



Alexander von Humboldt: Dilletante of Natural History or Oracle of Modern Science?

A.M. Celâl Şengör

ITU Eurasia Institute of Earth Sciences, Turkey (sengor@itu.edu.tr)

When the German satirist and journalist Alexander Moskowski interviewed Einstein in 1920 and implied that in Einstein's Valhalla of scientific geniuses Alexander von Humboldt surely had a place, he was taken aback with the surprising denial: 'At least Alexander von Humboldt I do not count among the geniuses... One has to realise that when we today look back upon the great discoverers, Humboldt hardly comes to mind.' Writing to his friend Joseph Dalton Hooker, Darwin was more appreciative, but essentially made the same point: 'I believe that you are fully right in calling Humboldt the greatest scientific traveller who ever lived. ... His Geology is funny stuff; but that merely means that he was not in advance of his age. I should say he was wonderful, more for his near approach to omniscience than for originality. Whether or not his position as a scientific man is as eminent as we think, you might truly call him the parent of a grand progeny of scientific travellers, who, taken together, have done much for science.' Was Humboldt, the greatest geographer ever, only a wandering dilettante who amassed a vast amount of knowledge or did Darwin and Einstein miss something in him that made him a true oracle of modern science, a genius who saw farther than others in his time? Darwin did not live long enough to be able to read Suess' Face of the Earth and Einstein probably never perused it as it was too far afield for him. Only after having read Suess does one appreciate that Humboldt represented the necessary transition from the piecemeal geology before him to the global geology that Suess finally brought to full fruition. Humboldt did see Élie de Beaumont's thoroughly deductive global theory and wrote appreciative things for parts of it, yet pure deductivism was not his own way of doing science. He saw his contribution to lie elsewhere: 'I flatter myself, that I may render some service to the small number of geologists, who prefer the knowledge of positive facts to speculation on the origin of things, in furnishing them with materials, from which they may generalize their ideas on the formation of the rocks in both hemispheres.' The positive facts he supplied did indeed help the geological world to abandon neptunism and to see the great mountain ranges and the vast basins of our planet as expressions of its dynamism. His broad knowledge in different compartments of human knowledge made him an extremely insightful critic of some fundamental geological methods as exemplified by his perspicacious critique of his friend Cuvier's biostratigraphy. Alexander von Humboldt was a true oracle in geology and if geniuses such as Darwin and Einstein missed it, it was because of the way Humboldt presented his material in the fashion of an encyclopaedist that brought his polymathy to the fore but veiled his original ideas in multifarious fields of inquiry. So, we should ask the muse of the history of science, *νδὰ μι ννεπε, μ̃σα, πλ̃τπυ, ς μ̃λα πλλ̃!*