

New friendships have been struck and old ones reinstated. Supported and reinforced by each other, we have a growing confidence in our ability to bring about change, and a sense of purpose and fun in having a common goal to work for. It has taken a long time to capture the imagination of a community like ours and to overcome the feelings of scepticism, apathy, and despair, but at last people are starting to believe that an alternative future without the open cast mine is possible and worth fighting for.

When the new year begins we will not know what the future holds. Like many other families, we will have to learn to cope with the stress of more uncertainty and perhaps even failure. But we also know now that some of the other issues that affect the health of our community, such as the design of the junction in the main road, the cramped doctors' surgery, and the leaking school roof are no longer daunting. And so by the time 1989 is over who knows what else may be on our agenda?

Surgeons' posture and kungfu

Yu Lap Yip

I visited more than 10 hospitals during a recent trip to New York, and their modernity, sophistication, abundance of instruments and computers, and excellence of clinical knowledge and surgical skill all won my wholehearted admiration. But one thing did strike me. When I went into the operating room, whether in dermatology, general surgery, urology, or plastic surgery, I noticed that most of the surgeons and assistants had very unnatural postures. They hunched their backs, twisted their necks, shrugged their shoulders, and stuck their elbows out. They were so

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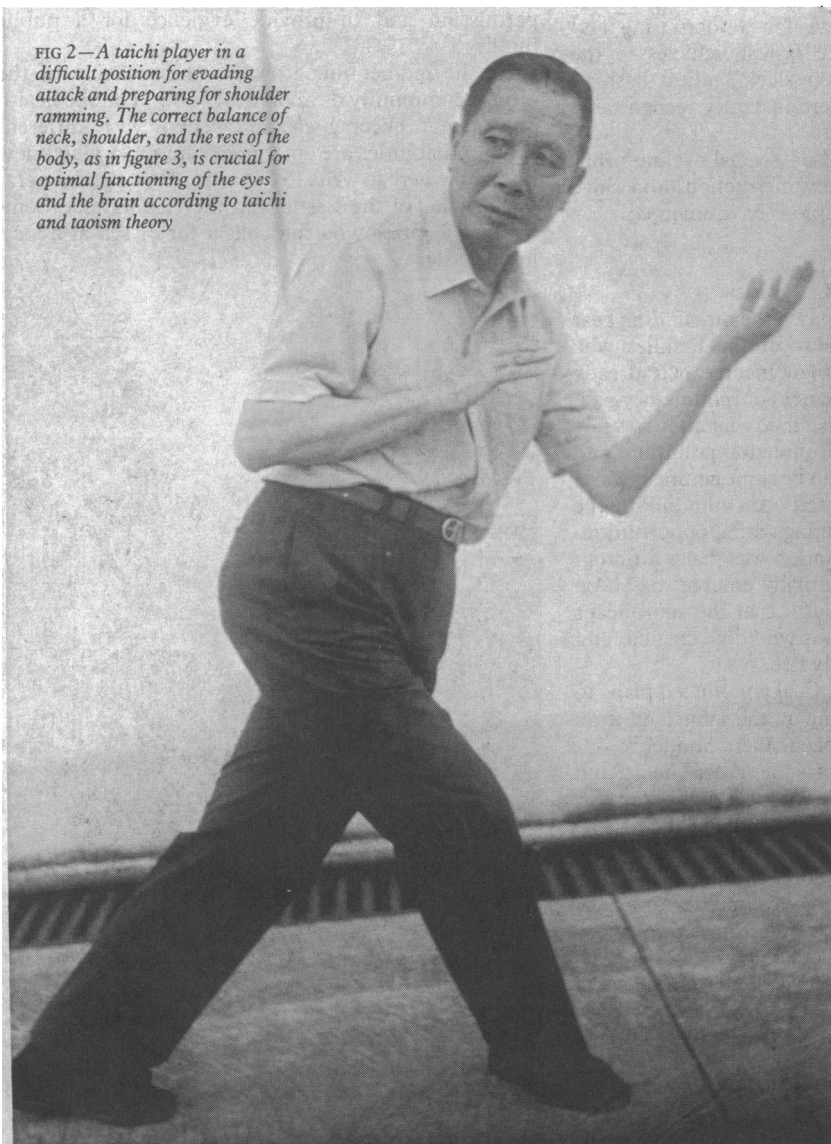


FIG 2—A tai chi player in a difficult position for evading attack and preparing for shoulder ramming. The correct balance of neck, shoulder, and the rest of the body, as in figure 3, is crucial for optimal functioning of the eyes and the brain according to tai chi and taoism theory

