

7. CASE STUDIES

7.1 FELDENKRAIS CASE STUDY – ONE LESSON IN FUNCTIONAL INTEGRATION

ADAM – ‘Bridging backward’

Adam (34) is an acrobat, actor and dancer. He is a trainee in a Professional Feldenkrais Training Program where I’m working as one of the assistant trainers. He came for a Functional Integration lesson in the second year of his training.

Adam comes to the lesson with a very clear wish to improve his capacity to ‘bridge backwards’, which means leaning only on the hands and the feet with the pelvis high up in the air and the belly oriented toward the ceiling. Maybe due to my knowledge that he is an acrobat or because I’m used to thinking in movement more than in positions, I associate immediately the movement of Flicflac (a jumping backwards movement onto the hands while arching the whole body). Normally I would ask in a more open way, but in this occasion I ask him directly if his wish has to do with this particular movement. I have this idea of using this direct question as a kind of shortcut to connect with him and his world. He answers that indeed his wish has to do with the Flicflac. Then he specifies that he can actually do the Flicflac, but only when it is associated with a jump.

I got his point because I saw him walking on the hands in the classroom some days before and I was impressed by his highly dynamic stability within this unusual movement. So I could imagine that his organization of the shoulder girdle, arms and hands in combination with a clear trajectory of the pelvis through the air was enough to get the Flicflac done mainly through jumping. I could also imagine that more easiness in bridging backward would make a huge difference in his comfort within this particular action (and others). I became immediately very interested in the possibility of working with someone within a more athletic function. That is something I would love to have the chance to do more often in my day-to-day practice.

As usual at the beginning of an FI lesson, I ask about injuries, surgeries or any special issue that I should know about. Adam tells me that he has injured himself many times due to his risky activities as an acrobat, although nothing which really impedes his physically demanding activities. Then he adds that he likes adrenalin and he starts to smile with shining eyes. He mentions, too, that a couple of months ago he had broken his 10th rib on the left front side while doing contact improvisation with another person.

My overall impression of him is that he is a healthy and strong young man, highly skilled and trained in different kinds of movements and with an elevated level of sensorial awareness. He moves without effort and seems to have potency for jumping and running.

I ask him to stand in front of me in a simple way without doing anything special. Then I start to explore his back with my hands to get an idea of how he organizes himself in standing.

I like to use my hands to amplify my perception and to become aware of things my eyes don't catch. Actually it is not only about collecting information. It is also a way to get into touch with the person in a literal sense, so he can familiarize himself with my presence and way to relate to him. Often the touch works also like a mirror (sensorial feedback) for the person and it creates a reference, which can be very useful at the end of the lesson to recognize the improvement.

I start touching his back between the shoulder blades with a gentle and very light touch. I'm interested in the shape of his back, his shoulder blades and the muscle tone in his back. My first impression is that the consistency of his body is quiet strong and firm, especially on the right side. I find his spine and chest on the level of the shoulder blades in a slightly flexed position (kyphotic).

The kyphotic tendency is so tiny that it would hardly meet the eye of any person who is not trained to see this kind of little differences. But within this context, which is to improve his capacity to bend backwards, this is relevant information because it is may be a source of difficulty in bridging.

I continue with my exploration and direct my attention to his extensor muscles in his back which are really tense on both sides and seem to be extremely trained, especially in the lower back region which is a bit extended, a bit more on the right side. I ask myself if the strength of the extensor muscles in the lower back could be a necessary compensation for the lack of extension in in the middle of his back.

In my experience I have often found this kind of relationship, and it would be easy to jump to the conclusion that this is again the same case, which would lead me to the idea to follow a similar path as other times. But I try not to take anything as granted, because I have learned that human functioning is so complex and varied that it can be something completely different than expected. It is absolutely essential to me to keep my mind always open for other possibilities and I believe this is one of the major values of the Feldenkrais' approach.

Beside the open mind to explore with him, I do have a functional idea to work with. The image that leads me is for Adam to not only be able to arch backwards but to do so with a high quality of comfort and without unnecessary strain. As this is a movement at the limits of what is possible for a human being, it would be necessary to recruit all the resources of the body to arch backward without any other part interfering or contradicting. That means that the necessary muscular activity to arch would be distributed in an even manner throughout the whole body, mainly on his backside with the corresponding reciprocal inhibition of the flexor muscles on the front side.

That is what I have in the back of my mind although I'm willing to change my thinking and acting at any time if necessary.

