

ON SOME 50% EXTENSION IN THE AEGEAN AREA AND ITS IMPLICATIONS FOR
OROGENIC RECONSTRUCTIONS IN THE TAURIDES

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Résumé: La géologie Plio-Quaternaire de la mer Egée indique une extension N-S d'environ 50%. Quand cette extension est reuversée la reconstruction qui en résulte apporte un appui supplémentaire à l'enracinement septentrional de l'allochthon ophiolitique du Taurus.

The perceptive analyses of J.H. Brunn and his students of the Tauride Belt in Anatolia have resulted in two important concepts:

- 1) That the Tauride (exclusive of south-eastern Turkey) ophiolites and the associated composite nappe systems root north of their present position, possibly north of the metamorphic axis (the Anatolides) of Anatolia (Ricou, et al., 1975).
- 2) That the post-orogenic geometries of the tectonic units in Anatolia have been largely disrupted due to later lateral movements (Brunn, 1976).

Dewey and Şengör (in press) and Şengör and Dewey (in press) have recently given a more precise analysis of the post-Miocene deformation in the Aegean and western Anatolia. Based on geophysical and geological data, McKenzie (in press) and Şengör (in press) respectively argued that the amount of N-S extension in the Aegean area and western Anatolia is on the order of 50%. When this extension is reversed the width of western Anatolia and the Aegean decreases by half and the extreme curvature of the "Dinarisch-Taurischer Bogen" diminishes considerably. On this reconstruction the large distances between the Tauride allochthons and their proposed northerly root zones decrease to a much more "reasonable" amount and the "blobby" character of the Menderes Massif is transformed into a more

elongate feature. This reconstruction lends, therefore, a greater credibility to the hypothesis that the Taurus allochthons are northerly derived.

I suggest that when palaeogeographic and/or orogenic maps of the Aegean/Anatolian region are prepared, an amount of N-S extension between 50 and 30% should be taken out to enable one to see better the mutual geographic relations of the different tectonic elements in the Tauride/Anatolide realm and to correlate better between the Hellenides and the Tauride/Anatolide belt.

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