

## GEOMETRY OF THE ACCRETION OF GONDWANA A PRELIMINARY INTERPRETATION

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The usually accepted shorter lateral extent of the Proterozoic fold belts in relation to their Phanerozoic counterpart might be related to a difference in prevailing geodynamic conditions such as smaller Precambrian plates or to a gradual destruction of the original length of long fold belts through successive diachronic action of several superposed Wilson cycles along different directions.

Globally, the present day large orogens along Gondwana's fragments are the Andean and the Alpine-Himalayan belts. If we allow a certain constancy or even inheritance in the directions of mantle convection, two important Late Proterozoic directions may be distinguished. The first, represented by the Araguaia Paraguai Pharusian and the Mozambique belt systems and the second, by the Damara, Cape, Sergipano and Ross belts. The Ribeira, Aracuai, Dom Feliciano, West-Congo belts are still rather controversial in terms of the ages of their histories of evolution. In terms of mantle convection, Gondwana consists of two main cratonic masses, the East Gondwana and the Northwest Africa-Amazon Cratons. These blocks apparently "squeezed" the fragmented Sao Francisco-Congo-Kalaari cratonic masses named herein Central Gondwana. In summary we had:

- a. Two larger cratonic masses.
- b. Fragmented cratons of Kalaari, Congo, Sao Francisco.
- c. Suspect terrains in Northeastern Brazil and North-Central Africa (pieces of the Tuareg Shield, etc.), the Goiano Massif and different basement inliers in the Damara, Ribeira and Dom Feliciano belts.
- d. Large shear zones, longitudinal to the cratonic borders or to the fold belts-several in the Mozambique belt, the Okjanda-Muyembeshi shear systems in the Damara belt, the Sierra Ballena-Leao and others in the Dom Feliciano belt and, finally, the 4 deg 30 min E - Transbrasiliano megashear zone along the Pharusian-Araguaia System.

e. Transverse ductile shears of dominant right lateral Precambrian component of movement at the North and South of the Sao Francisco-Congo Craton.

f. Possible triple junctions or diachronic overlaps at the joining points of the following belts:

Mozambique x Ross, Damara x Mozambique-Zambese, Damara x Ribeira Dom Feliciano, Rockel River & Pharusian.

g. A "Cratonic Embayment" which we propose to call -the Rio Doce Thermal Embayment- (RDTE)-to the South of the Congo-Sao Francisco Bridge (Porada).

h. The Island Arc accretion zone in the Arabian Shield.

i. Late Proterozoic areas of thermal overprint.

j. Zones of Late Proterozoic extension.