I close the initial exploration in standing by shifting his weight from foot to foot with my hands touching his pelvis evenly on both sides. I'm interested in the horizontal axis between his hip joints, especially in relationship to the horizontal axis of the shoulder girdle. Both are very balanced and without any bigger asymmetry. For me, these are basic coordinates – together with the relation between the pelvis the spine and the head – which I always try to have in mind when working with someone to improve how to organize him or herself against gravity.

In the lateral shifting movement of the weight, I notice that there is only a very small difference between both sides, but there is a tiny hesitation before coming with all of the weight onto his right foot. Then I ask Adam to lie on his front side on the table.

I chose this position by intuition although now, reflecting on my way to act, I can find at least three reasons for it. One is because I'm interested in exploring how to improve his capacity to bend symmetrically backwards. The image I have in mind goes back to the motor development when the baby learns to arch in a similar manner to lift the head (on the stomach). Infant development is often a very useful reference system that provides my thinking with coordinates of the basic relationships in a function (or action) to improve. In this particular case, I'm interested in finding out how he organizes his shoulder girdle, thoracic spine, lower abdomen, pelvis and the hip joints when lifting his head.

Another point is that the change of position and relation to gravity takes away the person's direct association of the movement he wants to improve. And often this helps people to avoid effort and find a new way to enhance their action. Dr. Feldenkrais points out in many occasions how important it is to separate the aim for achievement from the learning process.

Adam is lying on his stomach on the table with his face turned to the right side, his right forearm near his face on the table and the left arm lying down alongside. His legs are long and a little bit spread. I sit on a stool near to his feet in continuation of his midline and start to explore the movement of his feet and legs by touching his heels slightly with two or three fingers. My touch has a quality of question more than doing when I start to roll his feet and legs a little bit in and out. I do it slowly one by one to feel precisely how and where the movement is happening. I find both legs moving nicely and easily in the hip joints although I find it a bit easier to move his left leg. I notice again a tiny hesitation in the movement of the right foot to follow the invitation of my hand, especially when turning out. The movements are available on both sides but not with the same quality. I change my position a little bit to sit in continuation of the axis of his left leg to sense with more precision the organization of the leg. Then I start to lift a little bit the lower leg with my hands in front of his ankle. I'm interested in how his knee bends, which is obviously a necessary part of the movement he wants to improve. In my

mind's eye I see him bridging backward – belly up - so I can detect any contradiction with this function although he is lying on his stomach. As his leg bends easily I continue exploring the connection of the foot to the hip joint by rolling his leg on the thigh in and out. That is also easy. So I bend his knee to a 90° angle and lift it a little bit off the table by holding his ankle with both hands. I want to explore his ability to extend the hip joint. This is another of my basic coordinates for the function we are working with (bridging backward). It is also a main aspect of the function of lifting the head in the early motor development. After that I explore the other leg in a similar fashion and find again that there is not a big difference between both legs, although the left leg seems to be a little bit lighter.

Then I move to the upper part and start to explore the right shoulder. Actually I'm very interested in finding out how his shoulder blade slides over his ribs towards the spine and pelvis. I'm almost surprised by the easiness and extraordinary availability of this movement. Actually I can smoothly bring his arm close to his head. I put his right hand on the backside of the neck near the 7th cervical vertebrae and lift his head and his right elbow near his face, as a unit, with both of my hands. To do that I kneel on the floor so I can move my pelvis and whole trunk with more degrees of freedom than in sitting on a stool. I also prefer this way to organize myself because it is more effortless, especially for my hands and wrists, and this allows me to sense Adam's organization in a finer way. While lifting his head this way I think on 'offering' him length all through him. There I can feel a kind of fixation in his chest (flexion), which does not allow him to find his whole length so I go with his pattern and move him a little bit to round him in his back. After a short rest I lift his head and right arm again a tiny little bit and start to move them a little to the right and left in lateral bending motion. He finds almost immediately a way to facilitate this movement by allowing the ribs on one side to come closer together and to widen the spaces between the ribs on the other side. His high level of sensorial awareness quickly allows more and more parts of his back and trunk to get involved in the movement which gets lighter and lighter. After that there is much more length in his whole trunk and he lies very differently and with more surface in contact with the table. We add a little variation by moving his head and arm first to the right side and then a little bit away from the table and back to the middle in a circular motion. This involves still more joints of his spine and middle ribs and improves his capacity in the matter in question.

