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## THE ARGENTINE PRECORDILLERA - A TERRANE MORE EXOTIC THAN EVER

The Precordillera of western Argentina (AP) is a terrane exotic to its present position along the western margin of the Gondwana craton. Speculations about its provenance centered around an Early Paleozoic trilobite fauna with strong Laurentian affinities. In the 1980s and 1990s, three basic models for the provenance of the AP evolved: 1) separation from Laurentia during Cambrian times and accretion during the Ordovician; 2) accretion during mid-Ordovician continent-continent collision, and separation during the Late Ordovician; 3) separation during the Ordovician and accretion during the Silurian/Devonian; 4) strike-slip transport to its present position from somewhere within Gondwana. For several years, a Laurentian origin was almost unequivocally accepted, with a majority believing in a mid-Ordovician accretion.

A Laurentian origin was assumed on geochemical and paleontological data and the presence of a thick Cambrian-Ordovician carbonate-platform succession very similar to that of Laurentia. Timing of the separation was deduced from sedimentological events and plate-tectonic reconstructions; timing of accretion was deduced from sedimentology, geodynamics, and paleontology. The sedimentary history can be interpreted in different ways; however, there is a fundamental discrepancy between geodynamic models claiming Ordovician accretion and paleobiogeographic data which require a Silurian/Devonian accretion.

Recent investigations on detrital zircons now have shown that the first three models altogether may be wrong and that the AP indeed may have been derived from somewhere along the former Gondwana margin. This scenario, however, again contradicts paleontologic evidence. Hence the circle is closed and the provenance of the Argentine Precordillera remains exotic as ever.