

**PALEOGEOGRAPHIC AND STRUCTURAL SKETCH  
OF SOUTHERN DINARIDS, FROM ADRIATIC TO  
SERBIAN BOUNDARIES (YUGOSLAVIA)**

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RESUME. - L'analyse stratigraphique et structurale d'un profil transversal des Dinarides en Bosnie-Herzégovine méridionale et au Monténégro permet de reconstituer l'évolution de ce secteur de la chaîne dinarique et d'envisager le problème de sa signification paléocéanographique.

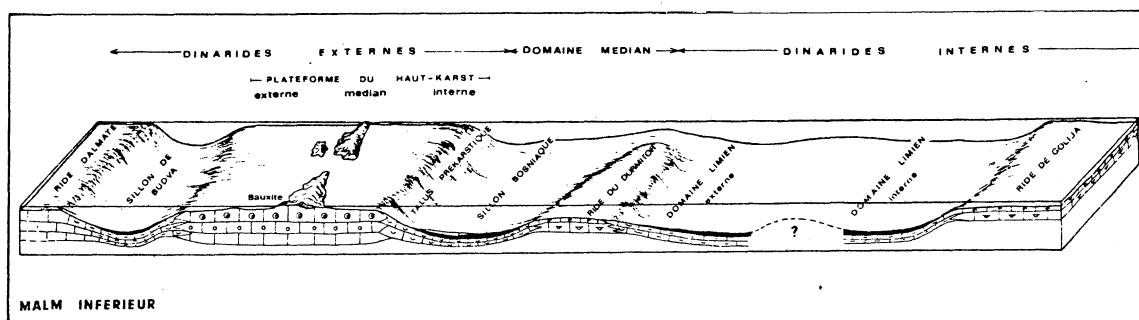
The stratigraphic and structural analysis of a transverse profile in southern Dinarids, from the Adriatic sea to ophiolites (Bosnia-Herzegovina and Montenegro) allows the reconstitution of the geological history of a part of this alpine range :

Paleogeographic organisation : there is an opposition between :

- \* the outer Dinarids composed of strongly subsident platforms (Dalmatian and High-Karst), with neritic-carbonated sedimentation from Trias to middle Eocene, separated by a trough (of Budva) with pelagic deposits. On each side of the High-Karst platform lie slopes (with breccia facies) characteristic of the transition with the Budva trough (subkarstic margin) and the bosnian trough (prékarstic margin) ;

- \* a middle area, the bosnian trough, filled as soon as eocretaceous by a thick flysch ;

- \* the inner Dinarids, affected by an early orogenic crisis (late Jurassic-lower Cretaceous) where can be recognized from upper Trias to Malm (first paleogeography) a serbian set composed of a Durmitor rise which disappears toward the NW and an ophiolitic Lim trough inwardly limited by the Golija rise.



Paleogeographic evolution :

- \* in the Permo-Werfenian, the sea transgresses on an emerged eroded area, hesitantly at first (evaporitic facies) then frankly during Trias (werfenian detritic series, and anisian limestones with high accumulation rates) ;

- \* from upper Anisian, after a volcano-sedimentary episode ("Porphyrit-Hornstein Formation"), the succession of rises and troughs characterizing the Dinarids paleogeographic scheme during upper Trias and Jurassic is differentiated, with deposits similar to those of the other perimediterranean ranges (shallow water carbonated facies on platforms, pelagic limestones and radiolarites in troughs) ;

\* at the end of Malm, after some emergences (bauxite) the sea comes back over the outer dinaric platforms while the inner zones record an early orogenesis (thick volcano-sedimentary deposits (Diabas-Hornstein Formation) and likely overthrusting of ophiolites chips in the Lim trough) ;

\* during lower Cretaceous, the inner Dinarids emerge and are tectonized (setting of the Pešter-Semeč nappe) and their erosion product fills the bosnian trough (flysch) ;

\* in the middle and upper Cretaceous, the sea transgresses over inner Dinarids while, after thick Rudists limestones series have been deposited, the dalmatian and high-karst platforms emerge (Senonian bauxite) ;

\* during Paleogene, the flysch progressively invades the foreland, first the Budva trough during Paleocene, then the High-Karst platform (paleocene transgression, lower and middle eocene flysch) and at last the dalmatian rise (middle eocene transgression and upper eocene flysch) preceding the final tectonization of the whole of Dinarids at the end of Eocene-Oligocene.

