plates in his fabric study about some Canadian coal mines. He found that the structural fabric does not vary significantly and that the macrofractures and bedding are the most consistent and predictable fabric elements. The macrofractures can be correlated between some localities by their similar orientations with respect to the local fabric axes. In other cases sets recognized at one stratigraphic level cannot be correlated, one for one, with those at another level, even though at both stations the same stress orientations are deduced from the extant fracture geometry and offset criteria. This is a good illustration of the limitation stated above.

Another example of the relationship between macrofracture and structure is afforded by Mauriño and Limousin (1966). They studied macrofractures in Silurian orthoquartzites, Province of Buenos Aires, Argentina, in a region characterized by basement block faulting. A well-defined macrofracture pattern is developed in the region consisting of two perpendicular sets. Locally a third set is developed parallel to the trend of the major block faults. Boretti-Onyszkiewicz (1966) reports a similar situation in sandstones from the Podhale region of Poland, where a regional orthogonal system of macrofracture sets is developed apparently independently of local fold axes. Locally, however, the macrofractures and faults are parallel. In some cases the fault displacement is manifest by movement along one of the sets.

These studies serve to illustrate that macrofractures do not necessarily randomly pervade the rock mass. They tend to be developed in readily mapped sets and are often geometrically if not genetically related to local and regional structure. This suggests that macrofracture orientations can be predicted for a given unexplored locality from projected structure or from stress trajectories obtained through theoretical and model studies.