

### **The Pattern Makes the Problem** *By Lawrence Wm. Goldfarb, 1993, All Rights Reserved*

"I exercise and I stay in shape." Casey says, "I can't figure out what's wrong. My back never bothered me before, but I guess everybody says that."

An athlete, a ski instructor, Casey's well-developed muscles show through her clothes. I ask, "Can we talk about what it means to stay in shape?"

"Oh. Maybe I need to change my workout."

"No, that's not what I mean. I want to talk about staying in shape, because I think that's part of the problem."

"Oh. Maybe I'm exercising too much ..."

"That's not what I mean either. I want to talk about the idea of staying in shape itself, the problem of striving for and holding onto some ideal form. Can I show you what I mean?"

Casey says yes and I ask her to sit on a low padded table. I run my hand gently and slowly over her back several times, getting an impression of the shape of her spine. I notice a hollow, a place where her spine arches forward, in the area around her lower ribs. The muscles alongside are tight and bulging. Further down, I feel the flatness of her lower back, her lumbar spine.

I ask Casey to slowly bend her head forward, suggesting that she allow her body to follow the motion. As she lowers her head, Casey's neck flexes, her upper spine between her shoulders rounds, as does her lower back, which allows her pelvis to roll backwards. My hand, resting on the area around her lower ribs, senses that her tight muscles don't allow this middle area of her torso to participate in the motion. I can feel the way the muscles contract there, resisting the rounding movement and keeping her lower chest apart from motion. This area stays motionless until Casey begins to sit up, she arches starting from the very place in her mid-back that was motionless moments ago.

Casey says, "Where your hand is, that's where I store a lot of tension. I really like getting massaged there."

I ask her to arch her back and look up. As Casey's chin lifts and her neck extends, her mid-back moves slightly forward, allowing her chest to lift. Asking her to repeat the motion slowly several times, I feel her back with my hand. I notice that each time she arches, the movement involves neither her lower back, which stays flat, nor her pelvis, which remains still and rolled slightly backwards. I ask Casey to perform other movements - to twist right and left, then to bend side to side. Each time I see the configuration of her body change, I have the sense I am watching her decode my words, that I am seeing her thinking in action.

In order to sense how someone moves, I must first understand how we can move. I know that we share a common blueprint for movement based on the design of our skeleton. Just as each joint both allows for and limits motion, the skeleton as a whole both permits and constrains movement, defining which movements are possible and which are not. This potential for motion both specifies the domain of possible human movements, the potential variety, and demarcates the absolute limits on movement, the constraints.

When I evaluate the way Casey moves, I ask, "Out of all movements she can, ideally, carry out - which ones has she eliminated?" My hand senses the impulse of the muscles in the area of her lower mid-back to contract each time she starts to move. Her lower back moves only in the direction of rounding, of flexing, and never in the direction of arching. I get the impression of someone with part of her spine - the mid-back - arching; and the other part - the very bottom of her lumbar spine - stationary. Out of the many and varied possibilities inherent in human movement, some configurations are, in Casey's current state, not possible. Keeping her pelvis rolled back and her back relatively flat, Casey maintains an unchanging relationship between her pelvis and lower back. The perseverance of this relationship restricts her motion more than her anatomy requires and limits the ways she can move. A new constraint has been laid over the limits defined by her skeletal structure, introducing a relative constraint that we call an invariant. This invariant, this ingrained pattern, is like a constellation.. In a constellation the stars move through the sky in fixed relationships to each other, maintaining a shape because the relative angles and distances between them stay the same. In Casey's body, a relationship that could change, indeed, that was made to change, has become a limit and this limitation has become a problem.

This is the kind of problem I was referring to in The three C's when I wrote: "Seeing how we move and understanding how we can move, Feldenkrais understood how dysfunction arises from our limitations and how our difficulties are embedded in the very way we move." Even though Casey can perform the complex activity of skiing, even though she works out and stretches, even though she is in good health, she is limited. Rather than understanding tension and pain as the consequence of how she moves, she mistakenly identifies them as the source of her difficulties. But what she identifies as a problem comes from how she moves, from the steadfast relationships between the parts of her body and the inflexible pattern that they form, not from any one part alone. The microscopic focus of the conventional diagnostic procedures excludes the systemic nature of the pattern. This invariant is not local—it is not simply due to the tightness of her muscles—it is global. The pattern is intrinsic to the way in which her whole self engages in every activity.

When an invariant limits movement, the domain of variety diminishes. This is how we lose our ability to adapt to changing circumstances: the invariant becomes routine and the routine is incorporated into the fabric of action. It is this very automaticity that makes habits so hard to notice and so difficult to change by ourselves: we have learned to do everything while maintaining the invariance. Like a limp, an invariant lurks underneath everything else we do, interfering with the efficiency of any movement that runs counter to it. The problems we often ascribe to growing older can often be attributed to the accumulation of layers of constraint.

Here we have the problem with "staying in shape." Shape is based on stillness. The idea of staying in shape is as dangerous as the idea of maintaining good posture.. Physical health is not to be found in imposing some constellation of constraint on movement; rather it comes from freeing up the potential inherent in our motion. Any imposed constant becomes a corset, a straitjacket, an imposition running counter to our dynamic design for movement.

This isn't to say that exercise doesn't matter. Exercise does matter. Maintaining strength, cardiovascular fitness, and endurance matters for everyone. However, none of these ensure that you will move as well as you can and as well as you should if you want to feel good. Exercise doesn't free us from habitual constraints, doesn't create an understanding of our problems, and doesn't develop movement intelligence.

My job with Casey, as with each student, is to guide her through the transition from looking for the problem to looking for the pattern that underlies it. To do this, I guide her movement explorations so that she finds what is invariant in her actions and understands how these limitations give rise to her back problem. As the pattern becomes perceptible, its grip begins to loosen, and alternate ways of moving—only moments ago locked out of reach—become possible.