility can also protect against many kinds of injuries. If the ribs are rigid and brittle in the back, it is conducive to injury.

As you breathe into your back, again try to follow the breath in and follow it out. Observe what else is happening as you breathe. Try to make it a total observation.

Now bring yourself back to a sitting position. Continue to breathe

consciously in and out, following the movement of the breath. Allow your upper body to be as flexible as possible. Breathe into your back as well as otherwise. Let the whole upper body be as loose and flexible as you can allow it to be while you follow the breathing. Make the breathing as expansive as you can without straining. See if it feels to you as if the breathing moves up the center of your body so that it is approximately symmetrical on the two sides.

Breathe in to the count of ten, hold for ten and breathe out for ten. Try to equalize the duration of each of these periods of counting. Also try to have the feeling that you inhale and exhale the same amount.

Then try inhaling to the count of fifteen and exhaling to the count of fifteen and holding the breath in between for however long it feels appropriate. If that is also for a count of fifteen, do it, and if it is for a shorter or longer period, do that. Be aware of what you do. Be aware of the duration that does seem appropriate when you retain the breath between the inhalation and the exhalation.

Try not retaining your breath at all. Just begin to exhale as soon as you end the inhalation. Feel how inappropriate that is, that you have to work like a bellows to do it. There must be some period in between the breathing in and the breathing out when the breath is retained. Try to be conscious, probably for the first time, of how the duration of the breath retention relates to the duration of the inhalation and the exhalation.

Extend that on up to the count of twenty if it is easy. Feel what happens in your rib cage and shoulders and your hands and face, everything that is involved in that breathing.

Then, on your own for awhile, see if you can increase the duration to twenty-five or thirty or thirty-five or forty or fifty, whatever you might do. What is the sitting position that most greatly facilitates the breathing? Try to retain the feeling of breathing into the back. Follow it in and follow it out.

Then without any regard for any of that, just breathe in and out in whatever is the fullest, most pleasurable inhalation and exhalation that you can do. Involve the greatest freedom of the upper body. Everything is as relaxed as possible, all the muscles are as free and as loose as you can make them. Observe the breathing in and the breathing out.

Then, for just a moment, lie on your back and breathe. Just see what you breathing feels like. Does the breathing in the back feel any less constricted or inhibited than it did when you lay down before? Have you acquired some freedom in the upper body as you lie on your back?

Having observed that, sit up and then stand or walk around and just quietly observe your breathing for a little while longer in each of these three positions. Let it be free and easy and coordinate it with your movements.

## 7) NEURAL REPROGRAMMING \*

To begin with, lie on your back. Your arms are at your sides and your palms are facing down. Arrange yourself so that you lie as symmetrically as possible. Do it without looking. Rely on your other senses to inform you concerning the positions of the various parts of your body. Only when you have done that, if you feel some need to, look and see if, for instance, your hands are equally distant. Are there equal distances between your fingers? You might also note if your feet are similarly positioned or if one goes out more to one side than the other, so that the rotations in the hip joints are dissimilar. This means, of course, a different and asymmetrical organization of the muscles and the two sides. I might add that I have just been reading a book about breathing by a man whose books on Yoga are supposed to be the best ones. He is writing this book for his own students and for advanced students of Yoga, so it is presumably for people who have been studying Yoga for a long time. At one point he was telling them to sit with their eyes closed and establish a certain breathing pattern. Then he said that after they had done that, they should open their eyes and see if they were sitting symmetrically. This is an incredible thing for one of the most advanced teachers to be telling his pupils, that they have to look and see where they are. I could not believe it when I read it.

Remain lying down with the back of your head lying on the floor. Make some circles with your nose. At the same time as you do that, be aware that the back of your head is making circles on the floor. In fact, you are making circles with your head. Now think of circling with your head rather than only with your nose. Notice whether how you conceptualize makes a difference in the movement. Try circling again for a moment with your nose. Then circle with the head and also make the largest circle that you can. Note whether the focus on the nose restricts the movement and whether thinking of moving the whole head is a liberating thought, so that it makes an easier and larger movement possible. If you can make as large a movement thinking of moving your nose, then observe if you are not somehow failing to focus on your nose but are allowing yourself to give thought to moving the whole head.

Let the head lie still. Circle with the base of your spine on the floor. In other words, make circles with your pelvis. Rotate your pelvis. Rotate it for awhile in the direction that you spontaneously moved it in. Be aware of what direction that was. Then rotate it for awhile in the opposite direction. Note whether you are now moving clockwise or counterclockwise. Stop.

Be aware simultaneously of your head and your pelvis. Be aware of them as those two structures that exist at the opposite ends of your spine. Then circle with both simultaneously. Notice in what direction you rotate your head and in which direction you rotate your pelvis.

Stop and rotate just the head. See if you move spontaneously in the same direction that you moved it when you moved it with the pelvis. Now

rotate the head in the opposite direction a few times and then stop. Then rotate the head again. Then rotate the pelvis in the opposite direction. Try rotating the pelvis in one direction and the head in the other direction. Ask yourself why there should be any difficulty about opposing those two movements. Start very slowly moving one in one direction and the other in the opposite direction. Breathe freely as you do it. Then look for any other signs of mental or emotional struggle. Move one in one direction until that is clearly established and then try bringing in the other one in the opposite direction. You can begin either with the pelvis or the head. If you find that it is any easier to start with one rather than the other, then do that. Then stop and rest.

Make some circles with your eyes. Make them clockwise a few times and then counterclockwise a few times. There should be no difficulty in moving in either of those directions, although the circles themselves may be imperfect. If some eye muscles are improperly functioning they may obstruct the circling. You may find yourself unable to complete a circle, or you may make an ellipse or whatever. Try to make a circle.

Then let the head circle with the eyes, but make sure that the eyes do in fact continue to circle and do not just passively ride along as if they were just passengers in the head. You are doing two things. You are circling with the head and circling with the eyes. Then stop.

See if you are able to circle in one direction with the eyes while circling in the opposite direction with the head. Start slowly. Again, why should this present a difficulty? Is the difficulty mechanical? The correct answer is that it is not, if by mechanical we mean that the muscles necessarily impede those movements. The blockage is rather in the brain and in the nervous system. We will see that it extends to such movements as opposing rotations or circles that are performed by many different parts of your body. However, the blockage is of varying degrees of severity, and in some cases is very easy to eliminate. In other cases it may be slightly or considerably more difficult to eliminate.

We will see that sometimes a very simple reconceptualization of a problem by the mind will suffice to release the inhibited brain cells and reorganize the whole mind-body system so that no further obstruction exists, unless we once again start to think of the problem in the faulty way we did before we solved it. This is an interesting exercise. You will find that it will reward you and if you can learn to do the tasks that are outlined here and that we will experiment with, you will reap some rich rewards that I will discuss later on.

Sit up. Put your hands out in front of you. Let your thumbs be parallel to the floor and separate from the rest of your hand. Let them point towards each other. Now rotate the thumbs so that they make circles. Make forward rotations for awhile and then backward rotations. It is better that you do not rest them on your legs but hold them out in front of you. Now stop.

Rotate the right thumb, just the right one. Then rotate the left one in the opposite direction. Now just rotate the right thumb in one direction. You have rotated the thumbs together easily in both directions. Now keep them in front of you, facing each other, parallel to the floor. They must be parallel for reasons that you will see. Now stop rotating that thumb and just rotate the other one in the opposite direction to what you have been doing. See if that thumb has difficulty now moving as compared to the other one. Now move both thumbs in the direction that you have been moving the one thumb in. See that there is no problem involved in going in that direction. You are going to have to keep the thumbs parallel to the ground.

Now, instead of holding the thumbs parallel to the ground, make them vertical. Rotate them in any direction that they spontaneously go. See if now the thumbs spontaneously move in opposite directions as long as they are vertical. See whether they go clockwise or counterclockwise. Try moving them both in the same direction so that they both go clockwise. You will probably find that that is more difficult than opposing them, but still it can be done without much difficulty. The thumbs are vertical now. If you do not do these horizontal and vertical positions that I am describing to you, you will miss the whole point of the exercise. Stop.

With the forefinger and the finger next to it in a vertical position, make rotations. Try not to make it a rotation of the whole hand, but just of the fingers. In other words, do not rotate your wrists, just your fingers. See whether that one is spontaneously of opposite or same direction rotations. If the fingers spontaneously go in opposite directions, try to make them go in the same direction. You must keep them in a vertical position, with the fingers pointing up. Allow the wrists to participate and see if, by so doing, you make it still easier to rotate either in the same direction or in opposite directions. Let the wrists move. Now the whole hand is doing it. The fingers remain in vertical position.

Then stop allowing the wrists to move and just do it with the two fingers. See if it is easier now for those two fingers to go in the same direction or to oppose each other.

Now, just with the thumbs in a vertical position, see if you can rotate those in the same direction without too much difficulty, more easily than you could do before. Then with the thumbs held parallel to the ground, see if you can manage to oppose the rotations. Then lie on your back and rest.

Draw circles with your feet and toes. See if the rotations oppose each other or not, and in which direction they go. You are moving the two separately, not as one unit. You are moving them as separate entities. Make circles with the left foot and make circles with the right foot. The feet are lying on the heels. Let the foot rest on its heel with the legs extended as you make the circles. Make circles clockwise and counterclockwise. Let both feet circle in the same direction and do them clockwise and counterclockwise. Then circle with one foot going right and one foot going left. Then just reverse those two directions and see if now the opposition of the two becomes somewhat more difficult. Stop.

Consider them to be a kind of unit so that you simply circle with both at the same time in opposing directions. Note that if you think of moving both feet as a unit but in opposing directions, it is extremely easy to do it. There is no bending of the knees. The circling is from the ankles. If you think of moving both feet as a unit, but moving them in opposite directions, for most people that is easy. However, if you think of going clockwise with the right foot while going counterclockwise with the left, so that you are doing two actions instead of one, then somehow the whole thing is more difficult to do, especially at first. Try it both ways. Now leave your feet alone.

Put your hands on your chest and make circles with your elbows. Note if those circles spontaneously move in the same direction or in opposition. Circle to the front and down in a clockwise movement with the right elbow while circling up and back in a counterclockwise movement with the left one. See if it is the same with the elbows as with the thumbs--if you leave them down pretty much parallel to the ground, they go in the same directions, but if you bring them up towards the ceiling, suddenly they oppose each other, spontaneously.

Now lower them. Go back to circling in a clockwise movement with the right elbow and counterclockwise with the left. Keep it down low enough so that there is some difficulty in it. It is not the body's preferred choice.

Then oppose the movements. Reverse the direction of the circling that each elbow is doing. If you have difficulty opposing them, then stop and very slowly circle in one direction with the right elbow and in the other with the left. You will probably find that you can execute this without any great effort. It is comparatively an easy opposition to achieve. Then stop and rest a minute.

Bring your knees back towards you a little so that your lower legs are dangling. Make circles with your knees. Are the movements in opposition or are they in the same direction? Here you may become aware of a factor not encountered by you before or which has not entered into your consideration. It is possible to circle with both knees at once by rotating the pelvis without any rotation in the hip joints, or almost none. Done this way, the knees circle as a unit clockwise or counterclockwise, but they cannot possibly oppose one another. If, however, the circles are made by the two legs separately while rotating from the hip joints, then the movements would probably tend to oppose one another. Try it.

Then circle in the same direction with the knees while continuing to rotate the legs from the hip joints. Also continue to move the legs separately. Do not just rotate your pelvis. Do what you were doing a moment ago when you opposed them. They are two separate movements, but just move the legs in the same direction. Be sure that this is what you are doing. Stop and oppose the leg movements a minute, which you cannot do except by doing separate movements from the hip joints. Then, being sure that you continue to move from the hip joints, let them go in the same

direction. Do not go back to just rotating the unit from the pelvis. Stop and rest again.

Rest your hands on your chest. Let your thumbs be parallel to your body just an inch or so above it. The remainder of the hand can rest on your body but the thumbs must be parallel. Then rotate them and see if they move in the same direction. Continue to circle while slowly raising them towards a vertical position. See what you observe now. Note that without any other changes whatsoever, the rotations of the thumbs have now come to oppose one another. See how it is a movement that is in the same direction in one moment, and becomes a movement in opposing directions by means of a slight shift of the position of the thumbs from horizontal to vertical. How slight is the movement that is required for you to begin to experience what was the same direction rotation as an opposite direction rotation? Start parallel so that they are going in the same direction and very, very slowly move them towards the vertical. See if you can reach exactly that point where the shift occurs and identify it. When do they stop going in the same direction and start going in the opposite direction? Breathe freely and see if you can come to the exact borderline where the movement changes.

Now sit up. Put your thumbs out in front of you as you did earlier. Move them both in the same direction. Now move them in opposing directions. See whether you can do it with the thumbs horizontal as well as vertical. If you can do it with only one of those positions, try to understand why.

Extend instead the middle and the forefinger. Circle those in the same direction. You are in the horizontal position. Move the fingers, not the whole wrist and hand. It is no good to move the whole hand. Try to be aware of what you are doing. If you can see that your whole hand and wrist are moving, then try to move just the fingers. There is no reason why the wrist has to rotate. Reverse so that they just circle in the opposite direction. Then oppose the circling of the fingers, one to the other. See if you cannot do that without putting them in a vertical position now. Stop again a moment. Leave your hands up there in a horizontal position.

