We are all Orthopedic, not “orthopaed-ic” or straight-child-ish... from “παιδίον”/paedion (=child) of Andry’s book for children!

There is a considerable difference between the spelling of the word «Orthopaedics» and «Orthopedics»; in fact, the first one, («Orthopaedics»), is incorrect and inaccurate; it has been widely used and copied as the correct spelling of the term to which one commonly recurs in order to refer to the profession or specialty of «Orthopedics»; the spelling with an «ae» derives from the French term «orthopédie» used in Andry’s book (written in 1741) providing instructions for the prevention of deformities in children; «orthopédie» is formed by the ancient Greek words «orthós» (straight and correct) and «paidion» or «pédion» (=child), while the correct ancient Greek etymology of the term «Orthopedics» («Orthopédikis» in Greek) derives from the ancient Greek word «orthós» (=straight and standing up) and the ancient Greek verb «ped-ó» (=to prevent a distortion, commit, hold strong and steady, engage with brakes, keep something motionless, bind) or, from its derivative word «pedions», with an “e”; Orthopedics comes thus, straight from the combination of two ancient Greek terms which embody and literally express, the specialty of prevention and correction of deformities, in all age groups and not only in children. The word «orthopédique» (orthopedic doctor) is the direct adjective of the ancient Greek verb «orthopédodo» (=standing up upright/raising someone upright on the ground or on the “pedion”) derived from the words «orthós» (=straight and standing up) and «pedion» (=ground, field or soil).

The purpose of this study is:

- To explain the error of continuing to use the actual, widely used term «Orthopaedics» with an «ae» versus the correct one «Orthopedics» with an «e».
- To present and make widely known and understood to the core, the so-far, unknown and some how, neglected ancient Greek roots of this term and in which manner they relate to it and, we should all agree that Andry’s etymology is the only correct one and the sole and unique correct medical and scientific term is «Orthopedics» with an «e», in Greek with an «αι» (=epsilon), which is the direct and self-evident objective of the ancient Greek verb «orthop-o(e) d-ο» deriving as it is mentioned from the ancient Greek words «orthós» and «pedo» from the Greek roots (= pedi/ podo) [1-4,9,10]. The alternative use of “ο” and “ε” letters in the same word was very common in the ancient Greek language e.g. «Λόγος/Légo» etc. When Paul wrote to the Galatians he said that Peter did not walk uprightly, according to the truth of the Gospel. Galatians 2:14. The Greek word here translated “walk uprightly” is the Greek word “ορθοποδέω/ orthopedoeo”, “ortho” (right), “podoe” (walk) [8].

Back in 1741, in Andry’s time, there were only few Greek academics with an excellent command of the Greek language; even the ones studying or living in France, aimed and worked towards liberating their country from the Turkish occupancy and most certainly, could not engage themselves into explaining to a French physician which should be the most suitable words to use for this term, or how to spell and write it correctly; these were the pre-existing ancient Greek words ortho-po(ε)do-o, pedo, ped-ion and péd-i, all written with an ε/e, not an αι/ae. The problem is that these words have the same spelling with «paedion» or «pédion» in French.
In this way, many English or American Orthopedic surgeons e.g. the members of the American Academy of Orthopaedic Surgeons (AAOS) who are not aware of the already cited correct and appropriate ancient Greek words, have been misled to believe that, the only correct word for their specialization is, in fact, the wrong one; Andry’s used words for children, «ορθόπους/ορθό-παιδίον» (=child), are not the suitable to express the whole object of Orthopedics. Unfortunately, the term «Orthopaedics» with an «E» has been established based on the second wrong synthetic word «paedion/paidion» (=child) indicating it has to do with children and assuming that, all adult orthopedic surgeons specialize in «children», in «childish» or «only for children»... as it was described in Andry’s book.

The Orthopedic medical specialty is not a “book for children” but a specialization mainly addressed to adult patients, which primarily assists them in standing up, walking upright and in an «ορθός» (=straight position, standing on the field/soil) and «παιδίον» in Greek, and on a second basis, a specialization that aims at rectifying and preventing deformities, concepts related with the ancient Greek verb «ped-ο» and its derivatives, and certainly not with the word «paidion/paidion» (=child) as in Andry’s book. Ortho-ped-ic surgeons or doctors, do not “play” with “paidia/paedia” (=children) or don’t try to “become” nor «be have» like children. All are adults who try to correct or avoid deformities in every patient, not only in children.

The correct words to express the object of the ortho-ped-ic specialty existed and were being used for more than twenty centuries before Andry’s book for children. The ancient Greek word ὀρθόπους/ορθό-παιδίον (someone with straight feet), and not «ορθο-παι-υς/ορθο-παι-ες», has been used by the ancient Greek tragic poet Sophocles (496-406 BC); the term is composite from «ορθός» (straight) and the derivative of the verb «πεδίον» (=foot) in Greek, for over a century as «ortho-ped-ics» with an «E», only. 

