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international journal of
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Editorial

The founding of a new scientific journal titled “**International Journal of Stomatology and Occlusion Medicine**” (IJSOM) by the Austrian Society of Dentistry arouses curiosity and raises questions in the reader’s mind. Why does a Central-European German-speaking Austrian dental society, rich in tradition, publishing a periodical with nearly the same name for about 150 years now, embark on the publication of a specialized Journal in the English language?

Why a new Journal? The first and foremost purpose of scientific journals of dentistry is to inform dentists and professional groups associated with dentistry about innovations which, when used in clinical practice, will benefit the patient. As the editor of a German-language Austrian Journal, I am confronted with the fact that scientific journals throughout the world are published mainly in the English language. Any information published in the local language of a country is accessible to those speaking the language but is hardly taken note of by the rest of the world. Thus, the linguistic Babylon of Europe itself and all other European languages spoken throughout the world as well as languages of all other cultures, with the exception of the English language, are isolated in the scientific sense and therefore out of communication. The immediate consequence of this reduced circle of readers is the increasing level of specialization evidenced in the list of English-language journals in order to maintain their economic efficiency. This creates a further barrier in inter-specialty dialogue.

For the young scientist’s career, the international rules at university establishments are such that the ranking of their publications is dependent not only on the quality of the scientific paper itself but also on the ranking of the journal the scientist wishes to publish his/her article in.

Therefore, we decided to publish a new Journal in the **English language**. We decided to publish an **international Journal, obviously peer-reviewed**, as a motivation and encouragement for our colleagues throughout the world to read this Journal, publish their work in it, and also use it as a forum of communication and discussion.

- **Why stomatology?** Stoma is derived from Latin, meaning “mouth”. Apparently a simple term, but turns out to be extremely complex when one takes a closer look at it. Stomatology is the doctrine and the science of the physiology and pathophysiology of the entry to the digestive tract, which is increasingly differentiated in Man in the course of his evolution itself, primarily due to the entirely new functions it has been required to perform over time.
- The **new post-evolutionary functions** will constitute the subject matter and content of the scientific work-up of **IJSOM** and are therefore listed in this section of my editorial:

Chewing and swallowing as the primary eponymous functions of the so-called “masticatory organ”,

Speech and Breathing, Head posture and Body posture, Esthetics and Stress management via the rows of dentition (pressing and grinding). Esthetics and Stress management are, to a large extent, linked with psychic well-being.

However, stomatology is particularly focused on all diseases of mouth, including disorders of functional processes, grouped together as so-called dysfunctions.

A major task of the scientific content will be to focus on the achievement of a clear definition and presentation of the physiology of ideal or acceptable functional processes before approaching the complex subject of

- **Definitions of dysfunctions** because any comparison of function and dysfunction is meaningful only if these prerequisites are fulfilled.

When searching for the cause of diseases in medicine, and also in dentistry, there exists a widespread tendency towards **Monocausal thinking** and thus restricting medical as well as dental diagnostics and diagnosis. This also generally limits the scientific work-up. One of the prime purposes of this Journal will be to encourage critical dialogue on the **reductionist mode of thinking**, which is regrettably very popular today. One finds this tendency towards simplified thinking in many publications.

Multicausality in scientific discussion will be a major concern of IJSOM with regard to all diseases of the masticatory organ.

- **Why occlusal medicine:** The understandable reactive wave of rejection after the dogmatic and widespread monocausal mode of thinking pursued by traditional gnathology in the late fifties of the 20th century led to rather radical limitation or even elimination of the significance of occlusion as one of the potential causes of functional disorders of the masticatory organ in the published dental literature. It was a trend that spanned and spilled over into several other specialties as well.

However, this phenomenon was by far not limited to the subject of functional disorders. Rather, it encompassed nearly all sub-specialties of dentistry: periodontology, oral surgery, maxillofacial surgery, and consequently also the growing new branch of implantology, restorative and prosthetic dentistry and – most unfortunately – even orthodontics. On a nearly global basis, but first and foremost in the USA, it led to a noticeable reduction in basic teaching units on dentistry at training institutions. The radical nature and the scope of restorative, prosthetic and implant-prosthetic

interventions, however, are strongly on the increase. From this point of view, re-integrating occluso-articular aspects into the mode of thinking in dentistry appears to be an essential element of prospective planning such extensive restorations as well as an essential challenge for a dental journal like IJSOM. On this point, however, I would like to make a cross-reference to Sadao Sato's introduction because this subject is one of his foremost concerns.

