Editors’ note: This article is part 2 on “Occlusion: Lost Art, Lost Discipline”

I’ve commented previously (in Part 1) that one must always begin with the final image (visualization, picture) in mind if one is to achieve a successful final result. Language may be satisfactory to explain details and technique, but it cannot adequately convey perception and visualization. Mental images rapidly dissipate when attempting to transform those images into words; visual thinking dies the moment it must objectify the subjective and create corporeal (ie, morphologic) reality. The trick is to be able to metamorphose imagery into corporeal reality. However, in those in whom the process is intact, or may even be blossoming, transmitting that ability becomes a moot point. It’s akin to ‘telling’ someone how to ride a bike; one has to develop that kinesthetic sense solely by participation. Similarly, morphology imaging is not a problem to be solved but an essential realism to be experienced, since every dentist will precipitate malocclusion to a greater or lesser extent with almost every restoration placed--mainly due to the inability to mentally perceive the existence of the odontomorphic “OCCLUSAL BALLET.”

The inability to envision, to mentally ‘see’ intercuspatation as a Pas de Deux between form (morphology) and function (occlusion) is what keeps dentists from creatively and effectually addressing maxillo-mandibular dysharmony. The inability to image explains why the eye does not see what the mind has not taught it to recognize (Fig.4). Again: You have to ‘see’ there to ‘be’ there. Vision without action is fruitless, and action without vision is dangerous. Thinkers think and doers do, but until thinkers do and doers think, progress falters. Sadly, “I dreamed a thousand new paths. I woke and walked my old one”. If there’s no ‘Occlusal Ballet’ playing before your eyes, the delicate occlusomorphic adagio begins to falter as cusps become shorn while stumbling awkwardly over one another as form (morphology) and function (occlusion) ignominiously collide in jolting antagonism, sparking cumulative cuspal ricochet! The ingenious, rather naïve choreography of what should have been a tranquil, arabesque cuspal ballet has instead ignited total gnathic war.

Time ripens all things. No man is born wise.

We should know the tops of teeth as well as Rubenstein knew the tops of piano keys. If most dentists cannot conceptually visualize and draw the teeth they attempt to repair, if they cannot mentally pictorialize morphologic form and draw teeth—how then are they able to properly sculpt restorations, fabricate provisional restorations, critically analyze work returned from the laboratory, or correctly intercuspate and adjust an occlusion? “O, had I but followed then arts.” (Shakespeare). If the dentists cannot artfully control the morphology, evaluate, understand and properly adjust ongoing cuspal
topographical changes, they therefore cannot clinically control the occlusion! Remember: morphology and occlusion are two sides of the same coin. To do easily what is difficult for others, is the mark of imaging talent. Of note once again is that visualization, and calling forth mental images allows that restorations are being carved with the mind, not with the hand—the hand simply being the facilitator. One must elevate such an ideation to a belief, and then acknowledge the fact that such a belief is not merely an idea the mind possesses; it is an idea that possesses the mind.

The aesthetics of occlusion---the ART OF OCCLUSION---represents an intricate, well-controlled, graceful balletic pavane between form and function. The dentist is the choreographer and the technologist is the ballet master. The treatment plan is the score, the provisional the rehearsal, and the porcelain is the actual performance. For example, when choreographing the 'Occlusal Ballet, this cusped corps d’élite, we establish that moving from 'en pointe' (centic position) to a lateral pas de deux movement (canine glissade/disclusion) is not an ensemble movement! The only teeth properly ‘performing’ individually in lateral movement are the canines, arguably assisted by select fellow performers (anterior teeth); choreographing ensemble (group) function ultimately begets ensemble (group) destruction. Shorn-cusped, amorphous ‘restorations’, aside from being ugly and difficult to keep from wearing away too rapidly, are unworthy of the skills the modern dentist can muster. If God wanted us to have flat teeth, he would have made us two-stomached, four-hoofed, tail-wagging herbivorous ungulates. (Fig. 4-A)

It must be considered that the significance of occlusion in clinical reality has not received attention commensurate with its importance...especially as most people do not have perfect occlusions, and virtually all people have occlusal interferences. Regrettably, occlusal adjustment is the least used and most misunderstood form of treatment available for occlusally related disorders. Realistically, not a single facet is timid or safe. These are seemingly small coincidental ‘occurrences’ with huge consequences, as cusps struggle to escape their oppressors and their seemingly inevitable ablative fates. A facet is a functional and morphological occlusal design flaw. It is better to prevent the occurrence of facets than to ‘adjust’ them. The often misused term ‘occlusal adjustment’ is nothing more than a tour de ‘farce’, more fraught than haute. Unfortunately, there is no universal agreement about the best way to perform occlusal adjustment, or which type of occlusal interference is considered to be the most detrimental to function. Stated most elementally, ‘occlusal adjustment’ means the artful elimination of the unnecessary so that the necessary may speak.