Why do we consider as correct the derivative "ortho-paed-ics" of Andry’s term “ορθοπαιδίκη” based on «παιδίον/paedia» (=child) and as false the self-evident derivative «ortho-ped-ics», object of the verb «ortho-ped-δο» related to the object of Orthopaedics as a whole? The sole correct term must not depend upon partial data taken from a “book for children” nor upon the erroneously used words of a French physician but, should be reasonably based on the knowledge of all historical and etymological data, available on this subject [3-8]. The meaning of a term must be in agreement with its composite words. Ortho-ped-ic surgeons are not "ortho-paed-ic" nor are they, if one can say it this way, “straight-childish” (literal meaning in Greek of «ortho-ped-ics»)...The term «ortho-ped-ic» with an «E», not an «AE», is written in French as «orthopédique», in Latin «ortopedico» and in Greek, for over a century as «ορθο-πεδίκη» with an «E» only.

It came natural to French and English orthopedic surgeons to connect the term Orthopedics/Orthopaedics with the words «paedion/paidion» (=child) of Andry’s book because they assumed it’s the same and because they did not seek advice from any renowned Greek linguist or any educated orthopedic surgeon, who would have explained to them the long Greek history of the term Orthopedics. To top this confusion and make it even more complicated, an additional problem has emerged concerning this matter, this time, in Greece: in an attempt to match and to conform with the guidelines and terms used by the American AAOS Society, the Greek Orthopedic Society (EEXOT) -which up to the year 2000, was bearing its well known title, written only with an «E» and maintained that form for more than 50 years- decided, without obtaining the absolute majority of its members, to replace the term in question, with an «ae», thus, with the term «Ortho-paed-ics/Orthopaidikis»! A new mistake copied by another one! In the majority of the Greek or related to Greek language dictionaries it’s written «Orthopedics» with an E, not AE or AI, philologists and linguists know it as «OrthopEdics/OrthopEdiki» as well; they all wrote it with an «E»; this new modification directly ignores the root of the ancient Greek verb «ped-ο», most probably, in an attempt for homogeneity, which, as explained, is based on false data [3,4,9-20].

The term Ortho-ped-ics is also used in the Veterinary medicine; they use the correct term to express the correction of deformities in animals; the veterinary medicine e.g. uses ortho-ped-ic splints for dogs or for cats’ fractures. Is it normal to commonly accept the use of the term «paedics» (=children’s and childish) for both, children and animals? Is it normal that the term which always refers to our children, is being used to indicate corrections of deformities, in animals? The ancient Greek verb «ped-ο» and its derivatives contain and express the practice of correcting all kinds of deformities in human beings of all ages, not just in children. We do not use children «paid-ia/paedia» (=children), instead of ortho-ped-ic splints or methods, to correct deformities.

This is really a strange linguistic and cultural phenomenon, widely discussed in the circles of intellectuals, cultivated Greeks and the medical Community; to seek authenticity and accuracy for our science and profession constitutes intent to avoid cultural and linguistic discrepancies and distortions.

Unfortunately, because of this mix-up and the everlasting and continuous use of a false term, there are currently and over these last years, two different terms used in Greece: one is the term Ορθοπαιδική/Ortho-ped-ics with an «E», used by nearly all educated Greek people who are aware of the ancient Greek etymology of the word or prefer to write it similarly to the term "orthopedic" of Andry’s book, and the other one is the «ridiculous» term, when it comes to adult surgeons, «Ορθοπαεδιακή/Ortho-paed-ics» (with an «AI/AE») used by some of the members of new Greek "Ortho-ped-ic"... with «AI/AE» Society and by near only one Greek linguist and his dictionary [21].

Another argument that questions the correctness of this spelling and writing is the fact that if, in every country, one had to literally translate the "etymology" of the already mentioned ancient Greek terms, borrowed from Andry’s book, then, for example, the Italian orthopedic surgeons should also be called with the ridiculous terms “Orto-bambini”, “Corretto-bambini” or “Dritto-bambini”... the English or American ortho-ped-ic surgeons should also be called with the funny terms “Ortho-childish”, “Ortho-infantile”, “Straight-childish” or “Straight-infantile”... and the French orthopedic surgeons "Ortho-enfantains" or “Enfant-droitique”... in their respective languages based on the incorrect second derivate παιδίον/paidion (=child).
In my opinion, the continuing perseverance to mistakenly use the wrong root of the wrong word in order to express our association with this particular science and profession, does not do count nor justice to serious and educated scientists. The correct and appropriate term is only Orthopedics, written with an "e-e" (epsilon) It's the sole correct term that should be unanimously, commonly, widely used to refer to our specialty and to that effect, its spelling and writing should be reviewed by experts, adopted and adapted with an "e-e" in all languages; it should become the only term in all electronic or paper dictionaries referring to our profession and finally, all related terms, composite words or deriving from this, must be written following the same linguistic principles, based on the same non-distorted etymology of the word.

