

from the members

## Re-unite Gondwanaland!

Impressions from the 4th international conference of the International Biogeographical Society at Mérida, Mexico, 8-12th January 2009

The very ambitious demand above was written with 50 cm large flaming letters in the Geodepartment of the University of Copenhagen, in the roaring seventies, on the wall in the gangway between the section of palaeontology and that of tectonics. I suppose somebody felt that good old geology had been torn by suboceanic lava flows, and longed back to former unity.

As a green researcher in those days, with interest in organismal biology (biodiversity had not been coined as a term yet), I felt that my discipline became torn too. The rift was between the taxonomical bookkeeping and the ecological wilderness and often much sharper terms were used to express mutual disregard.

When biodiversity in the beginning of the nineties became an issue of interest (for once in this sequence: first politically, then scientifically), I and several others hoped that now taxonomy and ecology could converge again but that did not happen, at least in the circles where I was. Instead, the field of biodiversity became a battle ground where taxonomists and ecologists fought intensively for grants, and accordingly the tone between the parts became more and more garish.

Biogeography existed as a term (or two terms: phytogeography and zoogeography) but encompassed an array of disparate disciplines:

- description of distribution patterns of plants and animals leading up to biogeographical regions and realms,
- historical biogeography focusing on a long term temporal scale,
- ecological biogeography with an autoecological approach to understanding of what determines species distribution,
- vegetation (or community) geography trying to define supraspecific ecological units and to explain their distribution,
- panbiogeography – the biogeography based on the paradigm of vicariance
- island biogeography where species are numbers rather than individual entities
- macroecology where species numbers become dots in graphs or colours on maps

Even though there were contacts between actors on this scene and even if media like *Ecography* and *Journal of Biogeography* existed, there was no common forum for biogeographers before 2000 when the International Biogeographical Society was founded. The foremost paragraph of the mission statement was the following: “Foster communication and collaboration between biogeographers in disparate academic fields – scientists who would otherwise have little opportunity for substantive interaction and collaboration.”

How did the 4th International Conference in Merida live up to this purpose? To judge from the titles of the symposia one should not expect sound healing of the ruptures between the disparate academic fields. The topics were (**bold typing** is my invention):

1. Pattern and Process at Biogeographic **Boundaries**
2. The Biogeography of **Disease**
3. Biogeographic **Disjunctions** between Asia and North America
4. **Extinction** Biogeography

The boldfaced terms do really not forebode unification or strengthening, but as the lectures proceeded it became evident that they represent potential fields for syntheses rather than black holes where biogeographic pattern and process vanish.

The speakers were excellent, the coherence between lectures within the symposia fine, and the scientific level high without being so sophisticated that part of the audience was disconnected. As a result there was only little seeping away from the lectures even at times where people got tired, hungry or overwhelmed by jetlag.

Without reducing the quality of the other three symposia I wish to point out the talks in the extinction symposium. It was an oratorical fireworks. We almost felt the late-Permian suffocation, we were almost shattered from the impact in the Chicxulub crater, and we almost heard the roar of the last mammoth and the swan-song of the giant Hawaiian goose.

But the clou of the conference was still to come. John C. Avise was granted the Alfred Russel Wallace Award and rewarded us with a brilliant talk on his field: phylogeography. It was a masterly review of molecular phylogenetic methods and their advantages and limitations, and the potential in biogeographical studies. I heard many of the participants afterwards express that they wished they had had this introduction to the field as the first point of the conference, or even better, years ago.

I especially appreciated the perspectives he outlined for biogeography as a unified discipline. He envisioned the ecological continent with its landscapes of microevolution, demography, population dynamics, ethology and ecological interactions on one side, and the taxonomical continent on the other side with historical geography, palaeontology, phylogenetics and sytematics as landscape elements. He urged for a reunion of these two continents and proposed phylogeography as stepping stones that might develop to a land bridge.

Let us give it a try. Let us reunite these continents. It should be more likely to happen than the reunion of Gondwanaland.

Apart from the invited speakers there were a lot of short talks in the three concurrent sessions. The ones I heard were inspired and inspiring. But it is annoying that you have to miss two third of the talks. It is a recurring problem at all conferences that could be overcome by one additional day. I do not understand that people that invest plenty of money and fuel to attend conferences cannot also set aside the time to fully enjoy the outcome of the investments.

The poster presentations were as always interesting. I enjoyed the diversity. The spatial scale was from biogeography of your teeth to global distributions. Imagine that a visit to the dentist may have as sincere effect in a small universe as a Chicxulub impact on global scale! The presented interpretations of the discipline of biogeography certainly verify the formulation in the mission statement that it encompasses disparate academic fields. This is not a rebuke: it is better

that way than the situation where posters are just echoes of mainstream interests. The poster sessions were so well frequented that it sometimes was almost too crowded. The authors should take that as the best proof that they did a good job.

The excursions gave good glimpses of the attractions of Yucatan : amazingly flat landscapes, marvellous white beaches, cenotes and caves, a rich bird life and at last but not at least magnificent remains of Mayan cities. I stayed for a couple of additional days so I visited all excursion targets. Everybody should have done the same: it was worth it.

Merida proved to be a lively and hospitable city. It was unproblematic to walk around and a lot to observe in the close neighbourhood and in the vibrating centre. The hotel served appropriately as a hosting organisation – my only complaint is that it was meaningless that even hardy Scandinavians like me should suffer from the refrigerator climate in the lectures hall!

The last comment must be a large bouquet of roses to the organizing committee. I am sure that there is score of anonymous helpers but I am also sure that that Ella Vázquez-Domínguez really deserves to be the one who receives the bouquet. She was just everywhere, smiling, helpful, competent and charming. Thank you, Ella. If we really want to reunite Gondwanaland, she should be in the action committee.

IBS seems to like dramatic events. Last conference was on the edge of mega-landslides in Tenerife, this one was in the Chicxulub impact area, and the next one will be on Crete close to Santorin where a mega-eruption destroyed most of the Minoan culture. Hope to see you all there among the ruins.

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