Circle with the two fingers in the same direction. Breathe freely. Reverse the direction of the circling with the two fingers. Do not oppose them, reverse them. Circle in one direction for awhile and then circle in the other direction. The fingers should point towards each other. Then try opposing them so that one goes clockwise and one goes counterclockwise. See if now you can do it very easily. It was quite impossible before, but now you should find that most of you can do it. With practice it will become childishly simple to do that, and even with almost no movement in the wrist.

Now lie on your back. Very slowly, try to circle in one direction with your pelvis while circling in the opposite direction with your head. Breathe freely as you do it. Stop and start again as often as you need to. Get a very clear idea of how the pelvis is going and try to move the

head in the opposite direction.

Sometimes it is possible to succeed in a complex movement like this if you take the pelvis north to west and the head from north to east and so on, doing it by quarters, or taking one of them to nine and the other to three on a clock. You are doing it a quarter of a movement at a time or a half movement, until you feel what it really is to oppose them. Try doing a few half-circles so that you circle with the pelvis just half a rotation in one direction and with the head half a rotation in the opposite direction. Practice that awhile and then see if you can do just one successful circle. When you are able to do one, then try to do a few until eventually the old, repressive wiring in the nervous system is overcome. The first ones are the difficult ones. Then finally you should be able to make many smooth, easy rotations of the head and the pelvis in opposite rotations. Most likely, you will not do it on this occasion, although somebody might, but with practice it certainly can be done.

Then similarly, by proceeding along the same lines, doing quarter and half movements, very slow movements and so on, you should be able to learn to oppose the eye movements to the movements of the head. You might complicate the matter a little further by opposing the movements of the head to the simultaneous movements of the eye and the pelvis. It is even possible while doing those three rotations to add on additional ones with the feet and the hands or knees and elbows or any combination of those, all rotating in various ways in relation to each other.

As the difficulty increases and as the more difficult and complicated actions are successfully performed, so is the nervous system deprogrammed and the cells in the motor cortex disinhibited to an ever greater extent. That is why it is a very important thing to do. Such movements and such reprogramming and disinhibiting have a powerful effect on the human mind-body system. A sufficient amount of such work will allow the individual not only to move in many new ways not at all limited to just these exercise movements, but also to think of other things which could not be thought about before, and to feel, to sense and otherwise experience beyond the range of previous limitations. When you do have a breakthrough like that, there will not be any question in your mind that in fact you are thinking and sensing and feeling differently as a result of that neural reprogramming and breaking down of old patterns.

Feel challenged to see how many opposing movements you can achieve. Discover how much else you might be able to achieve thereby. It is easy to remember the task because it is simply one of rotating parts of the body in opposition. The natural parts to oppose are those that you have two of, such as the feet, or the rotation in the hip joints when you move the knees in opposite directions, the two hands or the thumbs or the fingers of the hands, and also opposing the head to the pelvis or the eyes to the pelvis or the eyes to the head, and then bringing in those opposing rotations as best you can and making them simultaneously. This is one of the very best and most potent of all ways of breaking down those neural programs which are inhibiting ones. You will not break any that are



valuable or constructive. You only break down the ones that are constricting and destructive or, if not destructive, at least obstructive. Now stop and rest.

Let your arms lie at your sides. Allow your body to release. Go over it for a moment with a fractional, progressive relaxation where you let go of the toes, the feet and then the ankles, the pelvis and so on. Let go of any tension that you are aware of in your body, whether it is in the ribs or the wrists or the fingers or the shoulders, the neck, the jaw, the mouth, the tongue, the face, the eyes, the scalp, whatever it may be. Let everything release. Let the muscles loosen and lengthen, the spine elongate, the back widen.

Without reintroducing any tension, simply remember that now you have at your disposal a particularly useful and effective way to break through those kinds of inhibitions that are wired into the nervous system so that even simple tasks, or what should be simple tasks, are obstructed. The human being has many, many such obstructions. The ones in the brain naturally also appear in conscious life and in the unconscious as well as obstructions to all kinds of mental activities, whether it be remembering or thinking or imagining or whatever. Now we are finished. Roll slowly to one side without stiffening your neck and sit up or stand and move around whatever you may feel like.

## 8) EXPANDING AND ENRICHING VISUAL PERCEPTION--CIRCLING MOSTLY \*

We are going to do an eye exercise that will increase the mobility and the flexibility of the eye muscles. The rigidity of those muscles is surely a major factor in most of the problems that people have with their eyes. While this exercise will not eliminate every eye problem, some of you will find that your vision will definitely improve if you can find the motivation to do this and other similar exercises often enough.

One of the things that I was thinking about when I was getting ready to do this exercise was the role of blinking in the health of the eye. It is very important to blink often enough. Then I was thinking about a problem that does not concern many people, but is a curious one. It has to do with professional hypnotists and their tendency of developing the habit of not blinking the eye. Then they have to relearn that habit, to consciously learn to blink.

Most of the people who come to you to be hypnotized, if you are a hypnotist, want you to look them in the eye and they want you not to blink. They take blinking as a sign of weakness. So you learn not to do that. In fact, eye contact in this culture, and in a number of other cultures, is a sign of dominance, a sign that one is trying to assert dominance over another. Many people take it as a sign of aggressiveness if you hold eye contact with them. There have been many studies done of all kinds of subtle shadings of when the eye contact becomes aggressive, just how much of it is needed to establish that one is not fearful of the other or one is interested in the other. They deal with such questions as when somebody is looking at you in a hostile way, how long you should look at them before you turn your head away or blink to indicate that your strength has been demonstrated but at the same time you are not looking for trouble. In other societies, if you look at someone long they think you are trying to put a spell on them. This is especially true in some societies in Africa and in Latin America and in the South Pacific. It is considered a very serious matter if you look somebody in the eye too long. They think you are doing witchcraft or sorcery, and they may attack you.

There are still other societies where the people maintain eye contact for long periods of time. It is considered a friendly thing to do. If you do not do it, then you are considered to be probably up to something. It is a sign that gives rise to suspicion of your entertaining bad designs on the person if you look away. They believe that you think that your eyes will reveal the designs that you have on them so that is why you are looking away, to conceal your intentions.

In ordinary life it is important to continue to blink. If you find that for some reason you have lost your habit of blinking fairly often, then you should try to get it back. It can usually be done in a rather short period of time by just deliberately blinking. That serves the function of reminding the brain that the eye blinks, and very soon that habit of blinking will reassert itself.

Now stand up and walk around a little bit. Try to walk in your normal way, the way that you ordinarily do it. Observe what you do with your eyes, where you tend to look and how much of the environment is accessible to you.

If the eye muscles are too tight, as they are in almost everyone, then your field of vision is not as large as it otherwise would be. The constricted eye muscles will, in time, lead to hardening of the lens and other problems. It is the hardening of the lens that affects most people between the ages of forty and fifty when they cannot see so well and cannot read the fine print. That kind of thing can be prevented if the eye muscles are kept loose and the eyes are mobile.

The criterion for the correct use of the eyes apart from any defects is that you take in as much of your environment as possible. You see as far to the left and the right and up and down, and in all directions that it is possible for the eye to see, without any special effort. Some people block that healthy awareness of the environment by lowering the head or turning it to one side or tilting it back. With others, the head is fairly upright but the eyes look down or up or to the sides.

Try to determine what you yourself do when you walk. Do you tend to look down so that your awareness is mainly of the floor and you do not see an adequate distance above you? Is it because you look down with the whole head or just with the eyes? Try to determine if you see equally to the left and to the right. If you see more to the left, see if your head is turned a little to the left. If you see more to the right, see if you hold your head turned a little to the right. If you think that you are looking up more than you should, see if that is because you are arching your neck.

Now come back to your mat. Look around you a bit and try to see this room and everything in it as you believe an artist sees. Try to see all of the different colors and nuances of color, different shadings, differences of light, differences in depth of objects. Try to see better than you ordinarily do if you are not an artist.

Notice the individual elements of the environment that stand out a bit, and then let them sink back into perspective. See a particular object that has more meaning for you than others. Also see if, by focusing on a particular object, you can invest it with meaning. See if there are parts of the environment that you relate to with more emotion than others. See if there are things that you look at that elicit memories or associations. There are some things that you see that would be easy to fantasize about or empathize with and other things that you do not want to have anything to do with. Then seat yourself in a way that is comfortable for you.

For quite some time, until I tell you to stop, rub the palms of your hands together. When Bates developed his eye exercises, which are the foundation for most contemporary programs of eye exercises, he found that this was probably the single most beneficial thing for the eyes that you can

do. You rub the palms together to excite the electromagnetic field, and then put the palms over your open eyes. Bates called it "palming."

Now put the palms over your eyes and exclude all light. You arrange your palms so that no light comes in. Try to do it in such a way that you do not cut off the air coming in through your nostrils. If you experiment, you will find that you can completely exclude light. Keep the eyes open. Look into the blackness that you create. Your eyes are stimulated by the effects of rubbing your hands together. You should be looking into blackness. "Palming" has been included in almost every program of eye exercise or treatment since Bates discovered it. When you are looking into blackness, think of it as getting blacker and blacker. See if by thinking of the blackness that you are looking into, it is getting blacker still. The darkness in fact increases. Be aware that your eyes are open. Do not close them. Sometimes it is very easy to close the eyes and not know it when you are doing this.

Now take the hands away a minute and rub them together again vigorously. Then once again put them over your eyes so as to exclude all light. When you feel that it is as black as you can get it by arranging your hands and by thinking that it is getting blacker and blacker, then close your eyes for a minute. Keep the hands as they are. You may find that it is lighter with the eyes closed than it is with the eyes open. If you do not find it so now, you may find it so later on. It is a curious phenomenon. With some people, images will begin to appear or forms that are not recognizable but that move or have several differences of color.

Then open your eyes again and look into the blackness. Do not remove the hands unless told to. It spoils the effect. If you did do it briefly, rub the palms together again and then put them back over your eyes. Be sure that your eyes are open. See if you can see anything in the blackness. Sometimes one will see shapes like spirals and filigree and latticework that Heinrich Kleuver called the "form constants" of images and what some believe are the basic perceptions that reality is built of. If you have ever looked with eyes closed into a stroboscopic light, putting your eyes close up on the edge of it, you see the "form constants" in very vivid colors. Now if you see them at all, they will probably be barely discernible.

Now roll onto your back, keeping your hands where they are, covering your eyes. See whether there seems to be more light with the eyes closed. Also note whether it is any different lying on the back than sitting. Then sit up again and rest, uncovering your eyes.

As we progress with the exercise, it will continue to become lighter with the eyes closed than with the eyes open. The question naturally arises as to what the light is and where it is coming from. There is no scientific research at all that provides any basis for the existence of images in the brain. Nobody can find where they could be or what they could be. They have no basis for existence from a scientific point of view. The same is true of the images of the other senses. However, with the eyes, light is at least partially explained as phosphenes and other chemical

actions, whereas it is very difficult to understand how a person can sense sounds and smells and so forth as an image in conventional scientific terms.

Again, sit comfortably. Either look at the wall in front of you or, if you cannot see the wall, imagine it in front of you. Imagine a clock dial that is about twice the size of a conventional circular wall clock. It is at least a couple of feet across. Move your eyes around the dial, going from one to two to three and so forth. Only the eyes should move. See if you can make a smooth circle with your eyes. When there are points where the circling is interrupted, also see if you can remain on the clock dial. Move in different directions and just circle around the wall. Try to touch every number with your eyes. Stop a minute.

Hold the image of the clock. Do not move your eyes. Just move your head so that your circle is larger than the clock. That should be comparatively easy. You should not have any difficulty at all. Follow the circle as long as you move your head. Let the eyes just ride around in the head. Your whole head should move in a circular movement. Do some one way and some the other way so you do not get dizzy.

Then hold the head still and circle just with the eyes again. Go around the clock counterclockwise. Observe any tendency in yourself to tighten the neck muscles or the jaw or the tongue or to hold the breath.

Then try closing your eyes and circling with them. See if it is easier with the eyes open or with the eyes closed. Be sure that you are not making circles with your head, but are only moving your eyes. Make sure also not to tighten the muscles at the base of the neck and do not inhibit your breathing.

Then open your eyes and make a much larger circle. Make the largest circle you can make right now. The circle can go up beyond the roof and down below the floor, out beyond the walls. Make the largest circle you can make. Go in one direction and then in the other direction. Then stop.

Rub the palms of the hands together again for awhile. Then put them over the open eyes and look into the darkness. Keep thinking that it is getting darker and darker. Now, without exposing the open eyes to light, roll onto your back. Continue to look into the darkness.

Then, keeping your hands there, close your eyes. Observe again whether it is lighter with the eyes open or with the eyes closed. Remember that the hands are still over the eyes, excluding light from the environment. By closing your eyes, you are reinforcing the exclusion of light so that it should be much darker with the eyes closed, unless the light is coming from inside the brain, or wherever it is coming from. In fact, try thinking about it getting lighter and look for forms. See whatever may appear to you.

Now as you lie there with your eyes closed, look over towards your left ear and then over towards your right ear. Then move between the left

and the right. Do it by making an arc so that you come up under the top of your skull or over the top of it so that you are making a half-circle, a semi-circle upward as you look from one ear to the other. Keep going back and forth. The head stays in the middle, unmoving. Look for any signs that you are tightening your neck, your jaw or your face muscles as you make that semi-circle. Then stop a minute.

Go straight across from the left to the right and back again. Look at the left ear and then over to the right ear and back to the left, a straight line right through the middle of your head. There is no arc at all. Then when you get to the right ear, pause there a moment. Then when you go back to the left ear, pause there a moment. Breathe freely. Loosen the muscles of your tongue so that they are free. If you succeed sufficiently when you pause on the left side, the tongue will have moved left. When you pause on the right side, the tongue will have moved right. See whether your tongue moves with the eye movements, if the movement is from one side to the other, or whether your tongue stays in the middle, or what it does.

