

‘Ankle Thoughts’ by Debbie Horton

(Written November 2019 as part of Deepening Practice Course)

The ankle is the joint that joins the leg to the foot. It's a simple joint, just a place where the two leg bones abut a large bone in the foot. But there is a very rudimentary mortise and tenon there, where the splayed and partially mortised end of the tibia fits into the tenon or the humped talus, a large bone that sits partly on the heel bone. The splayed end of the fibula slides down the outside of the incomplete edge of the tibia mortise, on the little toe side of the foot. The whole lot is then held together by a number of ligaments. My initial response to drawings of it was that it looked a bit like a medieval town plan, lots of differently shaped bits all cobbled together. Which is pretty much what it is, both are the result of evolution. An American anthropologist, Jeremy de Silva, who has studied the evolution of the foot and ankle joint, sums it up well, "Evolution doesn't act to yield perfection, it acts to yield function". Whilst acknowledging that, Leonardo Da Vinci's drawings of the ankles, which show how they work, do make them seem both functional and rather good.

I waylaid myself by reading more online articles by anthropologists and biologists who argue about the evolution of the ankle. One was very dismissive of it saying that it had seven useless bones that did nothing except make it prone to malfunctions, such as twists and sprains. Another said that the ankle joint is less well adapted to running than the fused lower leg and foot bones of the ostrich, which runs incredibly fast and that if the human ankle was designed from scratch by a computer, it would be different and a lot slicker and stronger. Reading these critiques led me to like the ankle joint even more, particularly as I had just been for an ankle walk and I came back admiring its ability to move very subtly in all directions, which is a huge advantage when walking over uneven ground. It can glide right and left a bit and the leg can twist slightly either way on top of the foot, which is so useful for keeping us upright on a slope, or when walking over stony ground. I tried to make my ankle go rigid by tightly lacing my walking boots and I found that I had to move my knees and hips quite grossly to maintain motion, and it felt very awkward. All the focus on my ankle also led me to realise how much I hold tension in my knees and hips, and when I was able to let go, my weight dropped to my ankle and foot, and I felt more stable, and walking was better. I think walking barefoot over different terrains everyday would change the strength of the ankle and foot in ways, which would seem quite profound to shoe wearers.

So after the ankle walk, I explored the movement and feeling of the ankle. The main big movements are pointing and flexing, with rotation in the pointed position and a smaller rotation in the flexed position and an elliptical rotation taking in both extremes. There's a waggle left and right, like the windscreen wipers of a car, and a less usual movement, which whilst walking could result in a sprain if unexpected, where the ankle allows the foot to bend inwards, so you can see more of the sole and then turn a little outwards so the little toe is lifted. For such a simple joint there is a lot of subtle movement.

I moved on to jumping and realised how important the ankle is for preventing a crash landing, and to modulate landings in general, in conjunction with the knees in particular. It was interesting to experiment with deceleration, to see how gently it was possible to touch down, but as well as the knees and hips, this also required the eyes to judge distance and surface, so the whole movement was quite complex.

Then balancing, on one leg and then the other. The main observation here was that my left ankle was very different to the right. It was much less stable and my foot, ankle and knee joints, wobbled around, microscopically sometimes, constantly trying to find the centre of gravity.

Back on two feet I felt rooted. Perhaps the most interesting experience of all was mountain pose. By dropping some of the holding in my hips, a sense of power and strength came to the ankles, rather like in the walking experiment. Slowly sinking that weight in to the ground, and allowing a sense of the ground pulling it down further gave increased stability in the foot and ankle, and a sense of enhanced trust and confidence.

Focus on the ankle whilst inhaling and exhaling gave me the sense of a clear tube for the breath to leave and enter the body and the thought that it is easy to feel congested there. After all the weight of the body passes through both ankles. They are pretty amazing joints, they carry us through the day every day, engineered by life, and with their help we can stand and move on the earth in a lot of different ways. We can dance, run, kick, walk, stand still, swim, balance, climb and glide on snow and ice.

Thank you ankles for your part in that.