

Three types of boundaries

Divergent ■

Plates move apart and new lithosphere is –
created

Convergent ■

□ Plates come together and one is recycled –

گسل های ترانسفورم **Transform** ■

Plates slide horizontally past each other –





Transform plate boundaries

TRANSFORM-FAULT BOUNDARIES

Mid-Ocean Ridge Transform Fault

Spreading centers are offset by mid-ocean ridge transform faults, where the two oceanic plates slide horizontally past each other.

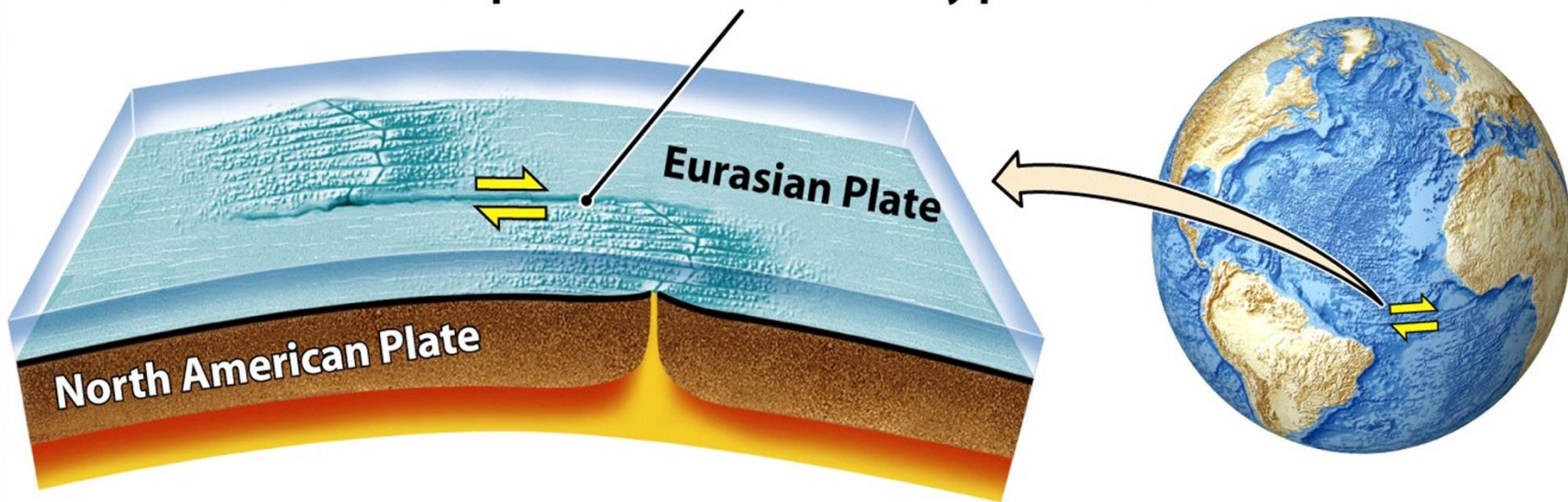


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Transform plate boundaries

TRANSFORM-FAULT BOUNDARIES

Continental Transform Fault

The San Andreas fault in California, where the Pacific Plate slides past the North American Plate, is an example of a transform fault that offsets continental crust.

