difference between these two temperatures of equilibration is due to different migration abilities of ions through the crystal lattices of minerals. The mineral pair geobarometers and the elevated sodium content in clinopyroxenes of both rocks indicate that their consolidation was in the higher pressure part of the spinel peridotite stability field.

The origin of the garnet clinopyroxenite is explained by crystallization of a picritobasaltic melt at high pressures, but there is a possibility also that all the metamorphic and ultramafic rocks in this area were metamorphosed in a subducted ophiolitic slab. Retrograde adjustment during decrease of pressure and temperature was prevented by fast uplift.

RIVER REJUVENATION AT THE AREA SURROUNDING THE NORTH AEGEAN SEA AS RELATED TO POST PLIOCENE TECTONIC AND CLIMATIC CHANGES

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The rivers that drain the continental area of the SE Balkans and discharge into the North Aegean sea, have been rejuvenated twice after the Pliocene. The rejuvenation processes expressed on the relief by the incision of rivers into sedimentary deposits and parent rocks and the formation of river valleys.

Two separate stages have be clarified:

The stage 1 characterized by the formation of rather mature mother valleys, 150-350 m deep and 1-2.5 km wide, opened in the eroded pliocane deposits and the underline varied rock types. The warm semi-arid climate of the Villafrak associated with active tectonic movements of the L-M Pleistocene, have been responsible for the stage 1 river rejuvenation. The subsidence of the N. Aegeis and the flooding of the N. Aegean plateau terminated the stage 1. The stage 2 characterized by the formation of young daughter valleys, 105-330 deep, less than 1 km wide, steepsided (Tempi) with local terraces, opened in the quatemary deposits and the underlie rocks. The climatic fluctuations of the U. Pleistocene - Holocene, associated with intensive vertical movements of the faulted blocks, have been responsible for the stage 2 river rejuvenation, still in progress.

The rejuvenation processes seems to have been 3-4 times faster dirung the stage 2, than during the stage 1, thus explaining the present valley forms, known as Tempi in Thessaly (Peneios river), in Macedonia (Rechios - Rentina r.), in Thrace (Nestos river). It was also found that the entire incision of the rivers that drain the areas of the geotectonic zones Axios, Circum-Rhodope, Serbomacedonian, during the stage 2 was smaller, than that of the rivers occured at the area of the zones Pelagonia and Rhodope.

This differece can be explained by an analogous difference in the verticel movements between the areas of the two groups of the geotectonic zones.

PETROGRAPHIC AND GEOCHEMICAL STUDY OF PERIDOTITES FROM THE DAFNOSPILIA - KEDROS AREA (SOUTHERN THESSALY).

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The ophiolitic rocks of Dafnospilia - Kedros area (W. Thessaly), which belong to Pindos - Koziakas - Othris - Argolis - Angelona - Crete - Karpathos - Rhodes main ophiolitic belt, consist the uppermost statigraphic unit. They form large outcrops of serpentinized peridotites and locally retain their original protolithic character. They are out by gabbroic veins whereas subophiolitic metamorphic soles were observed, at their base, as well.

Their microscopic investigation exhibits textures similar to those from upper mantle perodotites, indicating that they are mantle, tectonized peridotites. They were classified, according to their normative mineralogy, into harzburgites, which are predominant and lherzolites, which are more restricted. Petrochemical study of harzburgitic peridotites, reveals an enrichment in some refrectory elements, as well as, a depletion in some lithofile ones, indicating a typical depleted mantle chemical character, in contrast with the lherzolites which are more fertile.

Petrographic and geochemical results of this study, as well as, similar results from other areas, suggest to establish a paleogeographic environment similar to a marginal basin.

EMPLACEMENT TECTONISM AND THE POSITION OF CRHOME ORES IN THE MEGA ISOMA PERIDOTITES, SW OTHRIS, GREECE

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Petrogenatic criteria fail to predict an economic chrome potential in the Othris ophiolite neverless, several mines contain combined deposits of Al-rich crhome ore bearing three million tons. Structural mapping in the Mega Isoma massif reconciles this dilemma as follows: (i) Crhome ores originated within a harzburgite nappe now largely occluded by an over-riding nappe of pagioclasse lherzolite; (ii) Emplacement of the