As additional supportive reference there is related vocabulary to the correct etymology of the term Orthopedics from the word "orthos" and the root "ped/pod" written with "e-ε" (epsilon) in Greek, abounds in Greek literature; In the Greek and English lexicon of Liddell HG et al. "Ορθόποδος/Orthopedo" (=to walk upright), "ορθο-ποδ-εικόνιον/ortho-pod-ousi" Επον, τ. Γάλατη, β', 14, "Ορθό- πους/ortho-pous" (=with straight feet) Νικ. Αλέξης, 419, "Ορθό- ποδ-ητά/ortho-pod-ite", "Ορθό-ποδ-ό/ortho-pod-o" (=I follow the straight path, I walk along a straight road) Ινάκης, Μεσοντ. 2, Ιδε-Αθήνας τ. ΙΑ, σ. 494, "Ορθό-ποδ-ία/ortho-pod-e" δίζο ("I follow the straight path, I walk along a straight road) Καρτ. Ι. 80-18 [3,20].

In the intermediate Greek-English lexicon, Liddell HG et al. It is also mentioned that "aetolic type πεδ-ά/πed-a is coming from the roots -πεδ/- ped (πρβλ. πε-ζός in Greek, pe-zos, ped-isequos in Latin), "ορθό/orthon ποδ-ά/πod-atthima" (=stretch the leg straight ahead in English), πεδ-άορος/ped-aoros" (=the elevated above the group in English), "πεδ-ητέριον/πed-ierteion" (=bind, bond, cuff, barrier, fetter), "πεδ-αίρει/πed-airei (=I get up and go to another place in English), "πεδ-άορος/πed-aoros" (=bind, bond for feet), in Latin etymology ped-ica, ex-pedi-im-ped-imo (=fetter in English), "μ-πεδ-όνιον/em-ped-onion" (=obstacle, prevent) [4].

In the Thesaurus Linguae Graecae (TLG), there are also the words: "Πεδ-έα (ped-ia), πεδ-αίρει/πed-airai (=Ped-aoros) (=child) (=I follow the straight path, I walk along a straight road) Καρτ. Ι. 80-18 [3,20].

Almost all Greek dictionaries, except very few e.g. of Babiniotis, have the term "Ορθοποδίκη (= Orthopedics) with an e/ε, as a first choice and not the incorrect for the orthopedic specialization term "Ορθο-παιδ-ική (=Orthoped-ics)" with an αι/ae [21].

The somehow amusing, but still, unacceptable phenomenon of two different types of writing for a term, meant to identify one of the most important medical specialties, as Orthopedics and "Ortho-paedic", cannot and should not go on indefinitely. The issue must be resolved and permanently corrected by a unanimously adopted decision by all orthopedic surgeons, globally, to use the only appropriate title for their profession, "Orthopedic doctor or surgeon." This spelling and writing with an "e" is similar to the French "etymology" and term "orthopedie" established by Andry [5]. The term "orthopedie" was correct for his book and the correction of deformities in children but not to express the prevention and correction of deformities in all age groups and the whole content of the modern orthopedic specialty, mainly the correction of the deformities of the adults from adult and not child-ish or "paed-ic"... surgeons.

This major linguistic modification, implies the orthopedic surgeons global understanding on the matter, their unconditional cooperation into establishing one unique form of writing this word; in particular the members of all Orthopedic Societies in Greece, England and the U.S., mainly that of the American AAOS, who use and insist upon using only the words «orthon» and «paedion», should carry out a thorough study and research of all historical and etymological data, before Andry's issuance of the book that caused all that stir and confusion, as well as, to understand the core of the problem and respect thus, the real correct quintessential ancient of modern medicine. If «prognosis» and «diagnosis», «anatomy» and «gynecology» are the only words that immediately and automatically come to mind when needing to perform or refer to what the words indicate (try to say «anatomy» otherwise) and have survived throughout the age of times, linking us directly to Hippocrates' Asklepiou, why shouldn't this apply to our word and «our» worlds? Why shouldn't we restore the real ancient Greek word for the Orthopedics' profession? We would correct a really significant linguistic mistake; we would define the object of our specialty and would certainly restore Hippocrates' intended original ancient medical vocabulary. I suggest we move along with the values that praise the authentic and the correct.

Conclusion

In conclusion, the only permanent solution in the future is the unanimous acceptance and adoption, on behalf of all orthopedic surgeons of the term ORTHO-PED-ICS including the correct root PED, in all scientific magazines, Congresses, seminars and meetings and the rejection and definitive replacement of the incorrect title «ORTH-OPAED-ICS», mistakenly adopted and introduced by Andry's usage of «PAED-ION» (=child)... We are not children nor child like or childish to declare that we belong to a "PAED-IC" Community... or those we members of "PAED-IC"... societies.

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