- **Cybernetic thinking in natural sciences** serves to disclose significant associations in medical diagnostics. Therefore, the presentation and assessment of feedback control systems appears to be highly instructive and constructive for accesses in therapy. Scientific papers concerning this access are extremely desirable because they facilitate **intradisciplinary dialogue** within the sub-specialties of dentistry as well as bridge the gap to interdisciplinary communication in medicine and other natural sciences. The human masticatory organ is a complex system with multiple functions. From the diagnostic point of view, it is best described as a cybernetic feedback control system. The human masticatory organ is an entirely new evolutionary concept with newly networked functional areas: in other words, a **new organ**. From the cybernetic point of view, the organism is a highly complex and closed system. It is unified by a common (external and internal) flow of information that compels all internal dependent sub-systems to undergo reactive changes and thus remains in a state of permanent instable homeostasis. In contrast to a "mechanism" the organism is in a constant mental and material relationship with its environment **and is constantly adjusting to the environment**. This permanent reactive adaptation of an organism to maintain homeostasis may be interpreted as a definition of the word "life". Therefore, in the case of disease, one will have to discuss these adjustment processes as well as individual adjustment abilities. Individuality will be a provocative word in the discussion on evidence-based medicine, which a new Journal will have to focus on.

One of the key questions of the discussion on the masticatory organ is the following: **What is the role of the psyche in the functions and dysfunctions of the masticatory organ?**

The psyche is involved in different ways, and with entirely different concatenations, in all of the functions listed above. These links are clearly seen in the libidinous aspect of the ingestion of food, in trying to keep one's "mental" composure when expressing oneself in linguistic terms, starting one's communication with a disarming smile (to emphasize the role of the "face"), or even when consciously using one's rows of teeth to reduce psychic stress.

The role of the individual in his environment

I am citing the following from the latest edition of the Brockhaus Encyclopedia:

Environment

The entirety of all direct and indirect biotic and abiotic factors acting on an organism, a population or a community, including

their interactions. The term "Umwelt" (environment) was introduced by J. von Uexküll in 1921 as one of the fundamental terms in ecology. According to him it is the specific environment of an animal species, essential for its existence and perceived by the species as its **world of characteristics** (the entirety of its characteristics). As the **effective world** (entirety of its effective characteristics) it includes all environmental factors the animal species actively relates to and acts upon (functional circuit).

For Man, in addition to the physical environment (natural factors) and the technical environment (created by Man), his social environment is also very important; it consists of the social structure in which Man lives. The development of human personality is marked by the ambience in which he undergoes his social experiences (socialization).

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In other words, the individual not only remains a passive component of his environment but also actively and causally intervenes in this environment. Both in scientific work-ups of diagnosis and in the treatment of functional disorders, this aspect is frequently ignored. One of IJSOM's concerns will be to devote attention to this subject.

• What is the role of pain in dysfunctions of the masticatory organ?

Pain and the masticatory organ are of great interdisciplinary scientific interest. Chronic pain is a special problem with a major psychic aspect. The general complex of functional disorders named "oro-facial pain" has been largely disconnected from dentistry. These disorders have created new terminologies and their own scientific language. However, as the chronic-pain patient is a routine guest at the dentist's office, frequently escapes notice and therefore remains anonymous, the specialist's detachment and isolation are undesirable. One of IJSOM's important concerns is to re-start this interdisciplinary scientific dialogue.

• What is the role of the psyche in the evolution of Man?

Evolution and anthropology will be assigned a fixed position in IJSOM because we believe that Man's evolutionary history until the present species contains key answers to some of his problems in the present time.

• The repetition of phylogenetics in individual ontogenetics

frequently permits the investigator to identify undesirable development early and initiate preventive treatment if necessary.

• Gerostomatology

is a very important sector with immensely important links to the individual sub-specialties of dentistry. It is devoted to geriatric dentistry. The interface between gerostomatology and general medicine is of particular significance, in the establishment of a strategic discussion on oral care as well as from the complex perspective of the individuality of dental prostheses.

• Revitalizing the discussion on the importance of occlusion and articulation

Pertinent to dental patients of every age, this forum of discussion creates a new possibility to transform dogmatic Class I

thinkers in dentistry into flexible appliers of functional variations in the recent and modern human being. This creates a large platform for the development of.

- **Concepts**

Even in the currently ongoing discussion on previous or current concepts of occlusion, one must explicitly emphasize the fact that solely the concept of optimal function (as expounded by Plato) is the decisive factor underlying natural dentition that undergoes its ontogenetic development regardless of all factors. On the contrary, concepts of occlusion and articulation are hypothetical considerations and methods of combining teeth, rows of dentition, and inter-dental relationships into a single method of classification. A comparison of well-documented, naturally grown dentition may well

be made when discussing the pros and cons of certain concepts, but can by no means be used to disprove hypothetical concepts. Hypotheses (concepts) must be clearly described in scientific language and must be backed by evidence; this will render them vulnerable and they will thus contribute to the development of the science.

IJSOM's task will be to provide a good platform for this purpose.

A wide horizon will be made accessible to users, readers and science. We look forward to enjoyable and fruitful cooperative work.

Rudolf Slavicek