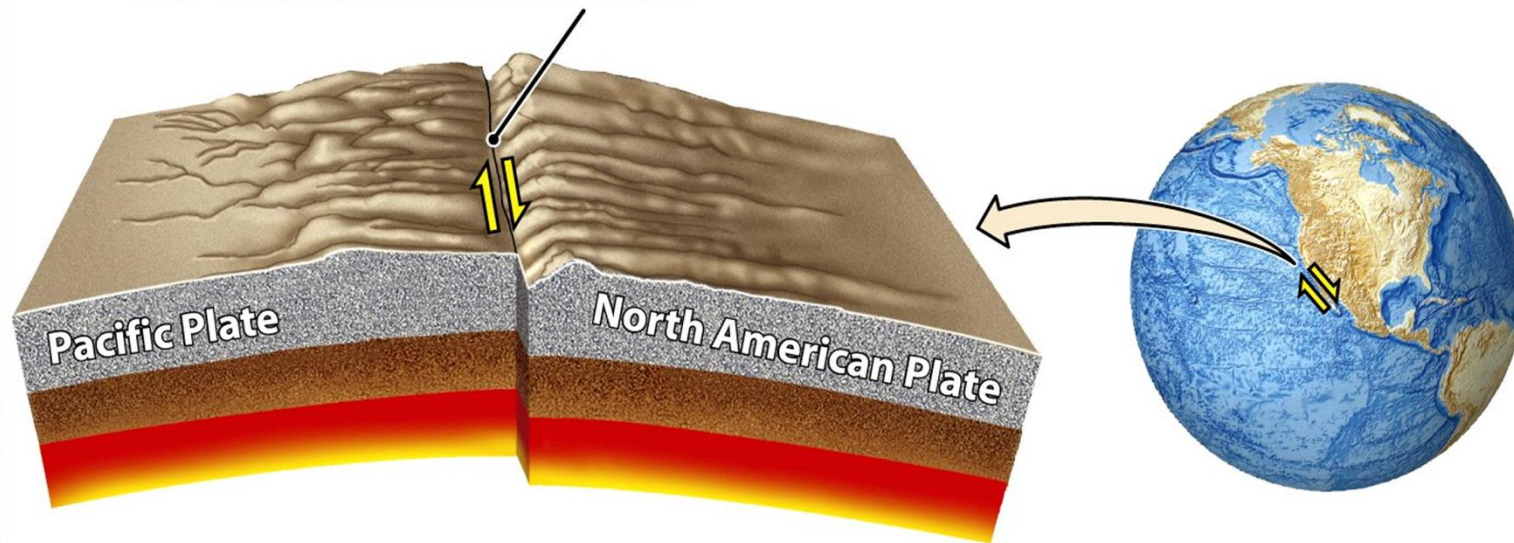
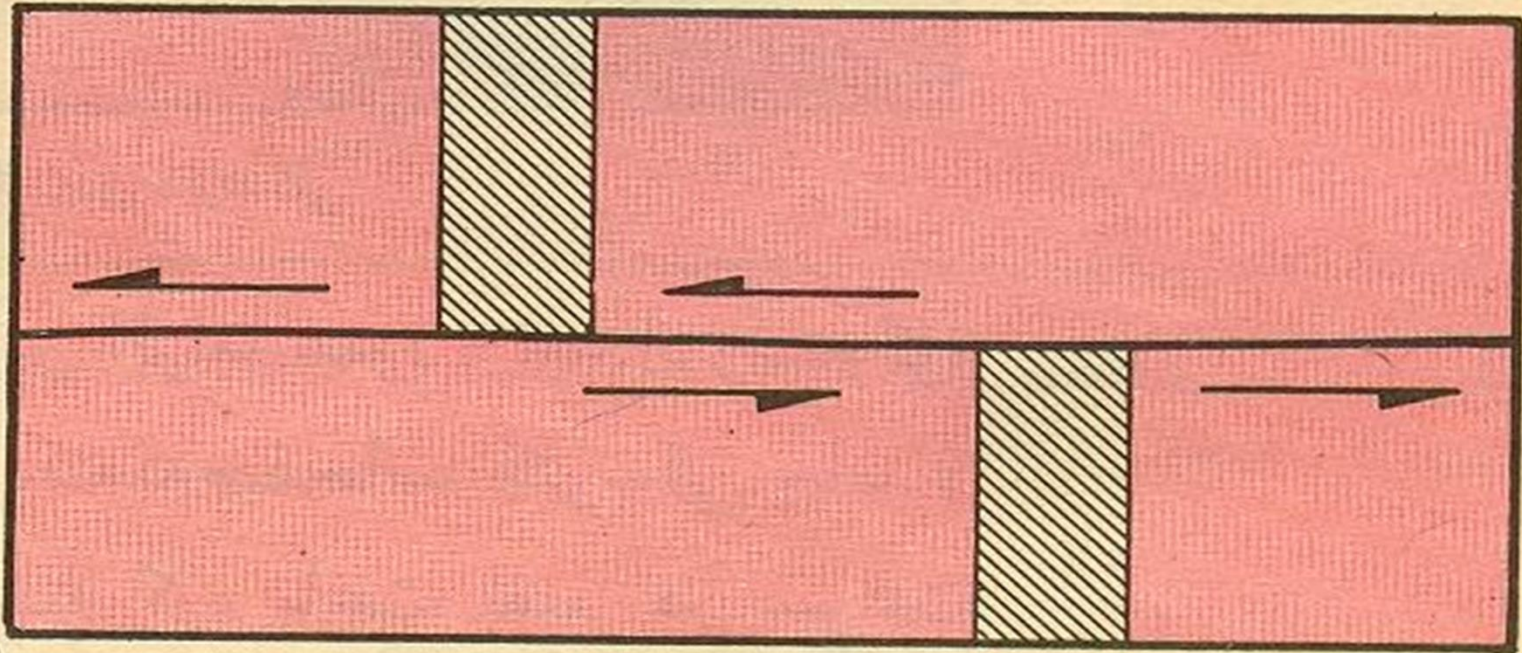