After these movements we pause for a moment in complete silence. I am just sitting and he is just lying there. I have a feeling of some sort of elevated common presence within a high level of sensory awareness. After some moments he takes a deep breath. I ask him to turn his head to the other side and we begin to explore the left shoulder in a similar fashion. Basically we go through the same steps, but in a much more direct way. His brain had already processed the image, and the movements are almost immediately available. Extending the second side is not so available for him.

Then I ask him to put his hands in a push-up position and to turn his head from side to side. I guide his head with my hands through some variations to get more and more parts involved in this movement. For instance, I follow his slight tendency to shorten himself on the right side, so I lead his head closer to the right hand when turning to this side to involve more motion in the ribs and the spine. We also explored the opposite side in the same way. Then I ask him to turn his head but to put his ears alternating on the same spot on the table on the midline. His capacity to turn his head by using the rotation near the axis along his thoracic spine is visibly improving.

I'm interested in the rotation in the spine, because it is one of my main strategies to help him to improve the function of arching backward. This has to do with the degrees of freedom (of movement) between the vertebrae in the thoracic spine: if these vertebrae can rotate in relation to their 'neighbors' above and below in the spine the muscles in the front part of the trunk have to be inhibited by the nervous system. This inhibition creates the possibility to lengthen the front part more so it facilitates the extension. That means that more than focusing directly on the arching in a symmetrical way I try to find first the diagonal (which means rotation and extending) he uses naturally to arch backward with more ease and to expand this quality to the other diagonal.

I change my position to the other end of the table to approach the rotation in the spine through a movement with the legs. For that I bend both of his knees, one after the other, and I kneel on the table to be able to lift both of them. I take each leg at the ankle (on the malleoli) and start to lift his knees alternately. I find his hip joints on the front side extending quite easily, so I put a medium sized (3'') foam roller under his thighs and 'walk his legs together' by lifting and lowering them alternately and bringing one closer to the other each step. My attention is mainly on the rotational movement crawling up along his spine between the shoulder blades. Then I ask him to change his head to the other side and 'walk' again his legs together and apart. After a couple of movements, I take the roller out and ask him to turn his head from side to side and to sense the difference. This is a kind of reference movement and he notices that it is much easier.

After some moments I ask Adam to turn over and lie on his back. I ask him to stand the right leg and to put his right hand beside his head on the table in a kind of bridging position with the fingers pointing towards the feet over his leaning hand. Then I ask him to lift his right hip joint and at the same I put my right hand on his shoulder blade to sense how he uses it in this context. His shoulder feels heavy and it seems like he has no idea how to connect the shoulder to the trunk to be able to bridge. So in the next movement I guide his shoulder blade toward his spine and away from the table. Then I hold it there while asking him to bring the pelvis slowly back to the table. We do this movement several times so he can find out how to use his shoulder girdle on the right side to bridge. He gets the idea after a minute, so in the next movement I guide his head

under the bridge of his right arm which brings even more arching into the whole trunk, especially the chest and sternum.

I have in mind a whole series of ATM lessons, which Feldenkrais taught in Amherst. It deals systematically with the possibility to improve the arching of the back and finding the middle of the back as a source of power.

After some moments of rest, we explore the other side in a similar manner, which is much easier than the right.

Then I ask him to put both hands on either side of his head in the same bridging way and to stand both of his legs. I ask him to bridge completely backwards which he can do quite easily, but at a certain point there is clearly effort coming into the movement. I realize that he is interfering with his stomach muscles, which are tight. So I start to look for a way to help him to become aware of this issue.

I ask him to push his abdomen out while exhaling and at the same time lifting his pelvis. To do this he needs to let go the habitual tension in his lower abdomen.

I start to lightly tap with my open hand this lower abdomen. I require him to push his belly out against my hand. As he can do this I asked him to lift his pelvis to the ceiling while pushing his belly out. The light tapping movement of my hand on his abdomen serves as a source of feedback for him to notice when he tends to contract his front side.

After some movements I ask him to pause and I put a medium sized white foam roller perpendicular under his feet. I sit on the table and put both of my hands on the front side of his ankles to give him some additional support and to be able to sense more clearly his way to organize himself in the movement. Then I ask him to bridge again and to pay attention to the exact moment the effort comes in. At that very moment he starts to push the roller away, so I tell him to lift his pelvis slowly enough to become aware of how to keep his stability with the feet on the roller without using more effort.

