THE RENAISSANCE Has Begun
The renaissance that occurred during the 14th, 15th and 16th centuries was not as much an awakening as it was a reawakening of ideas and concepts almost two thousand years old. Many today do not realize that 2500 years ago Democritus, with his discussion of limits, was close to the discovery of Calculus, had believed the Milky Way to be composed of unresolved stars long before astronomy reaped any benefit from the science of optics, and had, in essence, explained the atom. Another member of Ionian society, Theodorus, invented the key, the ruler, the carpenter’s square, the level, the lathe, bronze casting, and central heating. Technology was then very close to achieving many of the conveniences of modern day.

After the worldwide climate blackout that occurred in the year, 535, and lasting for several years due to the eruption of a super volcano (Toba) in the area of Sumatra, the Dark Ages began. And only after another 1000 years of intellectual dormancy did Western society emerge with ideas and technologies that slowly led to today’s space and computer-age visions. At first, these so-called new ideas were actually discovered by looking into the past at the ideas of previous Greek and Roman cultures.

Although extreme burdens were placed on the progress of the Occident during the Dark Ages, such stagnation was a fortuitous situation for factions striving to control Man’s beliefs and subjugate him with arcane regimentations. The Dark Ages perpetuated man’s fears of the unknown, permitted social institutions of extreme conservatism, and after centuries, succeeded in slowing any technological progress that might emerge with deeply rooted customs, rules, laws, etiquette, prejudices, and social structure. Hence, for eons, any challenging idea had little chance against the established order. The past and present thoroughly hobbled the future. The benefit for those in control was that this made for a very stable society.

Presently, we live in a relative oasis—culturally and intellectually—an oasis that is easily taken for granted. Nevertheless, new ideas in almost any field of human endeavor have a paradoxical reception. On one hand, they are revered as a kind of newfound hope. On the other hand, they are feared as a threat to the established social order.

Anarchy is greatly feared by society; as well it should be as it is a consistently destructive force to society. This anarchical fear often trumps hopeful innovations that might also bring disorder. And this principle can be applied to a society at large as well as to discrete subcultures within the society who might be disenfranchised by new discoveries.

True innovators are rebels—often outside the ranks of their professions, formal credentials and, sometimes, the law. Instinctive knee jerk defensiveness is to constrain, censure, and discredit these recalcitrant types. And while it is true that all mavericks are not correct in their stance against established views and practices, they embrace Step I of two steps formally taught in the subject of critical thinking and problem solving. Step I is to brainstorm answers to any particular problem with total immunity to criticism. Step II is to apply criticism—a distinctly separate process from Step I—to the possibilities collected during Step I.
The Dark Ages completely squashed Step I from our reasoning process. The pendulum swung and stayed in Step II for almost 1000 years. Then, the rebels started emerging in the late 14th century. These early rebels were often the artists like Massaccio, Donatello, and Brunelleschi. These artists and many others were followed with the technology of the printing press and then the religious rebels of the reformation. According to Theodore K. Rabb, PhD, Emeritus Professor of History at Princeton University: As soon as Martin Luther emerged in the early 1500s, hundreds of other rebels in various areas of both religious and secular life “came out of the woodwork” as though they had been festering under the surface for some time and merely needed one immensely courageous man to push the button to release it all.

Like with the revelations of Copernicus, Galileo, and Kepler, the typical citizen is oblivious to the breakthroughs that will eventually affect his personal behavior, culture, beliefs, and welfare. And as before, the present renaissance in exercise is not appreciated by most people in the field. The exercise renaissance is actually the quintessential Renaissance in reverse. Referring back to the problem-solving sequence mentioned earlier—with exercise notions—Step I exists as if it were on steroids and Step II is practically nonexistent. The prevalent attitude within the fitness ranks—including physical therapy, coaching, athletic training, bodybuilding, physical education, and sports medicine, etc.—is an anything goes mentality. Present-day exercise notions—formalized within academia or not—have grown out of the cult of running and athletics, outside the regimens of formal science. Admittedly, much of this has occurred because formal science has ignored the subject of exercise. And yes, regimentation does indeed exist within the academically-controlled factions of exercise, but the regimentation is not, for the most part, fact-based.

So here we see multiple pendulums swinging simultaneously between:

- Step I (unrestrained brainstorming) and Step II (critique) Problem Solving
- Order and Disorder (Anarchy)
- Reglementation and Laxity
- Constraint and Freedom
- Cosmos and Chaos
- Science and Pseudoscience

And a swing (or swings) is often within other swings and in opposing directions. For instance, SuperSlow® Protocol is often forced within the confines of exercise equipment that is non-accommodating for SuperSlow. The result is often an erosion of the standards of the protocol. And when this erosion is rigidly formalized by an accredited certification program within the fixed constraints of the inferior equipment, the physical misdesign of the equipment then jails any insights that foster protocol OR equipment innovation.

True exercise practice and philosophy made steady progress with the ideas of the Austrian, Gustaf Zander, MD, and others until about 1920. Until then, an emphasis on training the skeletal musculature led the way of science and medicine. But with a combination of World War I, the Influenza Epidemic, Zander’s death, and the Great Depression, the Dark Age of Exercise fell upon us. At this point, the steadystate practitioners took control of the exercise scene, wielding
several advantages. There was no one to oppose them in academia. Steady state was close to what people already performed in their work and other activities. It afforded more people to engage as no equipment was needed. It was convenient for processing millions of military recruits for the several major wars that were to come. And it was eventually linked to a romanticized passion to save us all from that ultimate fear, death via heart disease.