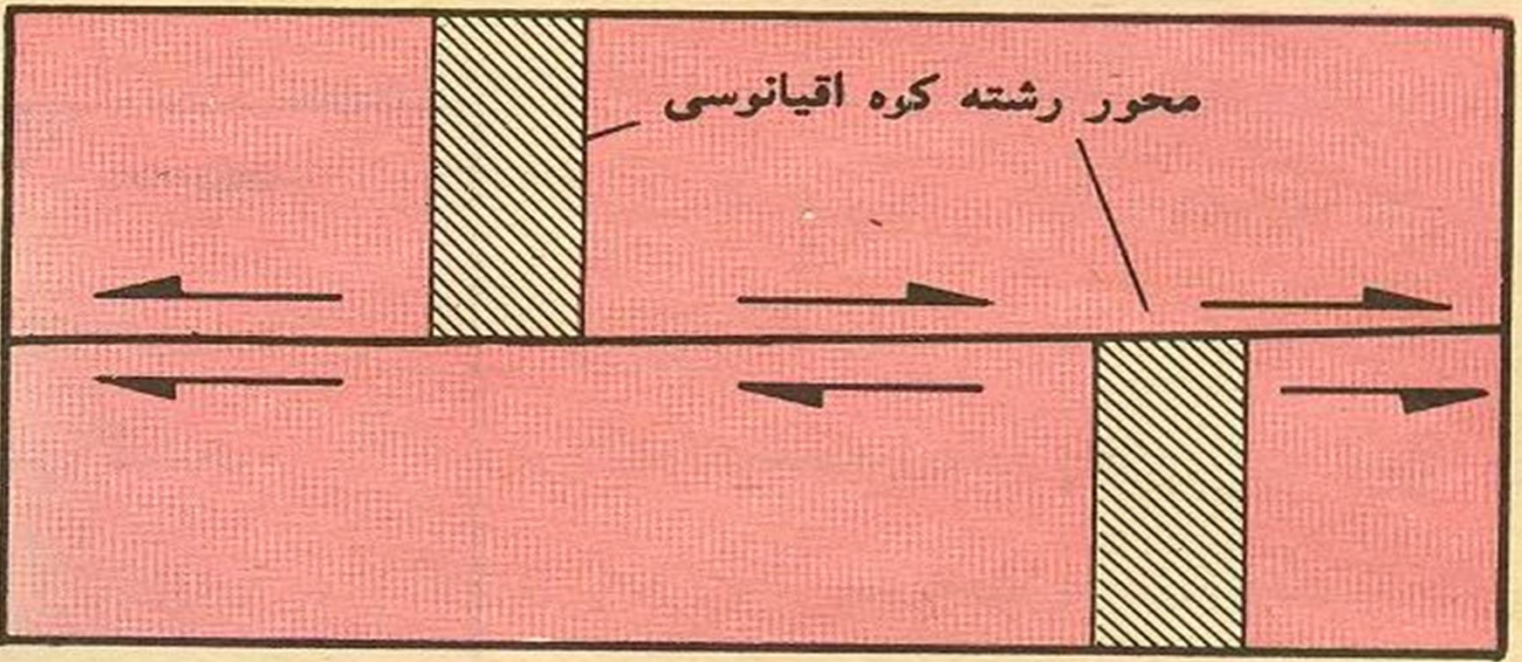