A few times, let the tongue go with the eyes back and forth across from one ear to the other deliberately. Then oppose the movement of the tongue to the movement of the eyes. See whether you feel any strain in the eyes as you do that. Then stop and just look left to right and let the tongue do whatever it will do. Let the movement from right to left be slow and let the eyes pause a moment on either side as you observe whatever connection there may be between your tongue and your eyes. Then sit up and rest.

Now close your eyes and make some circles inside as if your face were round. Just go around the outside of your face. See whether it is a continuous movement or whether there are places where you tend to pause and the movement gets a little jerky. Also see if the feeling of circularity and the feeling of movement is clear and that you can circle more easily than you could at the beginning. Then just circle over the bottom half of the circle from one ear to the other. Then circle over the top half, going back and forth. Do a half circle on the left side. Then do a half circle on the right side. Open your eyes.

Project the image of the clock again on the wall and go around the clock with your eyes. Go around it touching every number clockwise and then counterclockwise.

Then instead of going around the clock, make a somewhat larger circle. Concentrate on feeling the circular movement with the eyes, the movement of the muscles. Concentrate on making the most perfect circle you can without tightening the neck or holding the breath or turning the head one way or the other so that it remains an eye movement. Try to perfect it and keep increasing the size of the circle, considering again that you have the capacity to look far beyond the confines of the room in all directions. Do not move your head. Try to eliminate the head movement. Then stop.

Do the palming again. Make a blackness over your open eyes. Allow

plenty of time to create the friction. Then, as you create with your hands the blackness over your eyes, see if you can feel anything coming from the hand into the eyes. Be sure that the eyes are open. Then as you look intently but without straining into that darkness, see if the hands feel anything coming out of the eyes. Do the one for awhile and then do the other. See if you feel anything coming from the hand to the eye and then see if you feel anything coming from the eye to the hand. Breathe freely.

Then just close your eyes, leave the hands where they are, roll over onto your back and rest a minute. Then take your hands down.

You may have read in the New York Times recently about a court case that was dismissed where a witness who had been hypnotized identified a man who had attacked another man. Although he had seen him in the dark and by ordinary standards it was too dark to identify him, when they put the man in trance he could see the face. On the basis of that he made the identification. There was a great deal of evidence that he was right. However, on the basis of the ophthalmologist's testimony that that was impossible, they threw out the case. The mugger was allowed to go free.

Years ago I used to do some experiments with hypnotic subjects who were able to get into very deep trance states. I would show them a dimmer switch. I would turn the light down and then I would turn it up until they clearly had in mind the concept of the dimmer, with which they were not familiar at the start. Then in the trance, with their eyes open, I would have them hallucinate a dimmer and believe that they could really turn the light up and down in the room, or I would give them an actual dimmer that was not plugged into anything. In a dark room I would have them use the dimmer. In many cases they could see far better when they were operating their dimmer turning up the lights than they could see otherwise. Some of them also felt that they were projecting beams of light out of their eyes. They also had much better night vision. They could identify objects. They could walk around without bumping into things. They could read in light so dim that they could never ordinarily read in it.

The potential of the eye is always much greater in a variety of ways than the use that we make of it. It is a mistake to assume that the vision that you have in ordinary life and everyday usage is the vision that you are capable of having even without any special corrective work. This can be demonstrated just by altering the consciousness. If you learn to move along the continuum of altered states, then you can use more of the potential of your eyes.

Now sit up again and close your eyes. Breathing freely, circle inside your head at eye level as if you were dividing your head in two parts with the circle. This time, instead of circling as if something were out in front of you, circle as if you were circling around the sides and the back and the front of your head. One part of your head is below the circle and one part is above. You go in one direction for awhile and then in the other direction. Do not move the head or tighten up anything.

Then right in the middle, about where the Indians place the third eye, stop and just look straight ahead at that point. Try breathing in and out of that point. Feel that as you inhale the eyes move a little back in your head and as you exhale they move forward. As the eyes move back, the ribs tighten a little and as the eyes go out with the breath, the ribs loosen. Then stop. Be sure that any time the eyes feel strained, do not go ahead with it.

Several more times, circle around your head with your eyes. Stop in the middle point. Keep the tongue loose, the jaw loose, the breathing free. Forget about the breathing in and out, but keep that still middle point. See how long you can focus on it without thinking about anything. If the throat and tongue are loose enough, then you should have little trouble with words coming into your mind. If the eyes are relaxed enough, then you should not get images, so that your mind is empty except for that point. When you make the circles with your eyes, see whether it is a clear sensation of circling or not. Now stop.

With your eyes open, and also with your eyes closed, make circles. Try to make the most perfect circles that you can with the clearest sense of the eyes moving. Make big ones and small ones, quick ones and slow ones, variations of it. Do not move the head. Do not tighten the muscles. Do not inhibit the breathing. Just try to sense clearly the eye movements.

Now look at the point most distant to you and then look at something close. Then keep going back and forth, focusing on something far away and something close up.

Now with your eyes closed, look as far up as you can and as far down as you can without straining the eyes. Also do it with the eyes open. See if you are obstructed by the fact of the floor or the ceiling or whatever. You can look right through them at what you know to be beyond them, as if the eyes could penetrate right through so that the eye movement is not stopped short by the floor or ceiling.

Then look from left to right as far as you can look. Let the eyes move to the left and to the right. Do it with the eyes closed. See how clearly you can sense the left to right movement. Then open the eyes and do it. Still sense very clearly the eye movement.

Then tilt your head back and look at the ceiling. Make the biggest circles you can make as you look up. Make them in one direction and then the other. Feel clearly, if you can, the movement of the eyes.

Then look straight ahead of you and do it. Do not move the head, just the eyes. See what happens if you just think about the eyes circling and intend that they circle. If you can mentally direct them to circle, then they will move. That is a different kind of movement than the usual conscious kind. Also just think that the eyes will move left and then that the eyes will move right, and tell them to move that way. Do not hold your breath. Then a few times, tell the eyes to circle. See if they



will move.

Let the eyes relax. Blink them quite a few times. Then do the palming over your open eyes. Look into the blackness and think about it getting blacker and blacker. Think about an inky pitch blackness. See if, in fact, that blackness is blacker than the black that you had at the beginning. Suggest that it will get blacker and blacker and blacker.

Keeping the hands there, close your eyes. Allow yourself the possibility of seeing light, the possibility that you may discern colors: blues, reds, green, yellows, whatever; spirals or organic shapes, images either barely hinted at or seen more clearly. Roll over onto your back and continue to look awhile.

Leave your eyes closed and rub your palms together. Again put them over your eyes and see what you feel. See if you have a greater awareness of heat now coming from your hands, or whatever else it may be. Then take the hands away and sit up.

Open your eyes and roll slowly to one side and get up. Walk around. Observe a number of things. Observe where you look. Do you look at the same place that you looked before? How much are you aware of? If you walk through the center of the room or someplace where you walked before, do you feel that the vision has widened and expanded so that, with the looser muscles, you are taking in more? See if your eyes are more clearly in your body image.

Then look for colors, textures, shades of light. Try to remember what you saw and see if you see any more detail. Does anything look any different to you? Be aware of the subtle things, the direction your eyes are looking, the scope of the field of vision, and the way that you see things, how you look at them and what you see. Do the same things have meaning or the same kinds of meaning? In what you see, note the amount of detail, awareness of colors, textures, shadings of light and darkness. Then come back and sit down.

9) "SENSING" SKELETON and ARMS ABOVE HEAD (EXTENDED VERSION) \*

Lie on your back with the palms down at the sides. Scan your body mainly in terms of the skeleton. The time will probably come in the course of this work when you will have a most extraordinary experience of being aware, or seeming to be aware, of your skeleton. It is a very, very interesting phenomenon. It happens to everyone who does enough of this work. If you have done the work for a fair amount of time at all, you should have an awareness of your joints already that most people never achieve in their lives. That will increase, and one of the awarenesses that you will have will be of your skeleton. Much of the movement in this work is based on the way that the skeleton would move with much less than the usual amount of impediment or inhibition of movement by the muscles. We seek to gain sufficient control over muscles and other parts of the body that support or inhibit the skeletal joints. It is this control that allows the skeleton to move without undue interference by the muscles.

In a leisurely way, try now to bring the skeleton, or an image of your skeleton, into your awareness as much as you can. Begin with the feet. Most of you know, at least in a general way, what the skeleton looks like and where the major joints are. You have your toes. Behind the toes are what are called the metatarsals, and they are like extensions of the toes running all the way back through the foot towards the heel. There are many small bones and joints in the heel. Then there is the ankle joint. There are two bones in the lower leg, the tibia and the fibula. One moves around the other. Then at the other end, the knee joint and one big bone called the femur. Then you have the hip joint and the pelvis with the spine joining it. At the base of the lower part of the spine is the tail bone, frozen now into the pelvis. Above that are the vertebrae of the spine proceeding on up through the rib cage. The rib cage goes all the way around to protect the organs in that part of the body. You have the sternum that runs down the middle of the rib cage in front and joins it. In the back you have the shoulder blades, the scapula. You have two bones that run across the shoulders, called the clavicles. Then you have the fingers and hands which are constructed very much like the foot. The wrist is very similar to the ankle. In the lower arm you also have two bones. One moves around the other, the same as in the lower leg, and those two bones are called the ulna and the radius. Then there is the joint of the elbow and then the big bone in the upper arm. That is the humerus and corresponds to the femur. Then you have the spine running on up out of the rib cage and into the skull, the bones of the head, the jaw bone, the lower part and then the upper part of the skull. It is like the body at the other end of the spine in that it has joints that were once articulated, but no longer are. However, as babies, the joints in the skull are articulated. It is said that those joints can be re-articulated by doing sufficient work on the skull.

Keeping that whole skeletal structure in mind, and forgetting about the rest of you, just go over your body. Try to bring the skeleton itself, or a picture of the skeleton, into your awareness, as if you were just bones

with a consciousness. It is that basic awareness that you will have when the experience of your skeleton occurs to you. Then there will be other later ones of much greater complexity, in which more and more of the body, not only its structure but its physiology, will also be experienced by you. Finally, it will occur that you can have an awareness of so many parts and processes and functions of yourself that it would seem incredible to you now, that it would seem impossible. Some of that will be an authentic sensing of the gross physical body. Some of it will be an imaging of it. In either case, it can be used to improve the body in its functioning in a most immediate way. Basic, however, is the skeleton, so continue with that. Really try to get a clear picture of it. I will give you a few minutes. Please remain with that. Do not let your mind wander or go to sleep, or otherwise be distracted.

Now see how good you are at estimating the passage of time. See how long you think it is since I last said anything. It is four minutes. To some it seems just about that and to others it seems much, much longer.

Now bring the whole skeleton as clearly as possible into your awareness. Put your arms down at your sides with your palms down. Your legs are extended. Try to get the clearest possible image of your body, the feeling of the whole of it simultaneously, not part by part.

Then, if you had noted how you were lying in the beginning, note how you are lying now. See whether by not paying attention to the muscles but only to the skeleton, the body is lying somewhat flatter. The muscles have ceased to do the same amount of work that they were doing before.

Once again take several minutes and try to go over the skeleton, beginning with the toes and the feet, ankles, lower legs, knees, upper legs, hips, pelvis, spine, chest, shoulders, fingers, hands, lower arms, elbows, upper arms, shoulders, neck and head. Take several minutes and do it as completely as you can. As you go up it, let the skeleton sink into the mat.

As you lie there, forgetting about the skeleton now, pay particular attention to your shoulders. Note the contact they make with the floor. If they do not make contact, how close does it seem to you that they come--related, that is, to how the wrists and hands lie? Is it possible to let the wrists lie flat without elevating the shoulders, or for the shoulders to make good contact without causing the hands and the wrists to flex?

Slide your hands up and down alongside your body. Move your shoulders up towards the ears and take them away, keeping the elbows straight so that the movement is really in the shoulders. Also try to keep the palms down and the wrists down as you do that. Sense both what is happening in the shoulders and how the arms move and what the hand is touching.

See if it seems to you that the movement is identical with the two arms and shoulders, or if they move differently. Then, as a way of testing that sensing evaluation, move just one a number of times and then the other.

See if, by doing it that way, they move the same, if each shoulder has the same freedom, and whether the sensations are the same in the two. See if what you sense in that way corresponds to what you sensed when you moved them together. Also try doing alternate movements. Move one and then the other. See if that gives the same information or something different. Then just stop and rest.

Sense how you lie. Then continue to rest with your arms out at shoulder height. Observe how you place your hands. Are the palms down or up or do you do something else with them? How much do the wrists bend?

Now bend your arms at the elbows. Leave the wrists limp. Make some circles from the elbow. Do whatever you spontaneously do. See if, unless you make a conscious effort to do otherwise, you do not move them in opposing directions. Circle in opposing directions. Then change it and circle in the same direction. Then, whatever direction you are going in, reverse it and go in the opposite direction, but still circling in the same direction with both hands. Now make the circles just with your right hand and arm. Then circle at the same time in the opposite direction with the left hand. Stop for a minute.

Just make circles with the left hand. Now continue to make the same movement with the left hand. Do not change anything. As you continue to make the same movement with the left hand, make an opposing movement with the right hand. Some people are able to do it very quickly and others have to stop and think and grope to do what they did spontaneously in the beginning.

