The alternative Laurentia-Gondwana paleogeography during the Lower Paleozoic.

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Both a traditional and an alternative paleogeographic model are permissible after paleomagnetic data of North America (NAM) and South America (SAM) during the Lower Paleozoic. The archetypal one in which, at the moment of the Taconian orogeny, SAM was around 4.000 km crossing oceanic crust, and the Dalziel one in which both continents drifted away during Cambrian, and interacted during Taconian times. In the latter reconstruction, the geology support is by far more detailed in the southern Iapetus region, and not only in explaining the SAM Precordillera origin. In contrast, the former is seen as aimed from the North Atlantic area, geology being controlled in distribution of Ordovician faunas. Mac Niocaill renewed the archetypal scenario considering Ordovician paleomagnetic and fauna data in an attempt to reconstruct Iapetus Ocean evolution. In it, eastern NAM faced three arcs and the Precordillera terrane was drifting from NAM to SAM. In that "funeral ship" hypothesis, the "Precordillera terrane" was interpreted as a minor terrane detached from Ouchita embayment during Cambrian differential transforming faulting. At the moment, latter ideas seems to be a "key" to solve that NAM to SAM Precordillera exportation, and relationships between continents. In summary, Dalziel positions during the period 520 to 450 Ma, which would allow eastern NAM margin and western SAM to collide, is supported not only by paleomagnetic data, but for correlation of salient geological features of both continents.