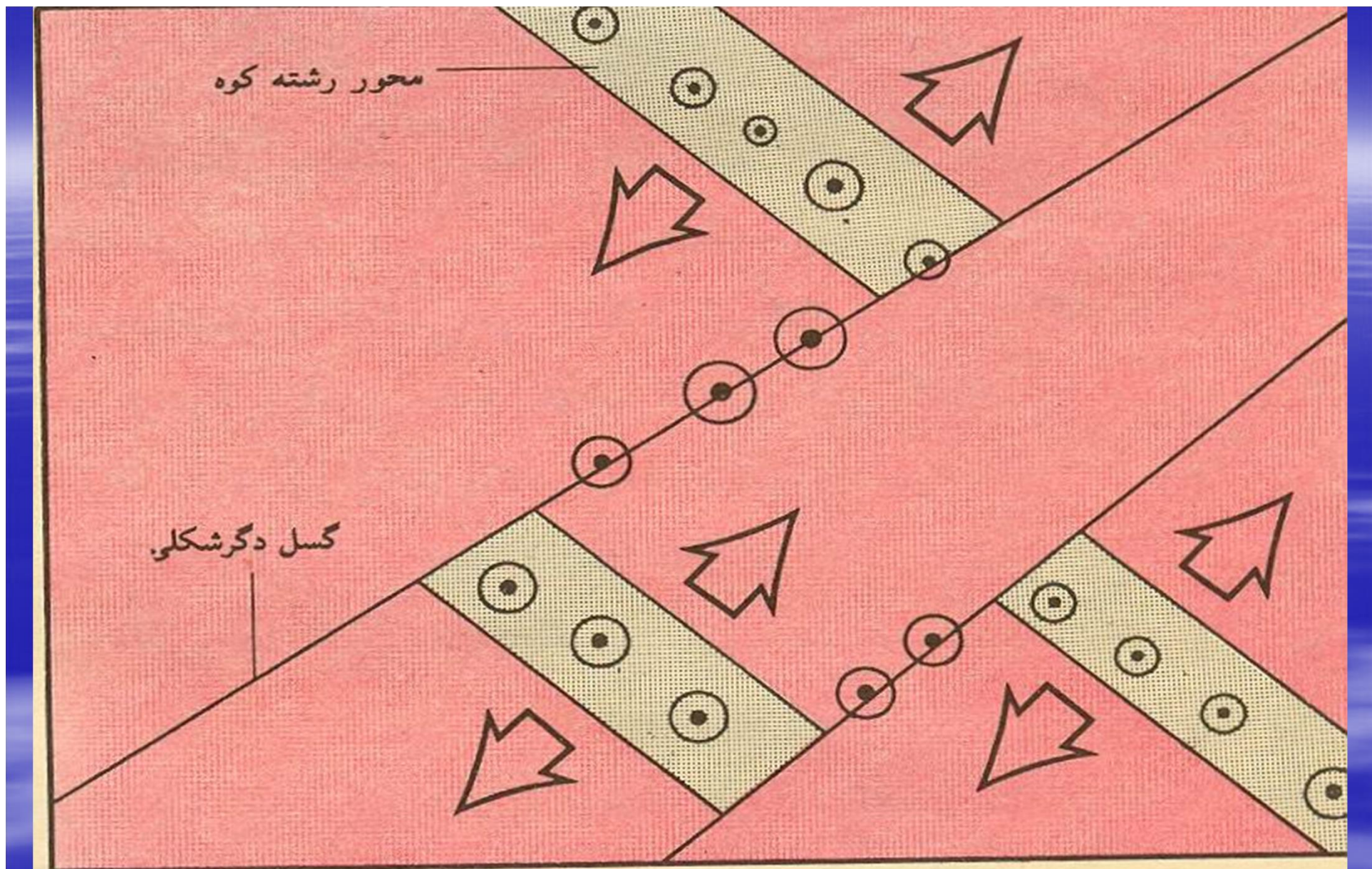
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(الف)