Let the arms lie at shoulder height. See if they lie as they did before. If the palms were down, are they still down? If they were up, are they still up? If they were some other way than that way, are they still that other way?

Then try them in different positions. See if you have any preference. Try placing them on the sides. Let them angle back. Let them angle forward. See which feels better to the shoulder. Then place them in the way that the shoulder finds most agreeable. Be sure that it is so. Be sure that you are not imposing something on your shoulder joints, that they really do feel most comfortable with the hands the way you have them.

Then make light fists and roll the fists down and bring them back to the starting place. Breathe freely. Just roll them like wheels along the floor. When they have rolled down as far as they will go, lift your head off the floor so they roll an extra turn or so. Move up far enough so that wherever they went otherwise, they now turn an extra quarter or whatever they will do. Exhale as you raise your head. Bring yourself up high enough that you get a maximum increase in the way that the shoulder will turn and the fist will roll. Be sure that when you raise your head, you roll your fists. Be sure that you do it by rotating the shoulder joints down. Then leave your head down and continue to roll the fists. Then rest.

Now, with your arms out again, roll the fists back instead, however far they will go. Then bend your legs and let your feet stand on the floor. When you roll the fists back, raise your pelvis so that you increase the way that the fists can roll. You increase the rotation in the shoulders, and the fists roll further than they did. Breathe freely. Lift the pelvis as high as you have to to let the fists roll as far as they will. Then leave your pelvis on the floor and continue to roll the fists back. Do not strain. Stop and rest any time you need to. Then put your legs down and roll the fists as far up as they will go and as far down as they will go.

See if you have increased the shoulder rotation something like fifty per cent. Consider what you gained going back and what you gained going forward. Then just rest with your arms at shoulder height.

Then put your arms down at your sides. Once again, sense how your shoulders are lying. Then, with the elbows straight, slide the arms up and down. Bring the shoulders up towards your ears and take them down again. Now stop and rest a moment.

Now put your arms out at shoulder height again. Bend them at the elbows so that the forearms are perpendicular to the floor. Take them down towards the floor beside your head. Then bring them back to the starting point. Continue to do that. See if you can bring them back just to the starting point and no further. Put them above your head on the floor or however far they will go and bring them back to the position where the forearms are vertical. See whether the backs of the hands and the wrists will lie on the floor or to what extent they approximate that. See if the whole back of the hand will really straighten out so that the fingers are unclenched.

Stop with your arms up and instead take them down towards your sides. See if you can put the palms and the wrists on the floor. If you cannot put them on the floor, let your head come up several times so that you can do it. Put everything down flat: the arms, the wrists, the hands and fingers. Then make it a complete movement with the hands going above your head on the floor and down below at the sides on the floor. If you cannot put the backs of the hands flat on the floor, bend your legs and raise your pelvis in order to do that. Then if you must raise the head to put the palms and wrists down, do that. Do whatever you have to do to put the whole thing down.

Then, if you are either raising the pelvis or the head, stop doing it and continue taking the arms above and below. Be very observant of what your shoulders do as you make this movement. See whether they really have to come off the floor when you take the hands down. If so, how much? See if it is the same with each shoulder. If there is a difference, define it for yourself. As you do this, be sure that you keep the upper arms out at shoulder height. You should be doing both arms at once at this time. Then stop a moment. Let your arms rest with the palms hanging and the lower arms towards the ceiling.

Then simultaneously take one arm towards the floor at your side and one towards the floor by your head. Be sure that when they meet, it is exactly at the starting point. Breathe freely. Observe what is going on in the shoulders. Take care that when the two arms pass, it is at the place where each one is vertical. Then stop and rest with your arms extended at your sides at shoulder height. Rest on the backs of the hands.

Bend the elbows and slide the backs of both hands along the floor. The hands are to approach your head as if you were saluting. Then keep the backs of the hands on the floor and continue to do that. Move both at once. Do not pick your hands up, but slide them along the floor. Try not to lose your floor contact. Keep the backs of the hands on the floor as much as possible, and the wrists and the arms also.

Continue to do it, but do it alternately with the two hands and arms so that one is going up as the other one is going down. Remember to keep them on the floor. As the arm goes away from the head and back to shoulder height, the hand stays on its back.

Then complete the movement by letting the hand come down to your side. Keep the elbow bent. You will see that on the downward movement, it must turn over onto the palm. As it goes up and gets approximately to shoulder height, it involuntarily rolls over onto the back of the hand. When it reaches shoulder height going down, it rotates onto the palm. See if you can get any sense of what those two bones, the radius and the ulna, and the lower arm are doing as you do that movement. See if you can feel at all that they really do rotate around each other and what happens in the elbow and in those bones. What makes it necessary for the arm to turn over that way so that it is one way going up and another way going down?

Also try the movement with both hands going up together and down together. Now stop and rest, but with your hands above your head on the floor. If your shoulders are sore, be careful about this one or do not try it. Also feel free to retreat from it from time to time. Some people have no trouble at all while others will not be able to do it. Some will be able to do these movements for awhile and will have to stop and rest and imagine doing them.

The arms should lie extended above the head. It means that the wrists are straight and the elbows are straight. See, in that position, how much of your hands and arms touch the floor. Then slide your extended arms up and down, so that the hands go as far away as possible. You keep the elbow straight so it is really a shoulder movement, just as you do when you do that with your arms down at your side. If you bend the elbow, it is either not a shoulder movement at all or it is greatly diminished as a shoulder movement. Continue to slide your hands up and down, keeping your arms straight. When your hands are as far above your head as you can get them, stop.

Take your arms from side to side so that when they go left, the right

arm will make contact with the right ear. Your hands are above your head on the floor. Just slide them left to right so that first one arm touches the ear and then the other. Alternate sensing the ears with the arms a few movements, and then sense the arms with the ears. Do not bring them so far that they come down as far as shoulder height. Keep them above your head.

Now see if you can let your arms lie so that the arms make contact with the ears. If you cannot do that, let them lie as close to the ears as they will.

Then, by moving the head, bring one ear to one arm and the other ear to the other arm. Slide the head along. Do not just turn it. Pick it up a little bit, if need be, and bring it to the arm. Breathe freely. Take the left ear to the left arm and the right ear to the right arm. Keep taking the head back and forth. Do that some more.

Let the arm sense the ear part of the time, and the ear sense the arm part of the time. You could also try on one side to sense the ear with the arm and on the other side to sense the arm with the ear. If necessary, bring the arms down and rest and then put them back over your head. You are doing some new movements and making some new demands that have not been made before but which are necessary to reorganize the muscles and the skeleton and also to free up in your brain the cells that have to do with the unaccustomed movements. Now stop and leave your arms above your head, extended. See if they can lie closer to the head now.

Roll your head from side to side a few times so that one ear and then the other touches the arm. Now let the left arm go out to one side a little and lie extended. Let it lie someplace where it can lie rather comfortably. Then bring the left ear to that arm. Put it where the arm and the ear can make contact. Leave the ear against the arm. Then, keeping the contact of the ear with the arm, bring the head back to the middle of your body. Do that several times. You take the arm away from the ear, then bring the ear to the arm and then bring them both back together until that arm lies alongside the head. Then leave it there and do the same thing with the right arm and the right side. Put it out there someplace where you make contact with the ear. Then bring the right arm and the right ear back to the middle. Just do on the right side what you were doing on the left. Now when you bring the head to the middle, keep the arm against the ear. Do not break the arm-ear contact. Now when your right arm can lie alongside the ear and stay like that, do the same thing with the left arm several times. See if then the right arm can lie alongside the right ear and the left arm alongside the left ear simultaneously. Then put your arms down at your sides and rest awhile.

Now see if you can put your arms back up there again alongside your ears. Now raise your arms towards the ceiling. Then see if you can bring them down so that your arms slide off your cheek bones onto the floor by your ears. You lower the arms so that they come down onto the face and slide off and rest alongside the ears, or however close to that you can

manage. Try to let the arms fall back and make some kind of contact with the face. Then just slide off the face onto the floor. Do it slowly at your own pace. Sense clearly what you do. Bring your arms in as close to your face as you can and let them slide off. Breathe freely. Now let them rest at your sides, palms down.

Notice how you lie. See how the shoulders are lying. Let the legs be extended. Let the shoulders go up off the floor. See if they make contact or much more nearly so. See about the space in between the middle back, whether that makes a different contact.

Then, several more times, put the arms overhead. See if you can lay them alongside the ears. You can do that by sliding them off the face or however you want to do it. See if the backs of the hands now lie on the floor or how close the elbows go. Do the arms in almost every way go better above your head and closer in? Do the shoulders have a freedom of movement in several directions that they did not have in the beginning? Do it a couple more times. Let them lie alongside the ears just a minute before you take them back. Breathe freely. The easiest way to do it is to let them slide off your face and lie alongside the ears. But remember to let the backs of the hands, the wrists, the elbows, everything, go as close to the floor as they can go without forcing them. Do it one final time as completely as you can and then rest with your arms at your sides.

Scan your body. Pay particular attention to the shoulders and the upper back. What else do you notice? Then slowly roll to one side and get up, not with the head first.

Walk around without hands in pockets. Let your arms move freely. See how your shoulders move. Do an about-face. Then come back and lie down.

Let us go over the various gains that have been made. Put your arms out at shoulder height, however they spontaneously go, whatever feels good. Put them with the palms down. Really sense that in your shoulders. Put them on their backs and sense that. Then put them on their sides where the small finger is. Then put them down at your sides. Then quickly, without thinking, put them out at shoulder height. See whether that is the way that feels best to you, or if you can tell. Now put them down at the side.

A couple of times, so you do not lose it, put your hands and arms over your head with the arms alongside the ears. Let them slide off the face. Go as far back as possible. Just do it a couple of times. That is enough.



10) RELEASING TONGUE AND INTEGRATING WITH BODY IMAGE \*

Lie on your back and do a body scan. Begin with the feet. Do a very careful one. See if you can sense the toes and, if so, how many of them? As you scan, go over not just the surface of your body, but try to go down into the skeletal structure and see what awareness you have of the various joints and bones. See if, in some cases, even though you may not be able to say you sense them in the usual way, you have an awareness of them and how those bones function that was not part of your body image in the past.

As always, notice where the sensing is strongest, where it is faint or where you are unable to sense the surface of your body at all. Also note whether the part that you are sensing moves at all. Observe carefully your breathing and the effects of your breathing on other parts. See whether you are aware that the shoulders move as a consequence of the breathing. How much of the back moves with the breathing, as well as the sides and the front of the rib cage? What do you feel in your neck?

Try to consider what parts you may have omitted scanning. Really scan the interior of your mouth, for instance, so you know exactly how your tongue is lying, whether your teeth are touching or how much space between the teeth there is, whether one corner of the mouth is equal to the other or if it is different in different places. How much of the interior of your mouth are you able to sense?

Now gradually, beginning slowly, turn your head from side to side. Move a little at first and then each time let the movement become a little larger. At first, roll it as far as it can easily go. As you do that, see what your tongue does. See if it goes from side to side in your mouth or whether it stays in the middle or what it does. Turn your head with the eyes closed. Take it side to side. Pay attention to what the tongue does inside the mouth. Turning your head really side to side now, however far it will easily go, note the movement, if any, of the tongue in your mouth.

Then open your eyes and do it. Observe whether turning the head with the eyes open, the tongue moves any differently than it did with the eyes closed. Then, as you continue to be aware of what the tongue does in your mouth, oppose the eye movements to the head movements. Note whether the tendency of the tongue is to go with the whole head or with the eyes. Then, without introducing any tension into your neck, come to a sitting position.

Continue to do the same thing. Turn your head side to side, opposing for awhile the eye movement to the head movement. Then observe any movement of the tongue in your mouth. Breathe freely. Now just stop and rest.

Sit with the head fairly erect. Observe the position of the tongue. See if it lies on the floor of your mouth or up near the roof of your mouth or somewhere in the middle. See where it is in relation to the backs of your teeth. Does the tip lie against them or further back, or does

it feel like it would like to force its way through as if the mouth were a little too short for it?

Then observe how quickly you can take your tongue from side to side inside your mouth, without forcing it or straining it. Then try moving it up and down. See if you notice a slightly greater tendency to inhibit your breathing when you move it up and down than when you move it from side to side.

Then retract it without swallowing it. Then push it forward and take it back so that the tip comes up against the teeth, and then draw it back as far away from your teeth as you easily can. Be sure that you really draw it back and that you do not just curl it up or curl it under. See if, when you feel as if you are taking it back in your mouth, you really are doing that rather than curling it under or curling it up. Sense very carefully and you will find that if you feel that you are taking it back very far, but you are actually doing one of those other things, you are not really sensing what the tongue is doing. You are bending it back either towards the roof or towards the floor, and turning it up or turning it under. Now stop.

Once again observe how it lies in your mouth. See whether it begins to feel wide. In almost every case, the tongue muscles are unduly contracted, and with many people you see that it is quite rounded and held like that all the time. The tongue that is habitually contracted keeps chronic tension in the jaw and also introduces tension into the neck, contributing to headaches. It may impair speech to some extent. Even a little change in it can be a serious matter for an opera singer.

Now open your mouth however wide it will go without straining. Do it two or three times to get a sense of it. Then see if you can sense clearly what you are doing with your tongue when you open your mouth. Close your eyes and see if you can sense it more clearly that way. See if it makes any difference whether you open your mouth a little or a lot. Then close it a moment.

See if your tongue lies against the backs of the teeth or what else you can observe. Then several times bring the lower jaw forward of the upper one so that the lower teeth come forward of the uppers, and then take it back. Again, always do it within the range of comfort and without straining.

