



Early Carboniferous paleogeography in the vicinity of Ireland suggest that the marginal marine clastics of the Porter's Gate Formation and the shelf slope to shallow water carbonates of the Hook Head Formation represent the products the Variscan orogeny. This orogeny appears to have been a response to the collision of Gondwana with the continental mass formed by the previously welded fragments of Laurentia, Baltica and Avalonia. Initially this collision shed clastics eastward (the Porter's Gate Formation) and then was followed by a period of crustal stability and carbonate accumulation (the Hook Head Formation) (map after [Ron Blakely](#)).