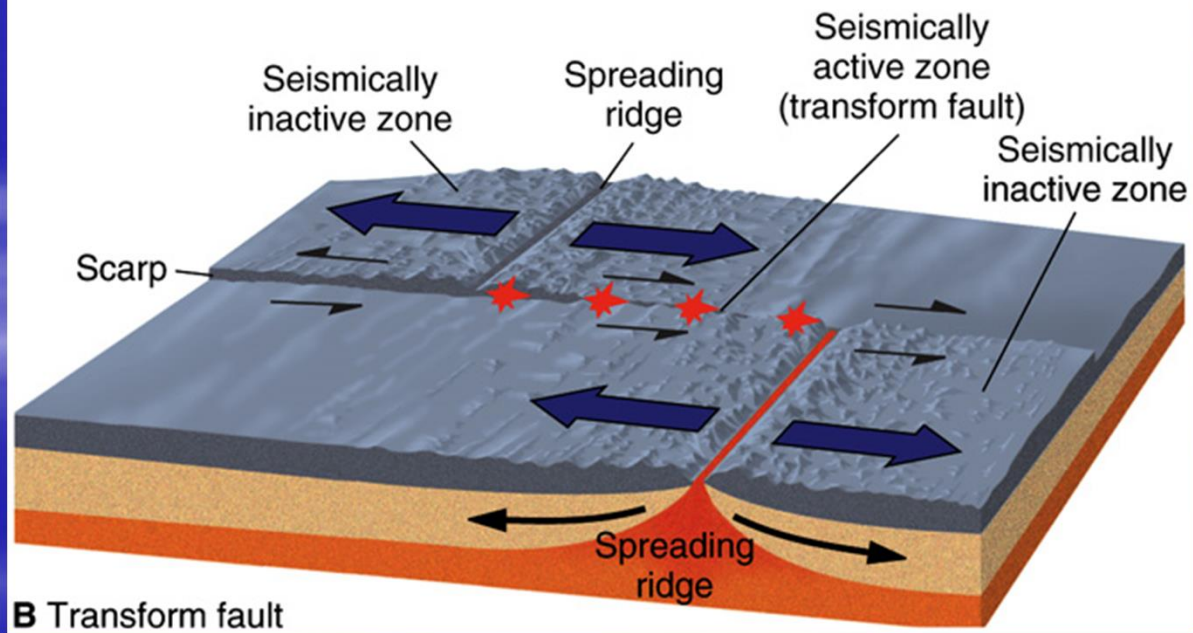
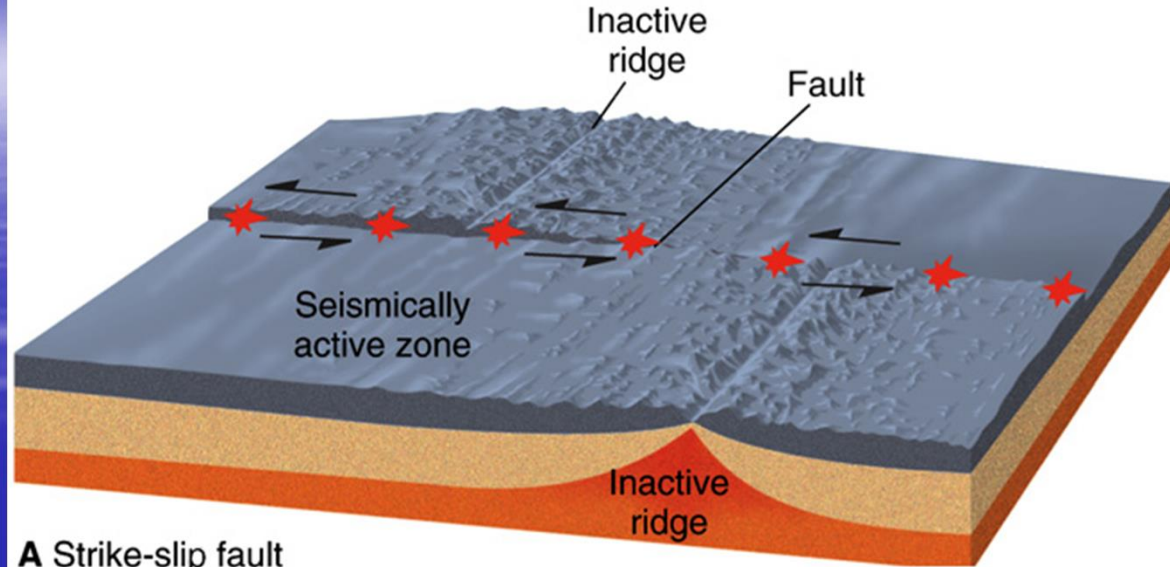
