

MAJOR STRUCTURAL TYPES IN THE NORTHWESTERN GULF COAST AREA

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ABSTRACT

This paper summarizes the results of a study of the various structural types encountered in the northwestern Gulf Coast area. A genetic classification of these types is attempted.

During the late Paleozoic or early Mesozoic, subcrustal movements initiated a regional, still continuing, subsidence in this area. Periodically, they also caused some local and regional igneous activity. These two events are directly or indirectly responsible for the formation of all structural types recognized.

Igneous activity created regional and local uplifts with associated faulting. Subsidence caused the formation of regional dips, flexures, arches and embayments, which features together make up the Gulf Coast geosyncline. Subsidence is also indirectly responsible for the formation of anticlinal folds and diapir folds by inducing plastic flow of salt and shale. Faulting, sometimes very extensive, is usually associated with the formation of these more local flow structures.

An illustrated example of each structural type is presented.