History and Development of the Motion Chiropractic Paradigm

Motion palpation is just one of many methods available to the Doctor of Chiropractic for evaluation vertebral subluxation. It is not a "technique". It is a method of analysis and an art to be developed by the practitioner. For the skilled chiropractor, it is a safe, reliable, convenient, and speedy means of locating joint dysfunction and determining a method of correction.

Earnest research into the art and science of motion palpation began in the 1930's with the formation of the Belgian Chiropractic Research Association. This association was headed by Dr. Henri Gillet. Dr. Gillet, however, was not unique in his theories. Similar research was being carried out in other fields such as osteopathy, physiotherapy, and orthopedics. In fact, the basic principles of motion palpation and chiropractic go back much further.

In 500 B.C., Hippocrates coined the term subluxation to describe a vertebra which appeared to stand out more prominently than those above or below. This is an obvious static observation of a swollen, diseased, or fractured vertebra. Hippocrates even described two treatments for spinal subluxation in his book, On Joints. One method, which would seem to be for severe spinal scoliosis involved hanging the patient upside down from a ladder and dropping the ladder several inches. Obviously the sudden stop would involve quite a lot of traction on the spine. Suffice it to say that Hippocrates did not recommend this method of spinal manipulation.
The second treatment was a fairly rudimentary type of manipulation for "replacing" a subluxated vertebra using an early type of adjusting table. Again, the methods employed by Hipprocrates were crude. If resistance was encountered during the attempted manipulation, he recommended placing a wooden board over the displaced vertebra and then two men would simultaneously jump on the board ensuring that the vertebra would move (along with a few ribs and other body parts)!

The hippocratic tradition of spinal manipulation was carried on in medieval and renaissance Europe by physicians and surgeons until the 17th and 18th centuries. In 1746, a medical physician named Johannes Heironymi used the term "subluxation" to describe a vertebral segment that exhibited decreased mobility and slight malposition. This is perhaps the first reference to abnormal motion being a sign of abnormal spinal function. Later in 1821, Edward Harrison, an English physician, proposed that a subluxation could impinge upon the spinal cord and cause visceral disease.

Despite its long history, the art of spinal manipulation was largely ignored by the medical society beginning in the early 19th century. A probably explanation for this is the spread of contagious diseases, such as bubonic plague, syphilis, and tuberculosis, that plagued Europe in the 17th and 18th centuries. These diseases were notable for their predilection for joint destruction and spinal cord damage. A physician might run the risk of severe joint damage, paralysis, or death of the patient who was in the late stages of one of these diseases. The tradition of spinal manipulation fell solely to "Bonesetters", folk practitioners who learned their art through family custom and apprenticeship.
Late 19th century America turned out to be an ideal environment for the cultivation of alternative health care professions. Social protest and distrust of the medical profession were necessary for the success of A.T. Still's osteopathy in 1874. The origin of chiropractic by D.D. Palmer dates to 1895. Both men lived within 150 miles of each other. Thus the modern rendition of spinal manipulation had its roots in a vitalistic American movement.

The principles that form the basis of the motion palpation paradigm originated in the earliest days of chiropractic. Although somewhat overshadowed by his son, D.D. Palmer was instrumental in developing the wholistic, vitalistic approach to health that defines chiropractic today. Palmer's theory was that disease has only three root causes: trauma, toxins, and autosuggestion. These are the same today only they are acknowledged in a slightly more modern manner: trauma, inflammatory mediators, and psychological illness. In his 1910 opus, The Chiropractor's Adjustor, Palmer considers a decrease in motion to be one of the key features of the subluxation. Both D.D. Palmer and his son, B.J., stated that palpation, static or motion, was the most important examination tool in locating a subluxation.
Another pioneer in the development of motion palpation was Willard Carver. He was a close friend of D.D. Palmer and one of his earliest students. Carver saw the body and spine as a mechanical unit with the different laws of equilibrium and gravity affecting an interrelationship of all its parts. Besides this early biomechanical approach, he also developed adjusting procedures for the extremities, visceral organs, and the Carver body drop.

A notable 1906 publication entitled Modernised Chiropractic, by Smith, Langworthy, and Paxson, identified the loss of segmental mobility as a central component of the subluxation. The book went on to propose a new type of palpation analysis called "Vertebral Field of Motion-Subluxation-Movement Analysis". Subsequently the three authors opened the American School of Chiropractic where motion evaluation, static palpation, gait analysis, and nerve tracing were all taught as means of finding the subluxation.

B.J. Palmer contributed to the motion paradigm with his concept of "majors" and "minors". He explained that, in the average spine, as many as 6 or 7 potential sites of subluxation might exist. The chiropractor, however, should limit adjustments to the 2 or 3 areas that were considered the most irritative, or major. The served as the basis for the "primary-secondary" rationale espoused by Dr. Gillet. B.J. Palmer and another contemporary of Dr. Gillet's, Major Dejarnette, were also influential in drawing his attention to the upper cervical and pelvic regions of the spine as primary sites of subluxation. Both Palmer's HIO technique and Dejarnette's S.O.T. technique were in development at the time that Gillet was attending Palmer School of Chiropractic.
Henri Gillet and his brother, Marcell, graduated Palmer in 1928 and soon joined their father, Jules, in his practice in Belgium. Henri became increasingly dissatisfied with the "unscientific and oversimplified" chiropractic approach and eventually left practice. It was only at Marcell's urging that Gillet began to research the available scientific literature from osteopathic and medical journals. When Gillet again donned the chiropractic mantle, it was with the intent of defining the subluxation through objective clinical observation.

With the addition of Dr. M. Leikens to his team in the late 1930's, the Belgian Chiropractic Research Association was formed. The members began to systematically evaluate each of the chiropractic diagnostic methods available at the time. They first considered and rejected the accepted practice of static palpation of the spinous processes. It was apparent that spinous processes were often malformed and the adjustment rarely altered their position.

For years, Dr. Gillet worked closely with Dr. Fred Illi on X-ray studies revealing the effects of gravity on the spine. Important advances were made with motion studies regarding the effects of hypo-mobility, hyper-mobility, and compensation within the spine. Tools such as X-ray equipment and Palmer's neurocalometer, contrary to popular belief were all utilized in Gillet's clinic in Belgium. This was in spite of the fact that chiropractic was illegal in Belgium and such equipment was difficult to obtain and expensive to maintain. Thus for practical reasons, the Association decided to turn their efforts toward developing motion palpation skills primarily.

Gillet based his motion palpation concept on three basic facts:
1. The human being is a living, moving organism.
2. Facts of Position- A subluxated vertebra is not a bone out of place. In fact, a vertebra is often fixated in a normal alignment.
3. Facts of Movement- Vertebral movements describe an arc around a center of motion, from one extreme to another. Factors may arise that can inhibit movement within one or more of these directions.
Perhaps Dr. Gillet's most important contribution to the field is his fixation theory. By differentiating classes of fixation and their characteristics, Dr. Gillet offered chiropractors an objective means of finding subluxations and evaluating the effectiveness of the chiropractic adjustment. The period between the 1930's and 1960's was a golden age of research in joint motion diagnostics. Outstanding in the field were Cyriax (pictured here), known for his model of hard and soft endfeel; and Mennell, who found that a normal joint possessed a characteristic "joint play". David Magee in his book *Orthopedic Physical Assessment* summarizes these concepts in a clear and thorough manner.

Today, the Motion Palpation Institute, founded by Dr. Leonard Faye in 1981 continues to educate chiropractors in the science and art of motion palpation. Under the leadership of Dr. Mark King, Motion Palpation Institute plays an important role in developing the practical skills of the chiropractor.