Stop a minute. Ask yourself what, if anything, you do with your tongue when you bring the lower jaw forward. Do not do it. Just see if you can answer the question. Observe how your tongue is lying.

Then, maintaining the awareness of the tongue, bring your lower jaw forward and see what you do with it. See if it is possible to leave the tongue where it was and bring the lower jaw forward. Do not strain at it. Just see if it is virtually impossible to do. Then see if what you do instead is to turn the tongue under and to turn it way under, or else to fold it back up. Do either one. You can either turn it up, folding it

back towards the roof of the mouth, or you can fold it under. Which way allows you to bring the jaw further forward? See if it makes any difference.

Then just stop a moment and let the tongue lie normally. Then once again take the lower jaw forward and take it back. See if when you did that, you sensed what you did with your tongue or whether it still is not sufficiently a part of your body image and that you do not notice it without a special effort. Now stop and just let your jaw rest.

Breathe easily. See whether your awareness of your tongue is increasing. In some cases, you might be more aware of it than you want to be. Then find the position where the jaw feels perfectly at rest. It requires a constant effort of the muscles to hold the jaw up. Without that effort the jaw would hang slack, as it does with some idiots. You can see if you identify the muscular effort that you are making to hold the jaw up, why it is actually desirable that some muscular effort should be unconscious. One can become sufficiently conscious for awhile of the effort that is normally unconscious, in this case to hold the jaw up. Then it becomes a real effort and you have to learn to forget about it again so that it is not burdensome.

Now take your jaw from side to side. See how quickly and easily you can do it. Find the place where it moves most freely. See if you can sense what your tongue does when you move your jaw side to side. Does it stay in the middle, or where does it go? Deliberately take it with the jaw. Then let it oppose the jaw. When your jaw goes left, you put it in your right cheek, and vice versa. Breathe freely.

Then let the tongue go freely and again sense what happens. Try to sense what happens when you lightly and easily take the jaw from side to side. Then lie down and rest a minute.

As you rest, yawn easily several times. See what your tongue does when you do that. See whether you yawn better if you let the tongue go up or if you let the tongue go down or if you do something else with it.

Then roll the head from side to side. See if you can sense the tongue movement at the same time. Let the head go as quickly as you can easily and comfortably do it without sacrificing the range of the movement. Do not make it less extensive because you make it quickly and do not make it less free because you make it quickly. Make it as quick and agile as it can be without sacrificing the quality of the movement. Do it with the eyes closed for awhile and with the eyes open for awhile. See if you can discriminate whether that makes any difference. Any time you want to let the head rest, do it, and then continue the movement.

Now as you do that, as the head goes right let the right arm slide down and when the head goes left, let the left arm slide down. Keep the elbows straight. You increase the range of the movement further in most cases by letting the shoulder go down out of the way of the head. Do not do it in a jerky way, but make it smooth and continuous and pleasurable.

The hand and the arm should slide down the mat on the side that the head is turning towards, and slide up on the side near the back of the head. As you do that, you can feel that the whole upper body moves from side to side. The spine curves first on one side and then the other. The rib cage shortens on the side where the head is going and lengthens on the side that the head is turning away from. See if you can feel the whole upper body sliding back and forth along the mat as you turn your head and raise and lower your arms. Move from the pelvis up as freely and extensively as you easily can. You bring the armpit down towards the hip joint as you turn your head in that direction. You keep taking the right shoulder down a little further as your head goes right and the left shoulder down a little further as your head goes left. On the side that you are turning away from, the shoulder keeps sliding up higher. It means that the whole spine has to curve more and more in each direction. Now stop.

Bend your legs so that your feet are standing. Just take the head from side to side. Note what you do with your tongue. Then leave the head in the middle. Look as far to the left as you can and then as far to the right as you can. See if the tongue follows the movement of the eyes. With some, it will be a slight tendency. With others, the tongue will go all the way from one side of the mouth to the other, following the eye movement.

Without holding your breath consciously, let the tongue and the eyes go together. Also try opposing the movement of the tongue to the movement of the eyes. See if you find that that introduces an element of strain into the eye movement. If so, just do it several times and do not do it any more. Also see if you can look a good bit further with the eyes when the tongue goes in the same direction, and that the movement of the eye muscles is inhibited when the tongue opposes it.

Then look from left to right with the tongue just resting in the middle of the mouth. See how far you look. Then see whether you can look further if you let the tongue go with the eyes. Then just roll the head from side to side. Let the tongue do whatever it will, but be aware of it. Now stop.

Lower the chin towards the chest, and take it away again. Continue to do that. Be aware of the movement in the cervical spine. Then use your feet to rock your body so that it increases the movement of the head. You can put your feet as far away from your bottom as you like. Place your feet so as to make it easier to rock the body up and down. See where you can put your feet to get maximum movement in your cervical spine. Try to do it so that the neck is really free.

As you keep pushing and rocking the body, instead of moving your head up and down, make circles with it. Remember not to make too many in one direction without reversing it. By this time, you probably have a notion of how many you make. You are not taking the head from side to side any more. You are making circles with your nose. If it helps you to make circles with your head, think you are making circles with your nose.

Imagine there is a little piece of paper or wood suspended above you and you can circle with your nose on it. Now stop and rest a minute.

Without introducing any tension into your neck, use your lower body mainly to come up into a sitting position. Roll to the side. Now take your tongue back and forth over the inside of the teeth, over the backs of the teeth. Do the uppers for awhile and the lowers for awhile.

Also, without making any space between the lips, make a space between the teeth and take the tongue over the top of the lower teeth back and forth for awhile and also over the bottoms of the upper teeth. You are doing that to help yourself sense clearly the structural difference between the top of the tongue and the bottom of the tongue. What kind of surfaces do they have?

Then open the teeth and the lips a little bit and let your tongue slide in and out between so that it makes contact with the top and bottom of both the teeth and the lips. Do it gently. Use that to sense clearly the difference between the top and the bottom of the tongue. Then continue to move it in and out. Do it so that a few times you make contact just with the teeth and a few times you make contact just with the lips. Then compare those two experiences of the tongue. See if the tongue is sensed any differently by you. Compare the top and the bottom when it is a matter of contact with a surface like the teeth and when it is a matter of contact with a surface like the lips.

Then instead of holding the tongue out, let the lips close lightly and explore with the tongue the space between the outside of the upper teeth and the inside of the upper lip. Also sense the top of that space. Then instead of going back and forth in the space between the upper teeth and the upper lip, do it in the space between the lower teeth and the lower lip. Then let it go completely around so that it travels over the space between the outside of the lower teeth and the inside of the lower lip, and comes back into the space between the upper teeth and the upper lip and moves all the way around the interior, the space between the teeth and the lips. You cannot circle, but it makes a movement like exploring a football. Then just let the tongue explore the entire interior of the mouth behind the teeth. Go from one cheek to the other cheek and from the top to the bottom, as far back as it can go. Explore the roof of the mouth and the floor of the mouth. Then let it come to rest again.

See if now, with some of you at any rate, instead of the tongue lying behind the teeth, the teeth have unconsciously opened a little bit and the tongue is between them. The tip of the tongue is between the teeth now. Then whether it is or not, place it there. Just a tiny bit of the tip of the tongue extrudes between the teeth. Then bring it out a tiny bit further, and a tiny bit further, without holding your breath. See how many times you can bite down on the tongue gently. Try to get the tongue as far out of your mouth as it will go. Continuously bring it out and bite down. See if you do fifteen or twenty or thirty bites. See how many you can do. Bring it all the way out, just as far as you can get it.

Then take it back also. Do it with your eyes open and with your eyes closed. See if that has any affect on how freely you can let go of the tongue and move it out and in. Sometimes people will discover that they were self-conscious about sticking the tongue out when the eyes were open and, although they did not realize it, that was inhibiting the movement. When they closed their eyes they were able to make more bites and the tongue went out further than it would when that inhibition was functioning. Keep trying to get the tongue further out.

These muscles are very important for many reasons. They are chronically contracted in almost everyone. It is important both to give it an opportunity to release the chronic contractions and also to bring it better into your body image. It is, in fact, related to eye movements, to speaking, to breathing, to eating, to all kinds of things. So you want it to be as healthy and free a tongue as possible.

Now stop and observe how it lies in your mouth. However, see if you can sense now the top of the tongue and the bottom of the tongue, and the sides of it. See how far back you can follow it into your mouth just by sensing. See if it is clear in your body image in a way that it has not been clear before, that you really know it is there now.

Now bring your lower jaw forward and take it back. See if now you are conscious of what you did with your tongue. Before when it was done, scarcely anyone had any consciousness of what he or she was doing with the tongue. Now almost everyone should know.

Open your mouth wide and see if you can sense what you do with your tongue. If you sense it spontaneously, the connection between the tongue and the brain has improved to the extent that you really know what it does. The nerves are functioning again that were not functioning before. Then sit and rest.

See how your tongue feels most comfortable in your mouth. See if, in this relaxed state, when you bring your teeth together firmly, it is a little bit too small a space for the tongue, so you end up leaving a little bit of space between the teeth for it. That is how it should be. The teeth should not touch. There should be a little space between them. The proper degree of tension in the muscles that support the jaw should be such that the teeth almost touch but do not quite. When the tongue is free, then the tip of it will just barely go between that little space between the teeth. Usually it is tense enough that it will lie just to the rear of the teeth. When it is really free, it will take advantage of that little bit of space and the tip will go out a tiny bit, not enough to be accidentally bitten however.

Now just turn your head smoothly and gently from side to side. Then raise and lower it. As you do that, oppose the eye movement to the head movement a few times. Raising and lowering the head, exhale when you take the head up and inhale when you take the head down. Then see whether it is any better the other way, when you inhale when the head goes up and

exhale when the head goes down. Do you prefer that the breathing go with the eyes or with the head? See if you can tell which is more comfortable. Then let them all go together so that you exhale when your head goes down and the eyes go down, and you inhale when the head goes up and the eyes go up.

Then put your hands on the floor a little behind you. Make some circles with your nose. In other words, the head circles. As you circle with the head, remain aware of the tongue in your mouth and also try to sense what you are doing with your right ear. When you think that you have established a sensory awareness of what the right ear does as the head circles, then maintain that. Sense also the left ear. See whether the left ear does the same thing as the right ear or if it feels different. Try to define for yourself what the difference is that you sense. Remember to reverse the circling of the head from time to time.

Now put your hands a little further behind you and try to find the distance behind you that will give the head its greatest freedom to circle. Try to find out what that distance is. If you put the arms too far back, you will not be able to make as big or as easy a circle. If you put them up too close, you will also not be able to make that optimal circle. Try to find out what the proper distance is. Try doing it with the soles of your feet together. Make the largest circles you can comfortably make. Do a few one way and a few the other way. Maintain awareness of the tongue and breathe freely.

Those of you who know that you can do it safely, circle rapidly with the head a few times and reverse it. In some Tibetan practice you continue to increase the number of rotations of the head until you do at least a thousand in each direction. They do it so quickly that the head is a blur. This is very good for the vestibular system, for the inner ear. It almost eliminates any tendency to dizziness. If anybody feels that he or she can do it safely, make your head a blur. Then lie down and rest.

Once again, turn your attention to your tongue. Sense how it lies and how differently it lies when you lie on your back from the way that it lies when you are in a sitting position. Be aware of the whole surface of it if you can. See whether it has a different relation to the teeth.

Then again take your tongue out bit by bit, or bite by bite, as far as it will go. Then bring it back in the same way. See whether you can exceed the number of movements, in and out, that you made before. Breathe easily as you do it. Now stop.

Turn your head from side to side again. Let your jaw be loose and your tongue be very free in your mouth. Let the breathing be free, as well as the eyes and all of the face muscles and the shoulders. See how quickly and lightly and smoothly you can roll your head from side to side. Then stop with the head in the middle.

Place both hands on top of your head. Let the elbows rest on the

mat or lie as comfortably as you can holding the top of your head in your hands. Breathe up into your hands, at the same time being aware of the tongue. With every breath, bring it more and more into your awareness. Also bring the whole mouth cavity into your awareness as you breathe up into your hands and beyond. Bring into that awareness the lower jaw, including the teeth. Become aware of where it attaches to the skull, those hinges at the side where it opens and closes. Bring the whole lower jaw into your awareness. Breathe up and increasingly bring more and more of the internal head as well as the external into your awareness, including now the upper teeth, the roof of the mouth, so that the lower jaw and the tongue and the interior of the mouth are all clearly there for you as you continue breathing up and expanding your awareness, so that it includes the sides of the face, the cheek bones.

Bring in the nose and proceed on up so that you are sensing clearly the eye sockets and the eyes, without sacrificing any awareness of the rest of the head up to that level. Breathe up and increase the breathing awareness into the whole space of your head, inside and out. Now see if you can bring into that your ears and the ridge of bone above the eyes, the ridges above the eye sockets and the forehead. Then bring in increasingly the sides of the head and the back of the head.

Breathe on up into the top of the head where the hands are. See if, as you do that, the distance between the jaw and the tongue and the top of the head appears to increase so that you have to travel back down to retrieve some of the awareness of the jaw and the tongue that you have lost and sharpen them again. The tendency as you move up is to withdraw and get further away from the lower part of the head. Being aware of that, keep the whole thing equally in the body image. Then take your hands away and put them down at your sides.

Continue to breathe up into your brain space. Fill out the awareness of the head by including the brain until you sense just as much of it as you possibly can and you have as great an awareness of the whole as you can get, including the nasal passages and the eye sockets. Bring the outside of the skull in, and the scalp.