I chose to use a roller due to its quality of clear feedback. It is a kind of mirror to see how the force is used, directed and transmitted to the ground. I had also in mind its potential for learning in this situation because if Adam would find how to increase his arching without pushing hard with his feet it would mean that he had refined his skill to balance himself over the roller. I thought of bringing in the element of balance to refine his ability to arch: to keep his balance he would need to avoid fixation and keep available all resources along his trunk to regulate this movement.

I had also a functional image Dr. Feldenkrais gave in Amherst which is of a cat jumping up from the ground without pushing the floor with his feet. The difference is that the image of the cat is related to a sudden and powerful contraction of the flexor muscles combined with a clear skill to flex or fold without any contradictory or parasitic elements. In this case we were

working with the opposite arch and the work of the extensor muscles. In my thinking, the main difference was the speed of contraction (due to the different combination of fibers in flexors and extensors), but the principle of getting rid of any parasitic effort to refine the skill to arch was the same idea.

I take the roller out and we pause a moment. I take two medium sized short rollers of white foam and put them alongside under his feet, in parallel. Then I ask him to find with his feet the necessary stability by stepping on the rollers to lift his pelvis. That's a crucial moment because his right foot is not really centered on the roller so he does not get the necessary support he needs to lift his pelvis completely. Suddenly the whole picture makes sense because I could feel throughout the whole FI that the right leg was a bit less easy to move and also that the diagonal from the right foot to the left hand not as easy to arch or extend compared to the other diagonal. With my hands I offer him another place for his foot on the roller and the moment he becomes aware of it he immediately finds a better step for his foot and the improvement of his arching is noticeable.

I take the rollers out and ask him to simply bridge backwards again. He does it with much more ease than in the beginning.

To end the lesson he comes to sitting and then to standing. He smiles.

Some days later I asked him if he is willing to write some feedback about the lesson. This is what he wrote (translated from Spanish into English):

“During the FI I felt a dynamic of question and answer that was maintained throughout the session, in relation to the topic raised and in dialogue with the movement of attention and construction and observation of my self image. This dynamic allowed me to stay active, curious and was even fun. I noticed a certain complicity and affinity in the search of contexts and varied strategies to enrich my learning. There was some challenge in the lesson, too. I remember having notably changed the position of the feet and the ways of supporting them around 10 times, and the support of the feet on one and then two high density rollers studying, asking us about a contact of the feet that would allow the force to travel through of a more convenient organization, also in "unusual" situations and with a certain degree of instability. Finally, when I tried "the bridge" I felt more comfortable, more organized and with an energetic feeling of having made an interesting process and with positive results in relation to my wish and adjacent issues.”

Conclusion:

In this lesson I learned a lot about the profound meaning of support for movement and how

important is the fine organization of the leaning surfaces. In Amherst, Dr. Feldenkrais taught an ATM-lesson called 'Rolling Fists' (1980/7/2) where there is one variation very much related to this lesson with Adam. It is a movement of rolling the fists upward while lifting the pelvis. Then he asks to do the same but to turn the toes of the right foot a little bit to the inside and to sense the big difference it makes in the upper part when one foot is not completely organized for support. The difference is huge and so it was also in the lesson with Adam. The foot on the roller was a means to make this difference evident and at the same time create the conditions for Adam to learn how to improve it. The roller was an uneven, reduced and to some degree unstable surface to stand on, so it was really a challenge for his system to organize balance within this particular configuration (bridging). Probably he improved so much because he found a way to organize the movement with his whole self to do the bridge within this challenging condition. For that his system had to recruit all available resources for this action, resources we just had explored before in a very detailed way, so they were available. But it was he who had to find a way to actively use them to to what he wanted to do (bridge backward).

There was also a moment at the end of the lesson I didn't mention in the previous description. When he came to sitting, for a moment he was completely supported by his pelvis and spine, but then he went back right away into his habitual configuration, with the chest sunk in. I let him explore a little bit the cardinal movements of his pelvis in relation to his spine, ribs and head, to see if it would be possible for him to choose something different, but afterward he went back again to his habitual place. From my perspective, it would have been too much for one lesson to go deeper into this aspect at that moment and that's why I didn't do it. But I had a feeling that it had to do with his self-image and his way to relate to the world. I would have explored this issue with him in a further lesson (unfortunately we had only one). I learned something about the self-image and how sometimes it is not enough to explore new resources and make the function available. It is necessary for the new to find a way to be integrated and used spontaneously in different contexts.

For me it was a very nice experience. I enjoyed the work with Adam a lot and, I think, it was mutual.