I have been told that a young would-be composer wrote to Mozart asking advice about how to compose a symphony. Mozart responded that a symphony was a complex and demanding form and it would be better to start with something simpler. The young man protested, 'But, Herr Mozart, you wrote symphonies when you were younger than I am now.' Mozart replied, 'I never had to ask how.' Isaac Asimov

It’s obvious that the ‘illusion of occlusion’ unfortunately still persists. Anyone who proposes to adjust the occlusion in whole or in part, should have some guiding hypothesis regarding the interactive relationships between the various parts of the masticatory system...especially as dentists are the putative specialists of occlusion! Things are only what they are when they do what they are created to do. Hence, interference-laden, facetted, flat-surfaced, or ineptly shaped artificial dentate pseudo-forms can hardly be called “teeth” or “restorations” since they neither intercuspate nor restore. Sadly, it’s L-brained choreography for a Never-Never Land, Peter Pan occlusion. We must always think Morphology Preservation! Idealism tempered with insightful practicality, empiricism restrained by thoughtful
reason. Continuous, conscientious, scrupulous, persevering effort—not strength or intelligence—is the key to unlocking our recondite imaging potential. It’s there in all of us—quietly, patiently waiting to be discovered. “Well done is better than well said” (Ben Franklin).

When we consciously make the mental shift to “LINGUOVISION”, it means being able to “view” the presenting clinical situation much as we would in the laboratory, when we turn the articulator around (You have to ‘see’ there to ‘be’ there !) and examine the occlusion from ‘behind’ (Fig 5).

Indisputably, imaging proper intercuspating morphologic form in this manner is the key to gaining the knowledge required to successfully (and esthetically!) treat problems arising in what is the quintessential common denominator in all dentistry—occlusion. Moreover, evaluating the ‘intercuspal ballet’ from the lingual perspective during laboratory fabrication is like viewing a performance of the "Élite Corps de Ballet" from 'behind the curtain'; That’s Linguovision! Without any doubt it’s the very best way to learn occlusion—GUARANTEED!

Anyone who keeps the ability to see beauty never grows old.

Franz Kafka

‘Seeing’ via Linguovision, is really an enabling and facilitating visualization. It’s scannable articulation imagery. Mentally ‘lingualizing’ the occlusion is an invaluable aid—an amazingly useful tool—for understanding the basic “A,B,C’s” of Occlusodontology! Think of leisurely and artistically carving the fine morphologic details of a complex restoration with ease, as if you were actually copying a vivid mental picture which you had visualized specifically for that procedure! Or think of the facility with which you might dispatch that nagging occlusal imbalance, diagnose the maddening persistent occlusal wear problem, or identify the correct intra-oral tripod contacts of a Class II malocclusion simply by calling forth in your mind’s eye the appropriate linguovision intercuspating morphology. The most exciting place to discover and practice this ability, is in yourself!

However there are ‘fences’ which seem to always surround you, and they are all in your mind. The physical fences you think you may be surrounded by, in reality are the mental fences that hold you captive. How can you free yourself, and how can you stop being fence-bound by negative thinking? Those so-called fences are never extrinsic. They’re always intrinsic, they live inside us. The antidote to being trapped by your own mental fences is to create a compelling enough vision such that you’re willing to resort to overwhelming measures to break out. Freedom, ultimately, is just on the other side of passionate, purposeful action. Always remember: The fences that seemingly surround you...are all in your mind! Our mental foibles may be best characterized by, of all things, a comic strip character called

Pogo: "We have met the enemy, and he is us!"

The ‘difficulty’ of the task is no excuse for avoidance; as such, we’ve all been admonished “Practice makes perfect”---and old aphorism which is generally misunderstood, and which now requires clarification in the context of this discussion. Deliberate practice, is a very special form of activity that differs from mere ‘experience’ and mindless drill. It is a discipline not inherently enjoyable. It does not involve a mere execution or repetition of already attained skills, but repeated attempts to reach beyond one’s current level…which is associated with frequent failures.It’s practice that doesn’t take no for an answer; practice that perseveres; the type of practice where the individual keeps raising the bar of what he or she considers success. This type of practice requires a constant self-critique, a pathological restlessness, a passion to aim consistently just beyond one’s capability. Failure and disappointment may occur daily, but there is a never-ending resolve to dust oneself off and try again and again and again. Every adversity, every failure, every headache carries with it the seed of an equal or greater benefit. It’s the kind of special, self-monitoring,intense kind of practice that forces your mind into the kind of change that is necessary for improvement.
Outstanding skill in any domain of human accomplishment—and morphologic occlusion is no exception—is rarely achieved without such disciplined dedication. John Keats opined, “Nothing ever becomes real ‘till it is experienced.” Simply put, we can't just wish our way into skill and success; skill and success are not given—they have to be earned!

