FOREWORD

“Freedom belongs to those who have conquered it” André Malraux

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Devoting an entire issue of the Dento Facial Orthopedic Review to discussing the interactions between anthropology and orthodontics is a choice that may at first surprise the reader. Yet, in many ways, it is justified.

In our bodies, most organs develop in an efficient and spontaneous way, without any need for therapeutic intervention. This is not the case with the masticatory system, as evidenced by the endemic presence of bone base shifting, malocclusions, or dentomaxillary disharmony. This clinical reality is closely linked to the modern human craniofacial anatomy: there is a strong reduction in masticatory forces, an increase in respiratory pathologies, and a mixing of individuals with different ethnicities, etc. This issue delves into the reasons for these imbalances, using the tools and resources of paleopathology. This investigation will broaden the scope of dentofacial orthopedics and allow us to perform a more important role than simply correcting a few malpositioned incisors.

Professor Philippe has made it perfectly clear: we must, in our diagnoses, free ourselves from the norms, in order to view a patient beyond their cephalometric values, to identify their dysmorphia, and to develop an optimum therapeutic treatment. Such therapeutic and diagnostic freedom comes at a cost. If our perception is not marked by numerical and normative values, we must be able to read the craniofacial structure of our patients and integrate the dysmorphia into their functional context. Anthropology is used to address the complexity...
of craniofacial architecture. Tracing the evolution of the face to the anatomy of modern humans, and establishing the genesis of the dysmorphia, has led to many studies on interpopulational and intrapopulational variability. It is, therefore, a valuable ally which can free us from the norms.

When we have fully ascertained the structural causes of human craniofacial dysmorphia, naturally, we lose much of our naiveté with regard to oversimplifying therapeutic concepts.

A deep understanding of the human face, and the way it develops, naturally stimulate our critical sense of our therapeutic possibilities. This concept takes on an even greater importance in the context of the possibilities offered by modern techniques e.g., mini-implants, autoligaturants, alloys), it is up to us to set the limits of therapeutic treatments.

The history of our discipline is linked to the influence of anthropology in regard to therapeutic concepts. It is by observing a prehistoric human skull with aligned and wide arches which gave Angle the idea for Edgewise apparatus, which generates the same expansion without extraction. Similarly, the study of attrition among Aboriginal people is the basis of the concept of stripping.

It was in light of all these reflections that this issue was written.

We start with an interview with Prof. Lieberman, the eminent figure in paleoanthropology, who lays the groundwork for reflecting on the background of the subject.

A prospective clinical study on the influence of strong masticatory forces on the stabilization of maxillary alveolar transverse expansion highlights the importance of strong masticatory forces in facial development, as well as their possible uses in orthodontic treatments.

A bibliographical synthesis addresses the ethnic factor by focusing on two decisive parameters in our orthodontic analysis matrix: dental maturation and the position of the lower incisor.

The importance of taking into account the ethnic factor in orthodontic therapeutics is also introduced through a clinical example.

Dr. Brondeau examines the complexity of craniofacial architecture and expresses an interest in a global approach to the cephalometric analysis of the skull.

Dr. Bazert discusses the appropriateness of extending the view of the individual beyond the craniofacial sphere through an analysis of posture and possible interactions between craniofacial dysmorphia and the evolution of bipedalism.

Finally, Professor Philippe returns to discuss the common and novel history of these two disciplines—anthropology and orthodontics. He explains that clinicians depend on craniometry to mark their therapeutic movements, and why clinicians have to separate themselves from this discipline.

To enable this separation, we must master our own perception when analyzing the craniofacial structure of the patient. We can only obtain this mastery by enhancing our knowledge of craniofacial structure, the structural causes of craniofacial dysmorphia, and the variability in the anatomy modern humans. We need to invest in learning about basic disciplines to effectively develop the clinician’s eye.