In 1939, Seward C. Staley, PhD, wrote *Sports Education: The New Curriculum in Physical Education*, stating that the term, *Physical Education*, was inappropriate because the physical was not being educated. *Physical Education* was adopted during the early 1930s because the college athletic departments during the 1920s feared disenfranchisement due to their admitted backwardness with regard to biology.

Until recently, most doctors avoided any discussion of exercise with their patients. They felt uncomfortable with its basis of fact and were keenly aware of the likely injuries patients would sustain in various activities. Only with the involvement of Kenneth Cooper, MD, did physicians venture to say anything about the subject. Wanting to appear progressive and politically correct, many physicians were eventually duped into what in some countries is called *Cooperism*. They now feel comfortable talking *Aerobics*, although they unknowingly babble.

In 1968, Cooper coined the term, *Aerobics*, (a proper noun) to denote his fascination with running. He later expanded this to include a host of activities, thus crossing over to millions of people and their pet interests and pastimes. Since *Aerobics* was deliberately intended to imply something highfalutin and medical, i.e., *aerobic* (an adjective describing a very minor metabolic pathway in the study of biochemistry), it naturally caught on as the connection to science academia and cardiology. Therefore, the recent incarnation of *Aerobics* is *Cardio*. Still the term, *Aerobics*, is used in quasi-academic circles. In addition, it has been replaced through habitual verbal misusage with *aerobic*.

Zander emerged with over 20 exercise machines in 1865. In 1970, Arthur Jones emerged with his exercise philosophy known as Nautilus®. As with Zander over a century before, Nautilus Philosophy swung the pendulum hard toward science. Jones’ ideas reopened the renaissance started by Zander to place exercise with its proper focus: strength training. Amazingly, Jones never knew of Zander until very late in his career.

In 1982, Ken Hutchins emerged with *SuperSlow® Exercise Protocol*. And Hutchins’ specialized SuperSlow equipment was first produced in 1999 to foster this most-ideal exercise protocol. SuperSlow protocol and equipment both corrected and superseded Nautilus philosophy based on its emphasis of speed control.

True exercise stimulates skeletal muscular strengthening. All reasonable expectations from exercise are accessed through the skeletal muscles—the only window into the body—by strengthening or attempting to strengthen the skeletal muscles. These expectations include improvements in bone density, vascular efficiency, metabolic efficiency, joint stability, muscular strength, and cosmetics.
Aerobics undermines the necessary process to stimulate strengthening. It promotes injuries, and thwarts the body’s ability to adapt to the stimulation were it to occur. In this regard, Aerobics philosophy, i.e., steady-state notions represent the Dark Age of Exercise.

It is important for all of us to realize several facts:

- The center of metabolism in the body is the skeletal musculature. Collectively, it possesses the greatest vascularity, the greatest concentration of mitochondria, and the greatest peripheral nerve supply. It is the site of a majority of chemical reactions and heat production.

- Although the heart is a muscle, it is involuntary. It is optimally accessed with exercise only by meaningful muscular (skeletal/volitional) loading. The very nature of steadystate (Aerobics) is to avoid meaningful muscular loading by burdening the bones, so that the muscles are spared to permit endurance and thus avoid exercise.

- *Cardio* makes about as much sense as cutting your heart out of your chest and putting it on an exercise machine.

The key to exercise is strength training. If you encounter an exercise instructor that insists you must do Aerobics or Cardio, calmly walk away. Although he might mean well, he is outdated and misinformed. Doing a “little extra exercise” in the form of a bicycle ride or some inline skating is counterproductive. It might represent great *recreation* for some people, but this is a grave source of confusion. Confusing recreation and exercise has led to the colossal nonsense promoted by the fitness community for the last century.

Aerobics is poor science. It is unhealthy. It is antithetical to exercise. It is backwards and uneducated. It is empty exercise. It subverts the loading required for exercise. It will not burn significant calories or meaningfully improve cosmetics. It severely compromises what can be accomplished for the heart. Aerobics will incur injuries that lead to inactivity, depression, overeating, and greater fatness.

Aerobics and all the head trash that has accompanied it in the fitness ranks—volume training, plyometrics, Pilates, functional training, explosive training, dance aerobics, spinning, cross training etc., and perhaps worst of all, the boot camp practices that include all the stupidity—represents the Dark Age of exercise. And while Renaissance Exercise® embodies those valid contributions of Zander, Jones, and Hutchins, Renaissance Exercise explodes forward with insights, applications, and the equipment to affect it all in ways never seen before now.

Strength Training is the Exercise Renaissance. But do not expect the authorities of the old philosophy to advise you on the principles of the new. They are all confused. Renaissance Exercise® is the true enlightenment that portends the instant relief of restless leg syndrome, instant relief of intense menstrual cramps, the development of a collateral coronary artery system, a hedge against obesity, exercise for stroke patients, an approach for the hypotonic
autistic, a boon to the depressive, an aid to the hypotensive, real reversal of osteoporosis, and the basis of physical rehabilitation for all joint debilities.

Another pendulum swing to consider: *Hope and Despair*. Renaissance Exercise® offers all of us hope for a productive and pain-free lifestyle. Exercise with any other approach offers the passion of false hope, eventually leading to despair.

*Ken Hutchins, Founder of SuperSlow® Exercise Protocol*

*Joshua Trentine, Founder of Renaissance Exercise®*