A CONFESSION OF A ZOOGEOGRAPHICAL SINNER. Jerzy Prószynski

Norman Platnick (Peckhamia 1(2): 23-24) has criticized my statements on limited relationships between Palaearctic and Nearctic faunae of Salticidae, amounting to about 5% of species overlap and to 12% of species related, the percentage based on species studied by myself or otherwise known to me. The criticism was also seconded by Bruce Cutler (Peckhamia 1(4): 62).

Thanks for reminding me of the Holarctics. However, I have not commented on general theory, but presented results of my own comparison of representatives of the salticid faunae of two continents. My research consisted of finding resemblances between species, arranging them into morphological chains of presumably related forms, and then analyzing geographical distribution of these related forms. I confess that the results were surprising for myself as well, but the results were such as I stated. Of course the results may be wrong, for instance because I misunderstood relationships, have not recognized relationships, or studied an insufficient number of species, omitting perhaps the most important ones. These allegations should be, however, substantiated by further research. I shall be very glad and grateful if somebody would correct my findings. But by new research, please.

Platnick explains that the percentage of specific overlap between Palaearctics and Nearctics is unimportant because both faunae could have originated from a single fauna and differentiated after splitting on both continents. Thus the degree of their differentiation would be just a function of the time. Originating from the same fauna they are still related, even if their specific overlap is nil, after lets say 70 million years of isolation. But have they originated from a single fauna? Have Oriental and Ethiopian regions contributed nothing to formation of the Palaearctic fauna of Salticidae? No genera originated endemically? Thank you Norman for suggesting these points to me. I have already begun to study these possible influences. And by the way, what is the speed of speciation and faunal differentiation processes in Salticidae and in spiders generally? That should also be taken into account. The age of migration is also suggested. I should point out that after examining 427 better known species from both regions I have not found others closely related.

1The elaboration of my original findings of 1976 is given on tables 9 and 10 in my paper of 1976: 49-52, see also my English summary on pages 231-235. They list species which migrated from one region to another, indicate the hypothetical direction of migration and species which presumably evolved from the migrants.