Salutation

The authors of this special issue wish to pay a tribute to Prof. László Órlóci and his great lifework. This lifework reveals to us a scholar who has wide international relations. Indeed, his colleagues and co-authors have been recruited from more than a dozen countries. His range of impact is even much more extended, thanks not only to his papers, but also his international projects and the more than 80 courses, seminars, summer schools and lectures, which were organized or given by him. His vegetation studies also incorporated several continents and numerous countries. About the details above, and about László himself and also the statistical ecologist and the scientific educator, as well as the milestones of his scientific career, Otto Wildi already provided a good review on the pages of this journal in 2000.

László has never forgotten his motherland. Though he left his country early, his relations to Hungary have never ceased to exist. He still maintains strong ties to Hungarian ecologists. It not only serves remembrance, but also teaches us several lessons, if we bring back to mind his direct and indirect influence on Hungarian vegetation science, and recall some important aspects of his Hungarian ties. His first scientific publication was prepared at the Forestry Highschool in the charming west Hungarian baroque town, Sopron, in 1955, while he was still a student. As a co-author to his professor, he described the forests in the Sopron Hills, and studied the acclimation of alien conifers introduced in different communities in the 19th century. Looking at them much later, these descriptions may be regarded as a foundation of a long-term ecological experiment. During the repeated surveys of the forest vegetation of the hills in 2011, it turned out that – as attested by the reference material published in 1955 – a period longer than a hundred years was necessary for the coniferous species to effectively gauge the habitats. Nevertheless, this early study was still written in the style of the central European phytosociological school, and does not reveal anything of the prospective researcher of statistical vegetation science.

During what followed, history played a crucial role in shaping the research career of László. The revolutionary events of 1956 in Hungary offered the opportunity to the faculty of forestry in the border city to free themselves of the rule of the oppressive regime, which was supported by the Soviet army that crushed the revolution with arms. Taking advantage of it, the faculty as a whole left the country. The Canadian government seized the opportunity and established a Hungarian section at the University of British Columbia in Vancouver. After obtaining his Ph.D. degree there, László left for the University College of North Wales, Bangor with a postdoctoral fellowship (1964-1965). There, in the school of P. Greig-Smith, the master of quantitative ecology, who created the scientific atmosphere encouraged him, László’s interest turned to statistical ecology, or more precisely – joining the pioneering steps of D. W. Goodall, J. M. Lambert, W. T. Williams – to the multivariate ordination and classification methods. He developed numerous new models applicable for analyzing taxonomical and syntaxonomical data sets. The publication of the more than 20 influential papers followed by a volume titled Multivariate Analysis in Vegetation Research (1975), represent one of the peaks of his scientific career. In 1982, his paper published in the Journal of Ecology on the ordination of variable-rich ecological data became an ISI Citation Classic. It is not an exaggeration to say that László has become the leader of researchers who revolutionized the classic field of vegetation science with their new analytical methods, since it has become clear that the application of these methods significantly increases the objectivity of research. This revolution has taken place also in Hungary (just like in other Central European countries engaged in classic phytosociology). Multivariate techniques still shape the classic (descriptive) phytosociological works in Hungary.

It is by no means indifferent for us that during the aforementioned period of the 1960s, Pál Juhász-Nagy spent the months of his visiting scholarship also in Bangor. Both of them aimed at renewing vegetation science. László was focusing on data analysis, whereas Juhász-Nagy was diligently working on developing mathematical functions that describe the basic sociological phenomena. It was their shared view that the application of information theory may yield serious advantages, so they both turned to the achievements of Alfréd Rényi. Their friendship and collegial relationship yielded their fruits in various forms of cooperation. János Podani completed the theory of spatial processes of vegetation in its entirety at Órlóci’s department and received his Ph.D. here. Later he joined the successful program ISVS (International School of Vegetation Science) of his former professor. László has been to Hungary several times. His visits, and the mini-symposia scheduled just for the same time – and not infrequently with international participants – were regarded as outstanding events of our field. He played a great role in the establishment of Coenoses (one of the predecessors of Community Ecology), helping our ecologists with its publication opportunities to appear on the international stage.

On behalf of the International Association for Vegetation Science, Hungary organized the forthcoming, 34th symposium of the association in the city of Eger in 1991. To day, this has been the largest event for Hungarian vegetation scientists, for this reason, the contribution of Prof. Órlóci proved to be of great help. He got to know Bálint Zólyomi, the doyen of Hungarian vegetation scientists, there. I can recall it: the mutual attraction towards one another developed
soon. None of them was influenced by the fact that they represented two distinctly different branches of vegetation science. László was apparently captivated by Zolyomi’s many-sidedness and originality in thinking. We may truly regret that their acquaintance has not begun earlier.

In his works during the past years, László often turned to vegetation dynamics. (It is for our satisfaction that – as it turns out of these works – he soon recognized the geniality of A. Kerner – the person who provided early a masterly description of the vegetation of the pusza in the Great Plain, and who still stands close to the Hungarian ecologists – and his role in laying the foundations of vegetation dynamics. He elaborated his view on this with eloquent arguments in several studies in order to convince western ecologists who were inclined to withhold the above facts.) László set to himself not a least goal than the foundation of the theory of vegetation dynamics (or rather narrowly, that of long-term secular succession). He considered necessary the explicit formulation of such terms as phase structure, trajectory mapping, attractor behavior, process velocity, process acceleration, velocity oscillation, process parallelism, etc. In this respect, his connection to the works of Hungarian paleobotanists is a significant moment. The Hungarian researchers have published several excellent case studies (because they are based on precisely dated and thoroughly identified fossil plant material), mainly from the Northern Great Plain. Recognizing the value of them, he analyzed the palynological spectra of the drill cores with his new statistical tools in his book published in 2012. Just to highlight some of the main results: the advantage that yielded from the expansion of the multiscaling concept over temporal processes has become apparent, whereas the application of the concepts of equal time steps and homeomorphy has satisfied the fundamental need, the objectivity in the comparison of palynological spectra (paleorelevé series) in paleobotanical syntheses. There is no doubt that the introduced methods may exert a fruitful influence on the thoughts of those here and abroad who are engaged in paleobotany.

Prof. Orlóci has received a number of scientific honors and prizes, such as the membership of the Canadian Academy of Sciences, a D. Sc. honoris causa from the University of Trieste, and won the Distinguished Statistical Ecologist Award of INTECOL, just to name a few. Recognizing his lifelong contribution to the development of the science of ecology and his continuous and influential ties to ecologists in the country, the Hungarian Academy of Sciences also elected him among his members. László bears this title (external member of HAS) with honor. His inaugural lecture was held in the headquarters of the Academy of Science in Budapest in 1991, in the presence of several leading representatives of international vegetation research. Humorously speaking, this has been the only double inaugural in the 182 years long history of the academy. It is because after the lecture of László, his wife Mártta took over and, in her kind and touching retrospective speech, voiced their contentment and pleasure for their long overdue return.

With his own existence, László Orlóci refutes the saying that no-one can be a prophet in its own homeland. It is because he is a respected and acknowledged scholar in both, his native and elected countries. He also is an internationally renowned scientific authority, who carries his scientific rank with modesty, and who selflessly supports those who deserve it. Now as he’s just passed his eightieth birthday, we wish him strength and health so he can continue his works with unaltered passion and creativity.

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