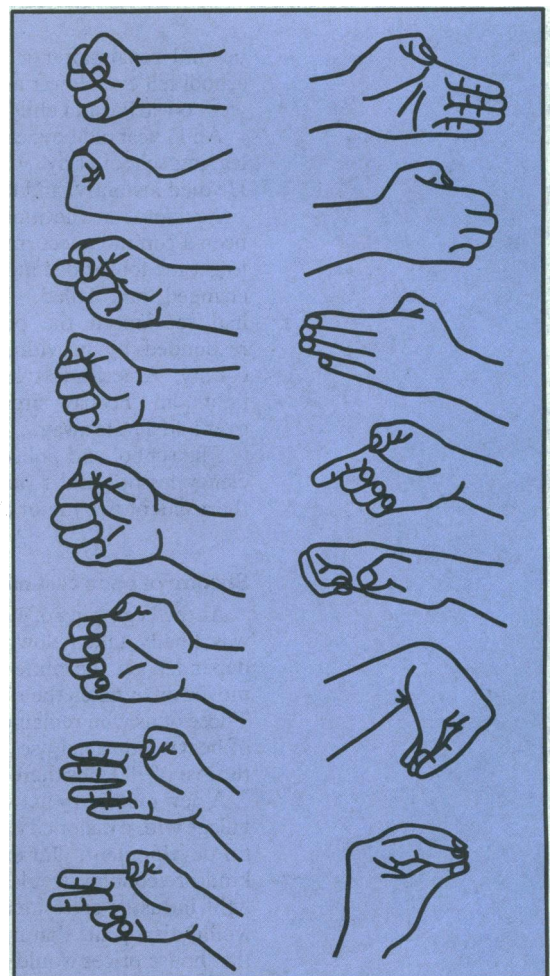


FIG 1—The various standard forms of hand movements of a Shaolin martial artist. The simple fist is the most commonly used

absorbed in what their hands were doing and their eyes were seeing that they seemed to have forgotten the feeling of their own bodies.

Some surgeons, however, had calm and relaxed postures; almost invariably they were senior surgeons. This proved the point that tension is the cause of unnatural posture. This was unusual when I worked in London and I cannot explain the difference across the Atlantic. But it seemed to me that in general London hospitals were more homely and the doctors were working in a less mechanised, more relaxed, yet equally efficient way.

As doctors we are all taught how to treat and advise

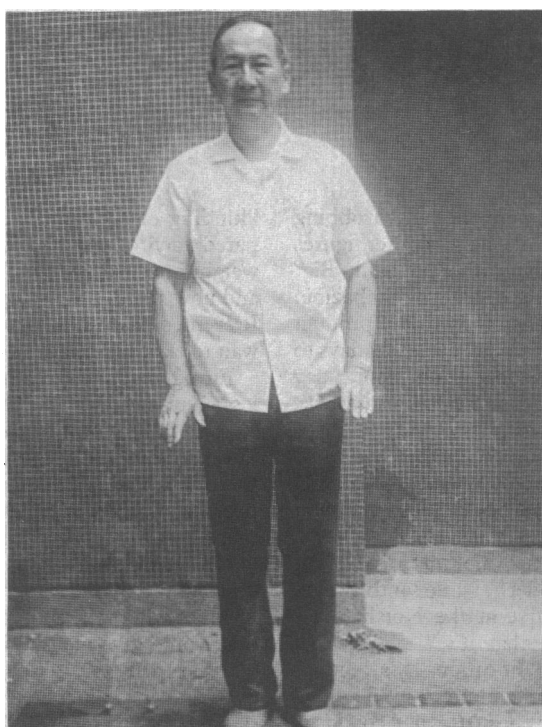


FIG 3—The simple standing posture, which is the basis of taichi. Note the check points for relaxation: neck, shoulder, back, loin, elbow, hands, and hip. The essence of the posture is serenity of the mind with a high degree of alertness and constant vigilance of muscle relaxation at the above sites.

our patients on cervical spondylosis or low back pain. But when it comes to our own daily work we tend to forget completely what we advise. Truly it is much easier to say something than to do it. When we work our natural tendency is to concentrate on our thinking, vision, and hands. We are trained to check the surgical instruments and even the lighting. But we are never taught to adjust our posture, breath, foothold, the position of the shoulders, elbows, neck, and back before and during times of tension like an operation. This is where the fault lies.

Similarity between a surgeon and a martial artist

It would be a little surprising if I tell you that kungfu provides a solution to this problem. But as someone who has studied and practised taichi boxing for 20 years I see great similarity between a surgeon holding his scalpel and a martial artist holding a sword. Both use the sharp cutting edge on to another person's body.