Every act of conscious learning requires the willingness to suffer an injury to one’s self-esteem. That is why young children, before they are aware of their own self-importance, learn so easily; and why older persons, especially if vain or "important", cannot learn at all.

Thomas Szas, MD, Prof. of Psychiatry

The real issue is not talent as an independent element, but talent in relationship to will, desire, tenacity, doggedness, inexhaustible grit, and indefatigable persistence. Staunch, unwavering, principled purpose elevates what we do. Only the mediocre are always at their ‘best’. Remember, we are what we do every day! Are you willing to experience the above-mentioned rigors of ‘deliberate practice’ to move to a higher level of accomplishment? Do YOU possess the passion?

It should be made clear that the study of occlusion is not the study of an accurate science. It requires knowledge, experience, creative imaging, a certain savoir faire; it requires an appreciation for, and an understanding of, the intricacies of shape and form. The occlusion of one patient is not the same as another patient’s occlusion. There is no “One Way” to treat all patients. We must adapt basic morphaesthetic occlusal principles to the specific clinical circumstances given, prudently judge signs and symptoms, carefully analyze masticatory movements, evaluate the entire patient complex—not just the craniomandibular function—and then proceed with treatment based on the sound anatomic,
physiologic, and personal information gathered along with a clear pre-operative vision of the aesthetics and function which is to be achieved. Enlightenment is preceded by diligent, thorough research. Though knowledge may ultimately be limited—imagination is limitless. Indeed imagination, visual imagery, and artistic creativity may even be more important than knowledge! Remember: Thought is the sculptor! Schopenhauer said, “Thoughts die the moment they are embodied by words”. True enough, but when creative thoughts are metamorphosed and embodied into structural form, as opposed to only words, an entirely different result occurs. A work of art (or creating an occlusion!) is above all an adventure of the mind. After all, art and creativity pick up where nature ends.

You speak of Lord Byron and me; there is great difference between us. He describes what he sees. I describe what I imagine. Mine is the harder task.

John Keats

The ordinary act of mastication ought not to become a self-destructive act which, in spite of our most valiant efforts, it oftentimes is. Pundits wryly opine, ‘success’ often consists of going from failure to failure without the loss of enthusiasm. We can’t have good occlusion without good morphology, and poor morphology will only beget poor occlusion. (Fig. No. 7)

Contemporary ‘wisdoms’ being the main historic landmarks of the past, we need creativity in order to break free from the suffocating strictures that have been set up by convention. We’ve all heard the old morphology adage “Form follows function”, yet in reality it’s simply mere dogma until we realize the higher truth that form and function are really one—inextricably interwoven, flawlessly fused, and beautifully bound. Structural beauty must always be a determining criterion in achieving successful function. Thus, every restoration we fashion should be the utopian re-integration of lost morphotypia via biomorphomimicry, dutifully paying its multiple tithes to the dignities of the periodontium, the morphology, the occlusion, the overall aesthetics, and most of all: THE PATIENT. It is difficult if not impossible, as I’ve mentioned, for most dentists to think otherwise than in the fashion of their own time. Yet almost always, the creative, dedicated, insightful minority have elevated the profession and made it better.

You are never too old to set another goal or to dream a new dream.

C.S.Lewis

In summary, allying the conjugate pairs of ART (right-brain imaging, shape & form, morphology) and SCIENCE (left-Brain research, facts, function) is incontrovertibly the key to gaining the combined skill and knowledge required to successfully treat problems arising in what is the common denominator in all dentistry, occlusion. Often considered by many to be dentistry’s bête noir, occlusion can be comprehensible and unambiguous, especially when not pursuing strictly dogmatic ‘scientific’ theories, and when artfully experienced on a creatively higher level. Having accomplished a “union of the disparates” (Coleridge), occlusion actually transmutes to an aesthetic to be embraced. As such, I have sought herein to provide an artistic alternative in teaching occlusion which seeks to remove—once and for all—the persistent “confusion in occlusion” by emphasizing the importance of understanding, internalizing, and employing the artful nuances of morphology as the ineluctable key to creating and maintaining a beautifully functioning occlusion. The things we do, define us. The things we create, make us. Purpose elevates what we do (Fig. 6).

Simply put, the study of Occlusion is an adventure. To begin with, it is an unfamiliar dalliance with shape

Fig. No. 7
and form. Then it somehow becomes a mistress, then it becomes a master, then it becomes a possessive tyrant, then a terrifying monster. But just as you are about to be reconciled to your servitude, MORPHOLOGY rises up and slays the dreaded Occlusal Monster, setting you free to enjoy the fascinating adventure that is OCCLUSION. Thus is heralded the obligate rite of passage from artless neophyte to dental aesthete adroitly versed and disciplined in ... 

THE AESTHETICS OF OCCLUSION.
All the forces in the world are not so powerful as an idea whose time has come. (Victor Hugo)