See how perfectly you can sense the whole thing now. Begin with the lower jaw and the tongue. Try to bring the whole head, including the inside and the outside, as perfectly as you can into an image that you sense or feel that you sense. Make it a simultaneous awareness that includes the pathways of the senses and the breathing. See if you can feel as if you are breathing with the whole head, sensing even the hairs of your head. Then come to a sitting position without stiffening the neck and putting any tension into it.

In that sitting position, close your eyes. Continue to breathe and fill the whole space of your head with your breathing. Then try to sense simultaneously the whole outside of the face and head and the inside. Then see if it is a very easy matter now to be aware of such things as the tongue and the teeth and the interior of the mouth and perhaps the ears,



things that ordinarily are very unclear in the body image, or not there for many people. Try to get the most complete awareness of your head that you have ever had. Retaining that, let the breath feel as if it goes up and up through the top of the head so that perhaps the skull will even feel that it elongates a bit when you inhale and comes down a little when you exhale. Keep the whole head in your awareness. As you breathe up, let the neck lengthen and the head move up a little with the breathing like a balloon that is being inflated with helium so that the breathing makes the head want to float up and carry the body along. The feeling is of wanting to drift up, of being light and yet, at the same time, very well defined in your consciousness. If you want to think of some one part of it, whether it is the eyes or the tongue or the forehead or whatever it is, just that thought will bring it into a much clearer focus, while at the same time keep as the background of your consciousness the entire head. Then just slowly roll to one side and get up.

Walk around a bit. Continue to keep that head as clearly in your body image as you can. Allow it to pull the whole body somewhat upward. Then see if now the tongue seems to you inescapably present and unlikely to be forgotten.

## 11) BRAIN: IMAGING AND MOVEMENT (FEET) \*

This exercise makes the point that the brain itself is unable to distinguish, in many cases, between an image and a precept, between a so-called subjective experience and a so-called objective reality. An "objective" experience occurs in the world that is outside a person's body, but all experience is subjective in the sense that it occurs only in the brain and in the mind. Your experience of me is a subjective one. You only assume that I am an objective reality, and I experience you in the same way, so that our experience of each other is really of an image and not of the thing as we initially perceive it. The brain constructs the object that is seen out of something that is composed of particles in motion that might, if we could see it as it really is, appear to be something very, very different from the thing that is presented to our consciousness after the brain does its symbolic coding of the raw stuff called reality.

Perhaps it is not anything to wonder at that the brain does not differentiate between the so-called subjective and objective realities, since known reality is all subjective anyway and it deals only in images. There are a lot of assumptions to the effect that the brain sees what is outside of itself and that we somehow have an experience of something objective. If you accept that, then it becomes mysterious why the brain fails to differentiate but, rather, acts upon other parts of the body similarly whether the experience be one of something that is a movement or something that is an image of a movement. If you keep in mind that it is possible to present the brain with images that it will mistake for what we call actuality, then you can use the brain to affect the body in very remarkable and profound ways.

Everyone knows that the brain, when so deceived, can carry out very elaborate processes within a human body. One of the most commonplace instances that almost everyone has personal experience of is nocturnal orgasm during dreaming. The brain mistakes the dream for objective reality and triggers that whole very complex sequel of events that leads to a sexual climax. There are people who, if they can sufficiently and vividly image or even imagine sexual activity, can achieve the same thing in an awake state, or even more easily in a trance state or with certain drugs that facilitate images. There are many other complex activities that can also be engendered by images. There is a book by the late Russian neuro-physiologist, Luria, called The Mind of a Mnemonist. It is about a patient he had who was able to image very, very vividly. If this man imaged a candle and held his hand next to it, his hand would burn. If he imaged icy water and put his hand into it, the hand became completely anesthetized.

The response of the body to images is undoubtedly a very major factor in both illness and health, in determining when we die, how we age and so on. It is one of the reasons why there is such a great effort to change the notions about aging, because they work as self-fulfilling prophecies. The body ages according to the expectations and the images of age that people hold. If that can be reversed, then the aging process will undoubtedly move

much more slowly.

This exercise is done seated and barefoot. There are many, many exercises that can be done seated in chairs so that, if you have people who are unable to sit on the floor or if you lack space, it is still possible to do a very satisfactory psychophysical workshop or training program. We will do exercises seated from time to time. However, that is not the reason for doing this one. This one is to show you the similar responses that the body makes to what we call actual movement, and to what we call imaged movement.

First of all, close your eyes. Place your feet side by side and about six inches apart, so that the fronts of the feet and the backs of the feet would be on the line if there were lines on the floor. Do it by feeling, not by looking. Only after you have felt, then look and see if the feet are in fact lined up that way.

Then again with your eyes closed, consider that you are going to rap with the balls of your feet on the floor. Place the feet where you think the rapping with the feet would be optimal, but do not rap. Just put the feet where you think you could rap best. Then, leaving the heels on the floor, actually rap with the balls of the feet. It makes quite a bit of difference how far the feet are from the body, how well you can rap with the balls of the foot. Take them further away and bring them closer, and so on. Find out in what position the rapping is best done. Now keep the feet in that position where you can best rap with the balls of the feet.

In that position, try rapping with the heels. You will find that if you really have the feet in the position where you can best rap with the balls of the feet, then you can rap only poorly with the heels. Put the feet where you can do the best rapping with the heels. The heels should come up fairly high when you do that so that the ankles flex and extend, but it is not the position where the heels can come up the very highest. Find where you can put your foot so that your heel can come up highest. You have to bring it in very close to you. In the position where the heel can come up the highest, you will discover that you cannot lower the heel to the floor once it has been raised. Place your feet in that relation to your body which will enable you to bring the heel up very high but will not allow you to lower it to the floor. Make a little effort, but not enough to hurt yourself, to force the foot down. Try to make the heel touch the floor.

In doing that, you experience something of what is experienced by some women who habitually wear very high heels and then suddenly try to stop, perhaps because they are pregnant and are advised to stop wearing shoes like that. Then they find that they have so altered the muscles in the legs that the heels will no longer go down to the floor. They find that they can only wear low-heeled shoes with pain. For some women, it takes months to re-organize the body so that they can stand on the ground, and some do not manage it at all. Now stop.

We are going to work just with the left foot for awhile. Place the left foot where you can best rap with the ball of the foot. Give your attention wholly to the movement, as you should always do when performing Psychophysical Exercises. Try to really find the place where the rapping is easiest. Then stop.

Try rapping just with the toes. You should find that the difference in the relation of the foot to the upper body is not at all so extreme as that between rapping with the heel and rapping with the ball of the foot. Still, the position where you can rap best with the ball of the foot is not the same as where you can rap best with the toes. Try to find where you can rap best with the toes. You should sit forward with all of these positions. Sit far enough forward in your chair so that your leg has freedom. If you sit too far back you will not be able to find any of the positions where the foot moves best.

Then bring the left foot back and rap with the heel again. The optimal position is when the ankle flexes the most and the heel comes highest into the air, but yet it is still easy to lower it to the floor. Then stop and let the foot rest. Put both feet flat on the floor.

Now just slide the left foot forward and back. Do not slide it out to the sides. Slide it forward and back. Make it an extensive movement. Then stop when the left foot is alongside the right one. Just take the ball of the left foot from side to side along the floor. Let the heel act like a hinge, and swivel the foot from the heel. Try to move the surface of the foot along the floor; do not have it up in the air. It is important that you sense the floor with the bottom of the foot. Try to keep as much of the bottom of the foot on the floor as possible. Then stop.

Now instead, slide the heel from side to side. Try not to pick the heel up. Then just rap lightly with the whole foot on the floor. Pick it up and let it down, and do it lightly. The lower leg should be at about a right angle to the upper. You put the whole bottom of the foot down. Now stop.

Close your eyes and sense the left foot. Compare it with the right foot. See if it is clearer in your consciousness, your awareness. Then see if this is also true of the left knee, shoulder, eye, side of the mouth and face. Is the body image clearer on one side than on the other?

Extend the left leg. Leave the heel on the floor and raise the front part of the foot. Make some circles with the front part, rotating from the ankle. Make some in one direction and some in the other direction. Then stop and place the foot where you think you can most easily turn it onto its outside and onto its inside. See if you can find that place. The movement should be in the ankle. Do not take the whole leg from side to side; then the movement is in the hip joint and not in the ankle. Let your hand rest on your knee so that you can sense whether the upper leg moves or not. Do not allow the movement to be in the hip joint. Make it be in the ankle only.

Again, it will make a difference where you put the foot. Eliminate the

movement from the hip joint. If you have to, put one hand on the knee and one hand on the hip, the left one of course. Make sure that the movement is in the ankle. There will be a very slight movement in the knee, but there should not be any movement in the hip. It is a foot and ankle movement. Now roll it from side to side. Stop.

Just slide the foot back and forth along the floor. Use the foot to sense the floor. Orient yourself towards the world outside of yourself so that your intention is to sense the floor and learn everything you can about the floor. Then alter that orientation so that your interest is in your foot. Learn about what the foot is feeling and how the foot feels, your foot's own sensations. This is a self-interest, a self-oriented sense. Then see if you can shift smoothly back and forth between an orientation to the outer world and the inner world, self and not-self. Most people are shifting that orientation all the time, for the most part unconsciously. You also find some who almost continuously are oriented towards the external world and others who are almost continuously oriented towards their own sensations and feelings. This one-sided focusing naturally makes a great difference in their thinking and behavior and what their personality is like. Sometime you might try to introspect and examine the way that you function in everyday life. Try to observe when you are oriented towards the outside and when you are oriented towards your own feelings and sensations.

Now continue to shift awareness, but instead make circles with the foot. Make some clockwise and some counterclockwise. When you go clockwise, try to learn about the floor. When you go counterclockwise, pay attention to yourself. Then do the opposite, going counterclockwise and orienting yourself to the external world, and going clockwise and orienting yourself to your own world of feelings. Then stop.

Once again, sense the two feet and the two sides of the body. See if you understand what neural re-education means. It means to alter the body image, to re-educate the sensory mechanisms. By doing these things, you alter your self-awareness in a drastic way. The body that you sense, the body of your experience, changes dramatically. Anyone with experience of Psychophysical Work will be aware of the fact that when the body image is sharpest, then the functioning is also best. However, the body image must be in coincidence with the physical body or else the action taken is not the action that one thinks one is taking. Clarity of body image alone is not enough. It has to be a correct body image, coinciding with the actual physical body.

Now rap a few more times with your left heel. Place it where the movement is optimal. Then place the foot where you can best rap with the ball of the foot. Then place it where you can best rap with the toes. Flex and extend the toes. Place the foot where it is quick and light and easy to do. Slide the foot back and forth a few times. Stop when the feet are symmetrical.

Get up and walk around for a bit. Compare the contact the left foot makes with the floor with the contact the right foot makes. Which foot is

more flexible? See if the left knee moves differently than the right one. Also see if there is any difference in the two shoulders as compared to the way that they ordinarily are. Then come back and sit down.

The difference in the sensing and functioning has been achieved by means of movement accompanied by awareness of the movement, by focusing on the sensing. To the extent that the movement has been done with awareness and focused sensing, the left foot should be well differentiated from the right, and the body image should be clearer on the left side. The entire left side, not just the foot, should function better.

Now the question arises whether the brain will alter the body to the same extent if you only imagine or image the movements. If the body is altered to the same or a greater extent by means of images alone, then presumably that means that the brain either cannot differentiate between the imaged movement and the actual movement, or it does not care one way or another. I think the fact is that it is not able to differentiate. There are many reasons why, based on my experiences with hypnosis and psychedelic drugs, I think the brain does not distinguish, rather than that it does not care or just happens to respond that way.

Close your eyes and try to get a clear image of the right foot. You will probably find it difficult because the left foot is now much clearer than the right one. In some cases, the right foot will barely be there at all at the moment. In fact, if you differentiate enough, one side of the body will disappear, so far as the sensing of it goes. It will be there not at all or just barely.

Now do, in each of the following cases, just a couple of movements, not at all resembling what you did on the left side. This will give you an actual experience of the sensation involved in the movement. Then you will imagine or image the movement, whichever you are able to do. Three kinds of images, or imagination, will be involved here. For our purposes, the most important of these is kinesthetic images. That is the feeling of the movement itself. The second is tactile images, which means the sense of touch, the contact that the foot makes with the floor. In this case, the contact of the foot with the floor is what you will be imagining mostly. Thirdly, use visual imagination or imaging, knowing what the movement looks like. By using all three of these you will create a much more complete reality than if you used only visual imagery or only kinesthetic imagery.

Place your right foot where you think you can do the best rapping with the heel. Rap just a couple of times. Then stop and, drawing upon the sensing that you just did, about fifteen times, imagine or image the rapping. Try to make the sensory powers of your imagination so strong that you can really feel it. Now continue to imagine rapping with the heel, or to image it.

Try to pay close attention to what you are doing as you do that. See if it is harder work to image the movement than it is to actually do it. You would think that something done in the mind would be easier. However, see if

you do not feel the imaging of the movement to be more difficult. Do you tend to interfere with your breathing, or to tighten your shoulders and neck muscles, or to do other various things that make the imaginary movements hard work?

Now imagine some movements with the left heel rapping. Observe what you do with your body. Then stop and do a few actual movements with the left heel. See if, as soon as you start doing the actual movements, the tension lets go and the thing becomes comparatively very easy. The physical movement is easier than the imaginary movement so long as the imagination, the imaging faculties, have not been cultivated. When they are untrained, then the imagined movement is harder. Now stop.