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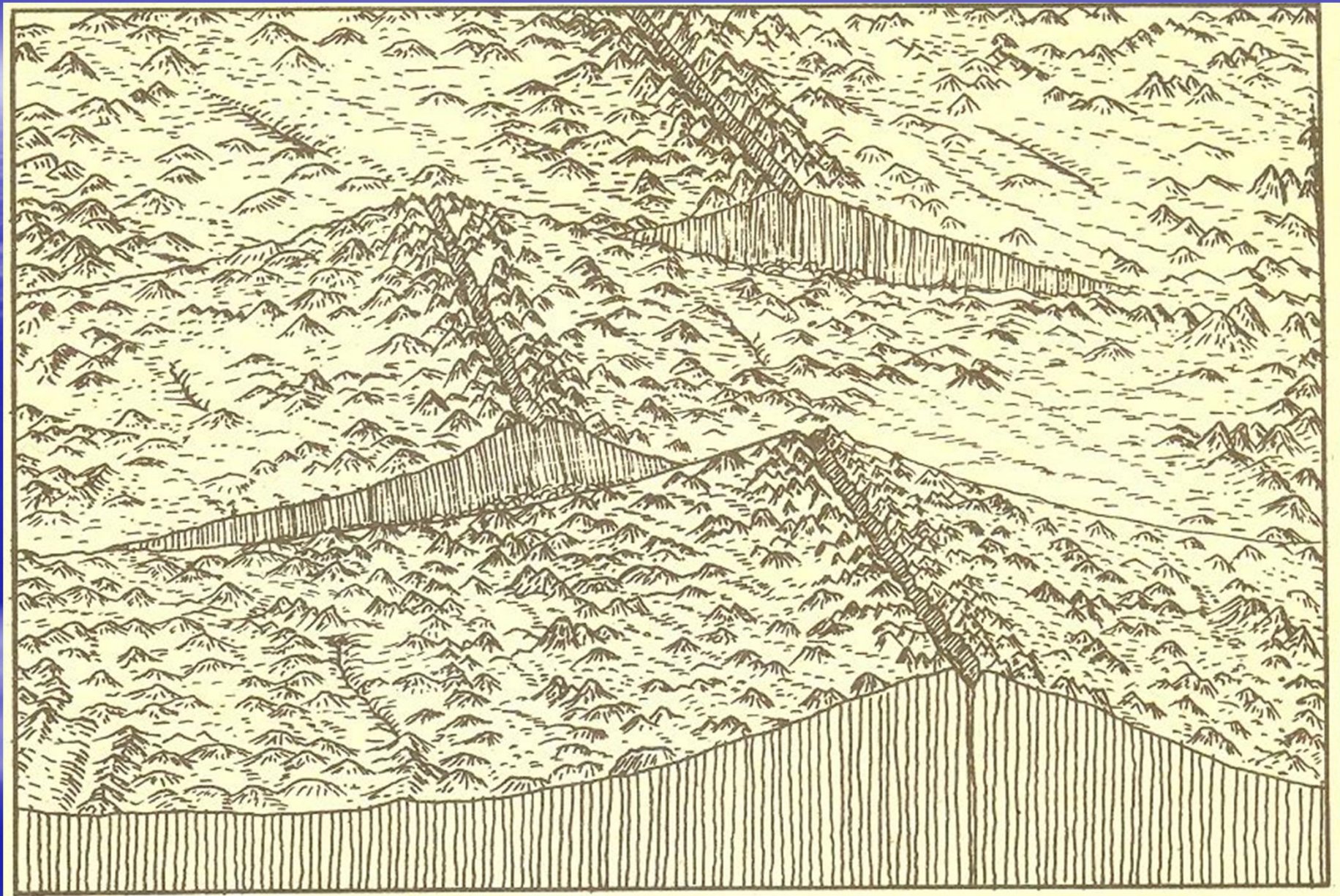