Paleoceanography : the outer Dinarids can be assimilated to the apulian paleoplate continental margin (of atlantic type) passing inwardly to a complexe succession of marginal basins (serbo-bosnian, Vardar...) separated by blocks with continental crust (Golija).

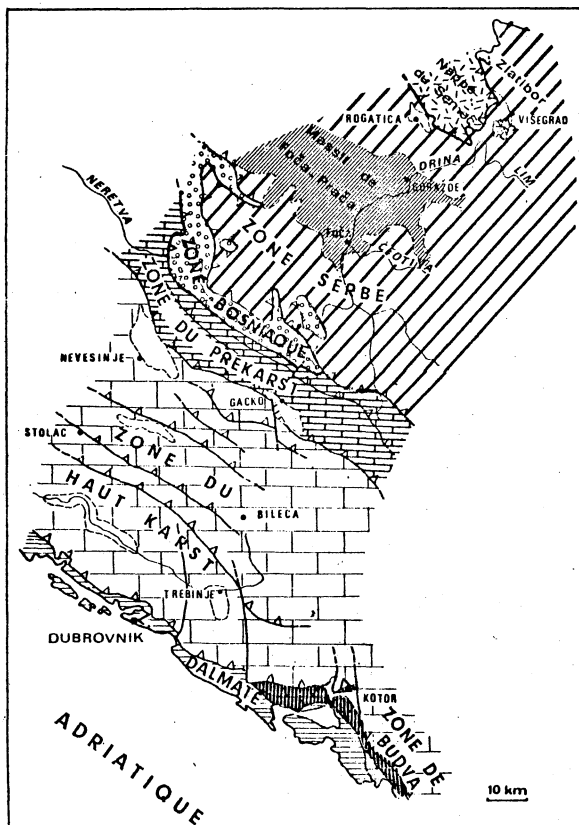
In this perspective occur successively :

\* an initial period of rifting (evaporitic, detritic, carbonated and volcano-sedimentary series) during lower and middle Trias ;

\* a phase of quiescence from upper Trias to Malm with the development of sedimentation ;

\* a period of compression starting at the end of Jurassic (volcano-sedimentary formation, setting of the ophiolites at the Jurassic-Cretaceous limit, and of the Semeč nappe during lower Cretaceous) and leading, after a new period of quiescence (upper Cretaceous), to the margin tectonization during Oligocene.

Tectonics : along the considered profile and on a dalmatian relative autochthon, are found, in succession from SW to NE, four main nappes with a tertiary setting (tectonic stage) :



- Budva nappe cicatrized south east of Dubrovnik ;
- High-Karst nappe lined by prekarstic scales ;
- bosnian nappe made of several piled units ;
- serbian nappe bearing the Semeč nappe (Golija zone) probably set during lower Cretaceous (paleotectonic stage).

It thus appears that the complexe evolution and structure of the southern Dinarids can only be understood in relation with the successive paleogeographies and the superimposed tectonics (cf. J. AUBOUIN, 1974)

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Structural sketch of Dinarids in southern Bosnia-Herzegovina and Montenegro.

*Intervention de J. Dercourt.*

Les remarques de M. Horvath conduisent à souligner que dans toutes les reconstitutions présentées ce matin un postulat cylindriste était implicite, c'est à dire que les auteurs admettent que les tectonisations successives ont rapproché les zones perpendiculairement à leur axe. Ils n'invoquent aucun mouvements longitudinaux.

Dans l'esquisse que Biju Duval, Xavier Le Pichon et moi-même avons présentée il apparaît de très importants coulissages selon l'axe des zones qui seraient beaucoup postérieures à la collision Europe-Apulie. Il nous semble que ces coulissages intervenant au Tertiaire iraient se brancher sur ceux qui ont été invoqués par Laubsher pour structurer les Alpes franco-italiennes ; ils iraient s'amortissant vers les Alpes en produisant des chevauchements perpendiculaires à leur sens de déplacement, c'est à dire perpendiculaires aux zones isopiques.