Again imagine rapping with the right heel. Try to not tense the shoulders, neck and face. Do not hold the breath. Also observe, as you imagine that just as vividly as possible, whether you can feel the tendency in the right heel to rise and whether, perhaps, you actually do move it a little bit. In fact, when you imagine any movement, there are measurable micro-movements, very small movements, made by the muscles in response to the images. See if you can be aware of that. Also, see if you can be aware, or if it seems to you that you are aware, that your brain is sending those signals down to the foot to raise and lower the heel. Then if you sense actual movement in the heel, try to sense the signals also coming back to the brain. See if you notice when you inhale, the heel tends to come up a little bit, and when you exhale it goes down. Let the same thing happen with the shoulder and other parts of the body, rising and falling with the exhalation and inhalation.

Now actually put the foot out where you think you can rap best with the ball of the foot. Do it two or three times and note carefully the sensations. Then stop and imagine it. Do the actual physical movement only two or three times so that it is not enough to substantially affect the results. It is just to give you something to work with in your imagination since you are not able yet to imagine those movements well enough otherwise. Imagine rapping. Imagine it very vividly and try to not do those things with your body that make the imagining physically difficult.

Then, observing closely, rap two or three times with your toes. Then continue imagining doing that. Then imagine sliding the entire foot from side to side. Actually do it a couple of times first, and then imagine doing it. Imagine the contact of the foot with the floor in that side to side sliding movement. Then slide the foot forward and backward a couple of times. Observe, and then imagine that. Do not do it more than two or three times. Imagine it very vividly and, in so doing, do the same thing that you did before. Orient yourself towards learning about the surface beneath your feet for a number of movements, and then switch back the orientation towards your own feelings. Do a number of movements like that. Try doing about ten of each before switching to a different orientation. Continue with it for awhile, and then stop and rest a minute.

Your hands should be lying on the thighs, the palms down. Let the middle finger rest in the middle of the leg. Sit far enough forward in your

chair so that it rests easily on the knee. You should be far enough forward so that the body can be upright and the fingers can rest easily on the knee without your bending.

Now move the ball of the foot from side to side a couple of times, using the heel as a hinge. Then stop and imagine doing it. Remember to try to learn to make the imaging easy. Learn to avoid those things that make it hard work. In fact, with practice it becomes both easier to do and the imaging becomes much stronger and more vivid.

Now do a couple of movements taking the heel from side to side. Note those sensations. Then do that movement in your imagination. Remember to use the kinesthetic, the tactile and the visual sensory imaginations. Now stop and rest with the hands on the knees.

Compare the two feet for a moment. See which is clearer in your body image, and also which knee, which hip joint, which shoulder and which side of the face. See if it is different from what it was before. Remain seated about halfway forward on the chair; otherwise you inhibit the leg movement.

Then extend the leg out to where you think you can most easily turn it onto its outside and onto its inside. Do that with actual movements a couple of times. Then continue to do it with your imagination--kinesthetic, tactile and visual. Now stop.

Pick your foot up and put it down lightly several times. Then continue to imagine doing that. Then make several actual circles on the floor, two clockwise and two counterclockwise. Note what it feels like. Then continue to imagine making those circles. Make large ones and small ones, clockwise and counterclockwise. As you alternate the direction of the circles, also alternate your orientation between self and not-self. Learn about the floor, and then learn about the feelings in the foot. The shifts in reality orientations are particularly potent in strengthening the neural circuitry.

Now, drawing on past experience and without doing any actual movements, just move the foot back and forth in your imagination. Again, switch the orientation back and forth between the so-called objective and subjective realities. Imagine pressing hard so that you sense clearly what the floor feels like and so that the sensations in the bottoms of the feet are stimulated. Now stop.

Again, without doing any actual movement, remember what it feels like and rap in your imagination with the right heel on the floor. Imagine it very strongly and see if you note any tendency of the heel to rise. You might notice a shift in the pressure of the toes on the floor.

Then put the foot where you think you can best rap with the balls of the feet. Imagine that movement. Imagine doing it very quickly with the ankle flexing a lot. Make it light, but vigorous and rapid rapping.

Then imagine rapping with the toes. Bring them up as high as you can,



in your imagination only. Then just a few more times imagine sliding the foot forward and backward along the floor. See if you can simultaneously and equally sense the floor and the feelings in the foot. See whether, when you do that, it seems to you that the orientation is more towards the floor or towards the foot. Now stop.

Keep the eyes closed and see which hand you sense more clearly, and which foot, which shoulder, elbow, knee, ankle and which side of the face.

Get up and walk around. See if now it is the right side that moves better, the foot having a better contact with the floor. Is it more flexible with the knee moving more on the right side? Try to determine whether the change is the same from the imaginary or imaged movement, as compared to the actual, physical movement, whether it is greater, whether it is less. See if there is some kind of qualitative difference in the way that the body feels; that it is a different sensuous quality that the imaging gives from what the actual movement gives. It is a subtle discrimination that you should try to make, to see what the difference is between what is achieved by the imaging and what is achieved by the movement. Then come and sit.

Now close your eyes and put your feet side by side. Can you sense much more clearly the right foot and the right side of the body? Now we are going to equalize the two sides. It means to some extent that you will have to exercise your own initiative, because with everyone the amount of work that has to be done to equalize will be different. I will give you some movements first that will bring you much closer to a balance between the two sides, and you can finish it off yourselves.

First of all, just rap with both heels on the floor. Put the heels where they rap well and see if one raps faster than the other. If they were in a race, which would win? Then put the feet where the balls rap best. Then just rap with the toes, in the best position to do that. Use all of the toes, if you can do it.

Then put the feet where you can rap with the heels, and imagine doing it, both of them at once. Imagine it as vividly as you can, rapping with both heels. Now place them wherever they rap best with the balls of the feet, and imagine doing that. If you need to, you can actually do it several times to get the feel of it. Then, using all three varieties of imaging--kinesthetic, tactile and visual--imagine doing it. Then adjust the feet a bit, and imagine rapping with the toes. Do it physically a few times at first, if you need to.

Then do five movements swiveling the balls of the feet to the left and then to the right together. They both go in the same direction. They both go right, they both go left. Slide them along the floor. Then imagine doing it.

Now, instead of doing that, swing the heels left to right, sliding the feet along the floor. Let them move equally and symmetrically. Sense clearly what you are doing, where the movement is. Then imagine doing it.

Now again physically move it. Slide the feet forward and backward along the floor. As you do that, alternate between awareness of the floor and awareness of the feelings of the feet. Do a number of movements sensing outward and a number of movements sensing inward. These are all misleading ways of speaking but the language does not really allow for an accurate description. You understand, but it is not adequate language because the language is so geared to a differentiation between the "subjective" and the "objective" world when it comes to describing things like movement and senses.

Now make some circles with your feet. Do some one way and some the other way. Now with one foot sense the floor and with the other foot pay attention to the feelings in the foot. One foot is outer-directed and one foot is inner-directed. When you change the direction of the circling, also change what the foot is doing so that if it was the left foot that was outer-directed now it is the left foot that is inner-directed, and the reverse. Do that a number of times, changing both the direction of the circling and the orientations of the respective feet. Then imagine doing it. Breathe freely and do not tense up. Now stop.

Sit with your hands resting lightly on your knees, your body erect. Close your eyes and see whether you sense equally the two feet, the two hands. Does it seem to you that your nose is in the middle of your face? Now if you still sense the right side more clearly, do some work with the left side. Do your own work. Do it both physically and in the imagination. If there is an imbalance in either direction, work on the side where the image is faintest to make it as vivid as it is on the side where it is strongest. Do it with movements of the foot, the kinds of movements we have been doing. However, choose your own and choose to what extent you do it as actual physical movements and to what extent you do them as imaginary movements, provided you do some of both. When you feel that the two sides of the body are equally clear, that the body image is the same on both sides so that it is a complete balanced body image, then get up and move around. See if the two sides are equal. First achieve the balance. Everyone is to work at his or her own pace. Take your time. Do it well, with regard to what you sense you need. Now sit down.

You see that the mind can use the brain by means of sensory images to re-organize and change those functions of the body of which it has some experience. Now you can, at this point, use the mind and its images to cause the brain to re-organize the body so long as you have knowledge of the sensations that are involved. You have to know what the sensations are in order to image them, before you can exert any conscious control over the organism itself in the way that you were doing. There are also many processes of the body that you are not able to sense.

To the extent that you are able to increase the range of your sensing, to sense inward and to actually acquire some sensory knowledge of internal processes, then you can bring those under conscious control as well. Otherwise, they can only be controlled through some kind of collaboration with the unconscious. To control such things as heart rate and skin temperature

and blood flow and brain waves and other ordinarily involuntary processes, it is really only necessary to establish a relationship with the unconscious that will take advantage of the knowledge the unconscious has of how to use the brain to regulate those involuntary mechanisms and processes. It is a somewhat dangerous and haphazard process as compared to establishing conscious control. Therefore, the range of conscious experience should be made as great as possible. The sensing and the conscious awareness should penetrate as far into the body, as deeply and as completely as it will go, so that the conscious mind can be used to bring about any of the changes that you want to bring about. Beyond that, you can only work with your unconscious and ask it to do these things for you. You can accomplish this by forming some kind of effective relationship between the unconscious and the brain.

At the beginning and throughout this exercise, the point has been to show that the brain does not discriminate between images and objective actions. When you see the changes that your body makes in more or less the same way, regardless of whether you do the imaginary or the actual physical movement, you understand that it is so. The body will also alter profoundly--and more mysteriously--in response to symbols, but that is another matter.

## 12) THE ARCH \*

(If possible, before you begin this exercise provide yourself with some cylindrical object hard enough not to yield to the foot and wide enough so that both feet can rest on it. The object should be as large or a bit larger in circumference than an ordinary rolling pin. A rolling pin can, in fact, be used, but if possible find something a bit longer and a little larger. A cardboard roll used in packaging is good for the purpose, if stiff enough not to yield to pressure when the foot's weight is applied to it. If you are unable to obtain a suitable cylindrical object, you may omit that part of the exercise which calls for it. However, best results will be had if the work with the cylinder is included.)

One of the most common foot problems, and sometimes one of the more distressing, is that of "flat feet." Actually, when this condition is congenital, the foot is in some important respects superior to feet having normal arches. The distinction between congenital and acquired flat feet was for some reason not made by the U.S. Military for some time. Thus, during World War I, all men with flat feet were rejected for military service. By World War II, however, it had been discovered that men with congenitally flat feet, or with a very minimal arch, could actually outperform men with so-called "normal" feet, marching longer without pain or fatigue, doing better on rough terrain, etc.

In the case of acquired "flat feet," the arches have "fallen," altogether or almost so. This happens to some people when they become too much overweight and to some whose jobs require a good deal of walking and, more particularly, standing. Policemen and waitresses are frequently cited examples. In those cases, there is often chronic and sometimes rather severe pain.

Almost no occupation or amount of body weight will ever produce fallen arches or flat feet when the posture is good and the body is otherwise well-used. Posture and other elements of use determine the pressure exerted on the foot in walking and the way the body weight is experienced. A quite obese man or woman whose body is well-positioned with respect to gravity will move very lightly, and the feet will experience little pressure. On the other hand, a very slim person with poor posture can come crashing down on the foot with each step with a force equivalent to a number of times the actual body weight. That person is then, for all practical purposes, "heavier" than the person who has good posture but whose weight, as measured by the scale, is far greater. The average person, with average defects of posture and body mechanics, comes down on the foot with every step taken with approximately three times the body weight. Even in rising from a sitting position, such a person exerts a pressure on the feet that is well beyond the actual body weight. If you doubt this, sit in a chair, put some bathroom scales under your feet, and then rise to a standing position. The needle on the scale will then go far past the weight of your body to demonstrate some of the pressure exerted on the feet. Were good mechanical use of the body present, the needle would move only to the

point where it indicated the body weight and then would go no further.

Almost all books by podiatrists and other physicians assert that nothing can be done by the person to remedy flat feet once the condition has occurred. The only possibilities offered are arches built into the shoe and, when the patient's pain is sufficiently acute, remedial surgery. Often, neither of these approaches is successful, and the patient well may be left worse off than she or he was before. And, of course, in the case of surgery, damage may be irreversible.

The fact is that arches that have "fallen" and feet that have "flattened" can often be helped by means of suitable exercises or work on the feet performed by a knowledgeable teacher of Psychophysical Method. Moshe Feldenkrais, in Body and Mature Behavior, asserts that nothing in particular needs to be done for flat feet. When the person has learned to stand and walk efficiently the correction will simply occur, if it has not already occurred during the learning process. To give another example, the late Ida Rolf, in Rolfing: The Integration of Human Structures, reports that flat feet can often be corrected by a teacher working on the flat feet with his or her hands. I have also seen it happen, as Feldenkrais asserts, that the correction occurs without special effort, as posture improves and good use is established by means of a general program of psychophysical re-education.

In some cases, including the congenital ones, pain accompanying the flat feet is mental or emotional in origin, and basically is caused by vanity, or the belief that pain should be experienced. The notion that high arches are beautiful or attractive, in the case of women's feet especially, can give rise to much dissatisfaction and other distress when the person's feet do not measure up to such a criterion. I have seen cases where women actually attempted to heighten the arch by clenching the toes and succeeded in creating a condition that eventually was maintained without conscious effort. They achieved this by contracting the toes and otherwise distorting the shape and the functioning of the feet and, in the process, bringing down on themselves troubles of various sorts, some pain commonly included. The arch so attained somehow blinded these persons to the fact that the toes were now ugly and the foot in general much less attractive to look at than before. Good functioning, health and aesthetics all had been sacrificed to achieve an end that was worse than the beginning.

