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Centennial of « *Tectonics of Asia* », by Emile Argand : a milestone for Alpine and Mediterranean tectonics

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As stated by Argand's mentor, Maurice Lugeon, the title of Argand's publication is misleading, because it is a book about the general processes of the solid Earth, and by no means restricted to Asia. In fact large part of this book is about the Alps and the Mediterranean region, and its conclusions about the latter area precede by 50 years what scientists of the early « Plate Tectonics generation » will eventually assess and consider applying new methods of study, not yet available in the 1920'.

Argand's last significant publication before « La tectonique de l'Asie » is that of 1916, in which he presents a cross section of the northwestern Alps, covering a vertical depth of more than 20 km and revealing the complete nappe structure of the orogen. Whereas the most important Alpine geologists of that time promptly react by constructing Argand-type cross sections in all parts of the orogen, Argand himself does not apply his concepts and approach to any other area of the Alps. He steps back from refining the architecture of specific Alpine regions and eight years later he presents in « La tectonique de l'Asie » with eight orogen-scale sections including the Alps, the Apennines, the Betic Cordillera, Carpathians, Anatolia, and the Himalayas, all simplified to the very essential elements that allow Argand and his readers to understand the 1st-order orogenic processes that mould mountain chains.

Just like Wegener, and at the same time, Argand cogitates about continental displacements. Each of these scientists builds his arguments upon the ones of the other. Wegener bases his interpretations on the synthesis of most diverse data sets, Argand upon the deep and detailed understanding of how horizontal movements are accommodated and recorded in the structure of mountain chains.