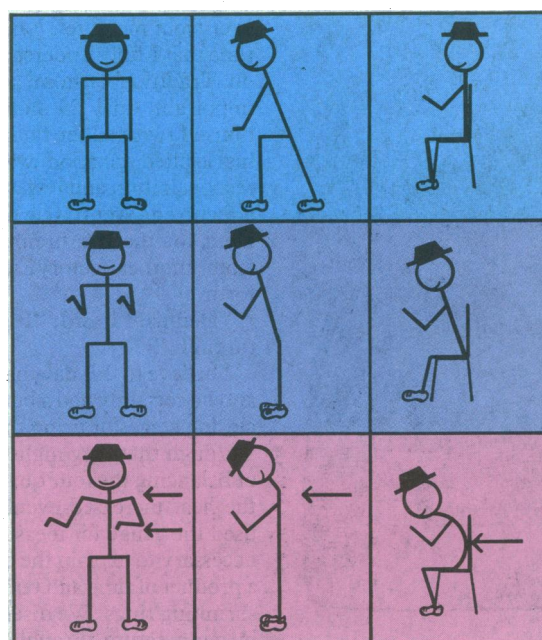


FIG 4—The above principles in clinical practice. The upper row shows the ideal posture. The middle row shows maintenance of the proper neck-shoulder-body-trunk complex posture in the usual operating theatre setting. The lower row shows errors commonly committed during operation or endoscopy. They are shrugging of shoulders, flinging out of elbow, hyperflexion of lower neck, curving of the spine. Ideally, the more relaxed postures of the upper row should be adopted, but often the less ideal but equally healthy middle row position has to be accepted. The errors in the lower row can always be avoided if you watch the relaxation at the check points. The middle row posture can be achieved by raising the operating table or walking half to one step sideways.

Both require rigid physical and mental training before being allowed into actual combat, which often means life and death—to himself in the case of a martial artist, to another in the case of a surgeon.

Surgery is relatively young, but martial art is an ancient science. Surgical training means acquiring skills with hands and instruments and, of course, lots of medicine. The history of Chinese kungfu also went through these stages, culminating in the external school with highly sophisticated hand skills and weaponry. Typical of such developments are the Shaolin Temple styles, seen in kungfu films, and from which are derived karate and taekwondo. The hand was used as a hammer, a claw, and a knife. It was menacing to others but was also detrimental to one's own health. Surgery is similar to this school because it also entails rigid self discipline and training and has even more sophisticated cutting instruments.

Surgeons are well known to risk their sleep, their cervical and lumbar spine, and their stomach to perfect their skills. But as early as the fifteenth century kungfu fighters began to realise that to utilise their hands and weapons fully they had to be meticulous with their posture. Thus after the hand and fist method (chuanfa), a whole hierarchy of body methods, standing methods, and walking methods were developed, the so called quartet of "hand eye body step," which every modern kungfu fighter must check before and during actual combat.

Winning your own self

Another important new concept was that you must practise kungfu not just to conquer the enemy—an external thing—at the cost of damaging your own health. You must build up health at the same time by winning your own self—in oriental philosophy an internal aim. This resulted in the rise of the internal school of kungfu, the most familiar of which is taichi. You can easily distinguish between a tense, fierce karate player and the serenity and grace of a taichi player. Yet taichi has been proved through the centuries to be a most powerful martial art in that it can be effective into your 70s, while the former can be effective only up to middle age.

As a taichi player you must always keep the spine straight, the shoulder must be relaxed and depressed, the elbow lightly held by the side. This is constantly checked in practice and during actual combat. In adversity unnatural posture is avoided by turning the body to another angle and changing position. This gives a relaxed posture and enables the optimum use of your hands for prolonged periods while remaining the most mentally alert. This is exactly the posture that can prevent undue neck and back strain. This all sounds simple until you realise the difficulty of trying to achieve it when tense and excited. It really requires proper theoretical and practical training before you can really "live" with it.

I have used this posture when doing operations since I was a junior resident. It just requires more self awareness of the degree of relaxation of various muscles. When necessary you raise the operation bed or walk one or two steps to the side. But I didn't see any New York surgeon raise the bed so that his own body was in a natural posture. None of them readjusted the bed's height or walked a few steps as the site of the operation changed. Even the few senior surgeons who did so did it unknowingly or unsystematically. I suppose that this applies to my London colleagues. All this reflects one thing—namely, that the constant checking of your own relaxation and posture is deficient in the training of a modern surgeon. Perhaps taichi training should be incorporated into the training of every surgeon.