Apart from such consciously self-directed folly, not a few persons have arches that are too high, for somewhat similar reasons. When shoes and/or stockings that are too short are worn over a period of time the toes tend to contract to accommodate themselves to the shortness of the footwear. Shoes that are too narrow also will cause the arch to rise as a part of the process by means of which the foot, its muscles contracting, becomes narrower and rises in a effort to escape the pressure of the shoes. The responses to the pressures from the shoes are continuous signals to the brain to re-organize the foot. When this has been done often enough, the sensory mechanisms and the neural connections are damaged and the brain continues to hold the foot in its distorted condition by means of chronic-

ally contracted muscles. One rarely hears about excessively high arches, but they are not at all rare in my experience. In fact, I would say that most arches are too high and that these greatly outnumber those feet which are regarded as flat.

It is a general rule in doing Psychophysical Method work with the feet that they get both wider and longer. The spaces between the joints are increased as well as the spaces between the toes and the long metatarsal bones which lie behind the toes and which, in the skeletal foot, appear to be extensions of the toes. With the loosening and lengthening and widening of the feet, they also appear and feel softer on both tops and bottoms. It is this natural softness and yielding capacity of the bottoms of the feet that allows many people who never wear shoes to walk over surfaces we can barely tolerate even when wearing our shoes. Such peoples do not usually, as some have supposed, have heavy callouses on the bottoms of their feet, but rather the feet are so soft that they shape themselves around the surfaces they touch. There are some people the bottoms of whose feet are so soft and pliant, they can walk on glass without being cut. In various parts of the world, people without shoes have no difficulty walking and climbing over rocky terrain.

Despite the advantages--health, functioning, appearance--some people are distressed when they lose their self-induced "high arches." They have to be convinced that what they regarded as "beauty" was, rather, deformity. No one doing the exercises presented in this book should object to losing a bit of the arch to gain the benefits described. No one I have heard of ever has acquired flat feet as a consequence of doing psychophysical re-education work. However, I have no doubt that someone could achieve it if important instructions were ignored and the work was done excessively or foolishly enough. When the work is done properly, any reduction of the height of the arch will be minimal except in the instance of the arches which are clear-cut cases of pathology.

Now be seated in a straight-backed chair, preferably one without arms, and we will work with the feet bare, as usual. In the future you can begin at this point and eliminate re-reading the preliminary discussion, unless you should care to review it.

First of all, take notice of your arches. To observe them, do you try to sense the feet themselves or do you look at them visually, from the outside as it were, and as you might observe the feet of someone else? Sense them both ways, by looking and by feeling, and note whether the impressions gained by the two methods coincide.

Then get up and walk around a bit and try to experience the foot's arches. As much as possible, walk just as you ordinarily do, but note closely that contact of the foot with the floor which might define the arches for you.

As you walk, experiment a little and observe whether it is possible for you either to increase the arch, or to flatten the foot, so decreasing

the arch. Could you perhaps flatten one foot while you increase the arch in the other foot, and do it without interrupting either your walking or your breathing? What method do you use to achieve this? One way might be to contract the toes of one foot while pressing down on the middle of the other foot. That is the method the person is most likely to hit upon. There is another much more curious method an occasional person might discover. That is, while walking, to rotate one knee out and the other knee in, and so doing without walking on the edges of the feet. The effects on the arches of rotating the knees are more easily observed when one is sitting. To walk in such a way is very awkward. See, too, if you can find any other ways of increasing or decreasing the arch as you walk, but do it without introducing into your foot or your leg undue strain. Then come back to your chair and sit down.

Sit with your feet equidistant from your body and with a fair amount of space between them. Let your hands rest lightly on the tops of your knees. Compare the two arches and try to sense whether one is any higher than the other. In general, do your two feet rest on the floor in the same way? Do the same parts of both feet touch the floor, and do they exert an equal pressure on it? What other comparisons can you make?

Now, for awhile we are going to work with the right foot. Unless otherwise indicated, all instructions will apply to the right foot only. (Another time you can do the left foot.) First of all, see how much you can tighten the arch by clenching or contracting the toes. Do it a number of times and observe what happens throughout the foot. Just be sure that the heel of the foot remains in place. Also, in flexing the toes, keep the toes on the floor. They will have to move along it but keep them on the floor all the same.

No matter how much you manage to flex your toes, you are unlikely to do it as well as some people who keep the toes habitually flexed. As you continue you can doubtless make better and better hammer toes for yourself but some who have done it without trying will have outdone you.

Now do raise the ball of the foot and the toes off the floor and continue to flex them, feeling the effects that this has upon the arch. Does the arch increase more when the toes are on the floor or off it? Put the toes back down and try to increase the arch while you move the toes as little as possible. Then just allow the foot to rest.

Now instead of clenching or flexing the toes of the right foot, extend them. That is, bring them back towards your leg, the ball of the foot remaining on the floor. Note that this also increases the arch, but in a way that feels somewhat more natural, more consistent with the foot's structure. Continue elevating the arch by raising the toes toward the ceiling however far they go in that direction.

Remember that at any time you can stop the actual movement and work with kinesthetic, tactile and visual images of movement. In any case, work with those images now, imaging the lifting up of the toes, the elevation of

the arch, the feelings in the heel and whatever else you are aware of. Image the movements without holding the breath or introducing any tension into the muscles or joints, whether in your feet, your face or elsewhere.

Do a few actual movements and note whether they coincide with the imaged ones. Then do the imaged ones again and see if the imaged movement can improve upon the physical movement. Be especially alert for tension in your body as you do that.

Now stop and note how the two feet are resting on the floor. Compare your sensing of the two, and also the two legs, your two hands, the two sides of your body. In what ways does the right side now differ from the left?

Now, without letting the heel or the toes or the leg move any more than is essential, rotate the right knee to the outside. See if you can sense what happens in the lower leg and the ankle as you do that, and whether, as you continue with the movement, you find that the arch becomes increasingly responsive to it. The movement may never have been consciously done before, and thus may be difficult in the beginning, but as it is learned its performance improves. See if it not only gets to be easier, but that the elevation of the arch is also more extensive. Continue with that for awhile, trying to improve the movement both as to ease and extensiveness. After that stop and rest.

Note if the left foot now feels somewhat flat by comparison. Get up and walk around a little and see if the feet make noticeably different contact with the floor. Focus your awareness on the arches and note any differences. In some cases the change will be subtle, requiring acute and detailed sensing. In other cases it will be very easy to note that there are differences.

Stop walking for a moment and just stand. Note if the left foot seems flatter, and if one leg seems longer than the other. If so, which leg is it, and why would it feel longer? If you are sensing from the middle of the foot, then the left leg may feel longer because the point you are sensing from is closer to the floor. Try to think whether habitually you base your sensations of your body's height or length by sensing from the middle of the bottom of the foot. Then sit down again.

Now take a rolling pin or other cylindrical object you have managed to obtain and let the middle of your right foot rest on the cylinder. Push down lightly with the foot on the cylinder by raising and lowering your leg without, however, losing contact with the object.

After you have done that at least twenty-five times, roll the object with your foot, going no further forward than the beginning of the ball of the foot, and no further backward than the beginning of the bottom of the heel. In other words, keep the rolling in the middle of the foot, the metatarsal region. As you roll, exert only gentle downward pressure with your foot. Too much pressure may cause pain to the foot now or later. Try



to make your foot as flexible as possible, so that it feels as if it bends and shapes itself somewhat around the cylinder as it rolls. Also, see if you can make the sensations in the bottom of the foot quite pleasurable ones. Work on increasing the pleasure for awhile, and on allowing the foot to be as supple and as responsive to the object as possible.

Let your foot rest on the cylinder. Try to find positions on it which feel as if they would allow the foot to bend the most, and try to find places which might emphasize the arching of the foot.

Letting the middle of your foot rest on the cylinder, bring your toes down to the floor. Hold them there very briefly, then bring them up again, and continue doing that. Then just rap very quickly with the toes on the floor.

Roll the cylinder with the foot again, rolling over the metatarsal area. Then let your right foot rest on the floor alongside your left one.

Push down with your left leg and see if by not too forceful pushing, you can bring almost the entire bottom of the left foot down to the floor. Then, bringing equal pressure to bear, see if you can do that with the right foot. Note whether the right arch resists the pressure more than the left one did. At least some people will find it quite impossible to bring the right foot into as extensive a contact with the floor as they achieved with the left foot.

Place your right foot on top of your left knee so that the ends of your toes point towards the wall opposite you. Slide the foot left a bit so that it is the leg just above the ankle that rests on the top of your left knee. Observe the arch visually and also try to sense it. Flex your toes and then extend them, noticing whether the arch is affected more by the flexing or by the extending, and how the changes produced by those two movements differ.

Take hold of the heel of the foot with your left hand, and flex and extend the toes with the right hand. You will probably be able to increase the magnitude of the movements somewhat by using your hands. The toes will flex more and then extend more and the effect on the arch will be more pronounced.

Now, using both hands, pull the toes back towards you with the right hand, while simultaneously you push your heel away from your body with your left hand. Then as you relax the pull backward with the right hand, pull your heel back toward you with the left hand, and continue doing that so you increase the arching of the foot each time you push on the heel and pull back on the toes. This change should be quite pronounced, and easy both to see and feel. Do the movement quickly for awhile without straining, and then put the foot down on the floor.

The arch may now have increased enough on the inside of the foot that the foot tends to go a little onto its outside. Move it back and forth

along the floor, sliding it, sensing the floor, and trying to eliminate that tendency to shift over to the right.

Then place your foot on the cylinder once again and use your foot to roll it, keeping the contact inside the metatarsal region. Let the contact be light and let the foot be as pliant as possible. For awhile, let the foot lean slightly to the inside as you do that. That is, there will be a little more pressure below the big toe and its neighbor than there is below the other three toes. Then let the foot roll so that you do not feel that it goes either to one side or the other. Stop rolling the cylinder and let your foot rest on the floor.

Alternately flex and extend the toes a few times, observing the increases in the arch, and then once again rest. As usual, let the hands rest on the tops of the legs, with the middle fingers at the center of the knees, and the two adjoining fingers near the outsides of the knees. Sense how the left foot lies, and the right.

Sense the left heel in relation to the ball of the left foot, and then sense the right heel in relation to the ball of the right foot. This means you also sense what lies between the heel and the ball of each foot. Note again if the left foot feels flat by comparison. It is not, of course, changed. Change has been in the right foot, and if the left one feels flatter when you compare, this must mean that the arch of the right foot has increased. Sometimes it is more difficult to sense the increase in the arch than it is to recognize it by comparing the feelings in one foot with those in the other.

Get up and walk around and note what you sense. See if you can detect that the arch is, at least somewhat, increased in the right foot, either by sensing the arch itself or by comparing it to the contact of the left foot with the floor. Those who can clearly sense the change in the arch will, of course, find it even easier to compare the differences between the two feet. On which foot do you prefer to move? Do you find the seemingly unusual flatness of the left foot disturbing, or an encumbrance?

Note whether, both when walking and standing, one side of the body seems longer, and whether the longer side seems to be the left one. If such is the case, the effects of this exercise differ for you from those of almost every other psychophysical exercise. Almost always, the side that is worked on lengthens, and is properly experienced as longer.

In the present case, as I have suggested, the explanation for the actually incorrect sensing resides in the fact that the literal basis for sensation of length is somewhere near the middle of the foot. Thus, when one arch rises, its distance from the top of the head is diminished, and the other side will feel longer. This will be the case even though the side with the higher arch is actually longer because all the work has been done on that side.

These feelings are illusory, but may persist for awhile until, as with

other exercises where one side is worked with, the nervous system reorganizes the body, bringing the two sides back into a balanced sensory relationship. This usually means, in practice, that the side that was worked on loses some of what it has achieved, while the side not worked on gains some of what the other side loses. This is evidently done by means of a transference of learning from one hemisphere of the brain to the other. That such learning transfers are possible is easy to demonstrate, and various Psychophysical Method, Feldenkrais and other exercises repeatedly make the point.

Continue to walk, stand and sit, and see in which of these three relationships to the floor it is easiest to sense what has changed in your foot.

ABOUT THE AUTHOR

Robert Masters has been, since 1965, Director of Research of The Foundation For Mind Research, first in New York City, then in Pomona, New York. From 1962-1966 he was Director of The Library of Sex Research, New York City. From 1965-1968 he was also Director of The Visual Imagery Research Project, New York City. He is author or co-author of eighteen books and more than one hundred papers and articles dealing with aspects of human behavior dealt with in his research and psychotherapeutic and teaching work.

Dr. Masters' many years of close collaborative work with his wife, Dr. Jean Houston, in the area of making accessible and extending latent and productive human capacities, has made its way into many school programs at all age levels and into programs for the elderly and for persons with behavioral problems, as well as for the specially gifted.

He did pioneering research with mescaline, LSD and other psychoactive substances from 1954-1965. His work with hypnosis--clinical, experimental and developmental--began in 1952 and continues up to the present. The main thrust of his research activities has been human potentials or capacities--the study of genius, creativity, altered states of consciousness, sensory imageries, accelerated mental processes (time distortion) and psychosomatic processes. For the past decade he has been especially involved in research and applications of psychophysical re-educational methods, particularly neural and sensory re-education, and has conducted many workshops and training programs for students and teachers of his Psychophysical Method in the U.S., Europe and Asia. Psychophysical Method is synthesized with hypnosis, or trance, in his psychotherapeutic practice.