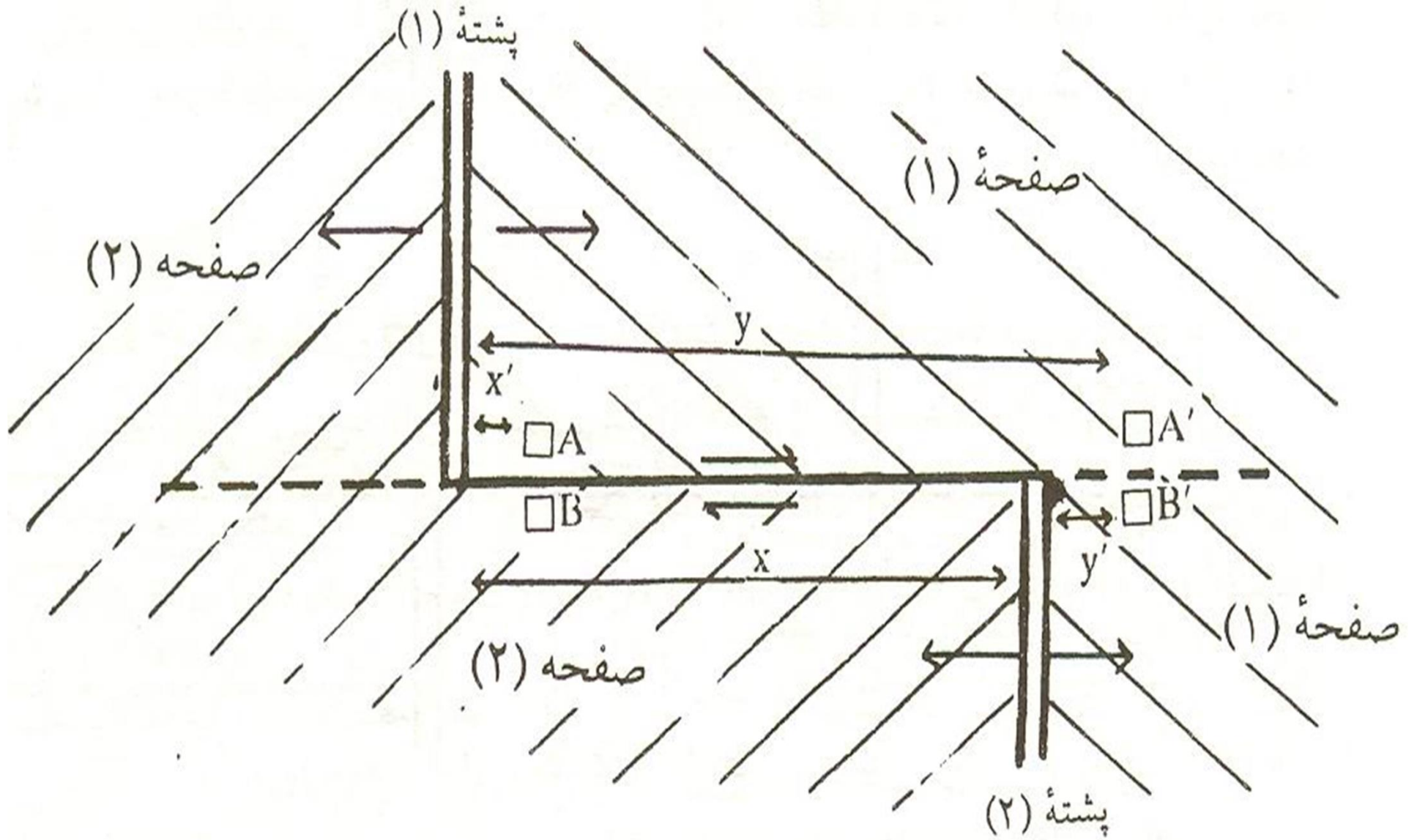
شکل ۵۴. نحوه پخش زلزله‌ها در رشته کوه‌های میان اقیانوسی و گسل‌های دگرشکلی (دایره‌های کوچک نمایشگر کانونهای زلزله‌اند)

Transforms. Fracture Zones

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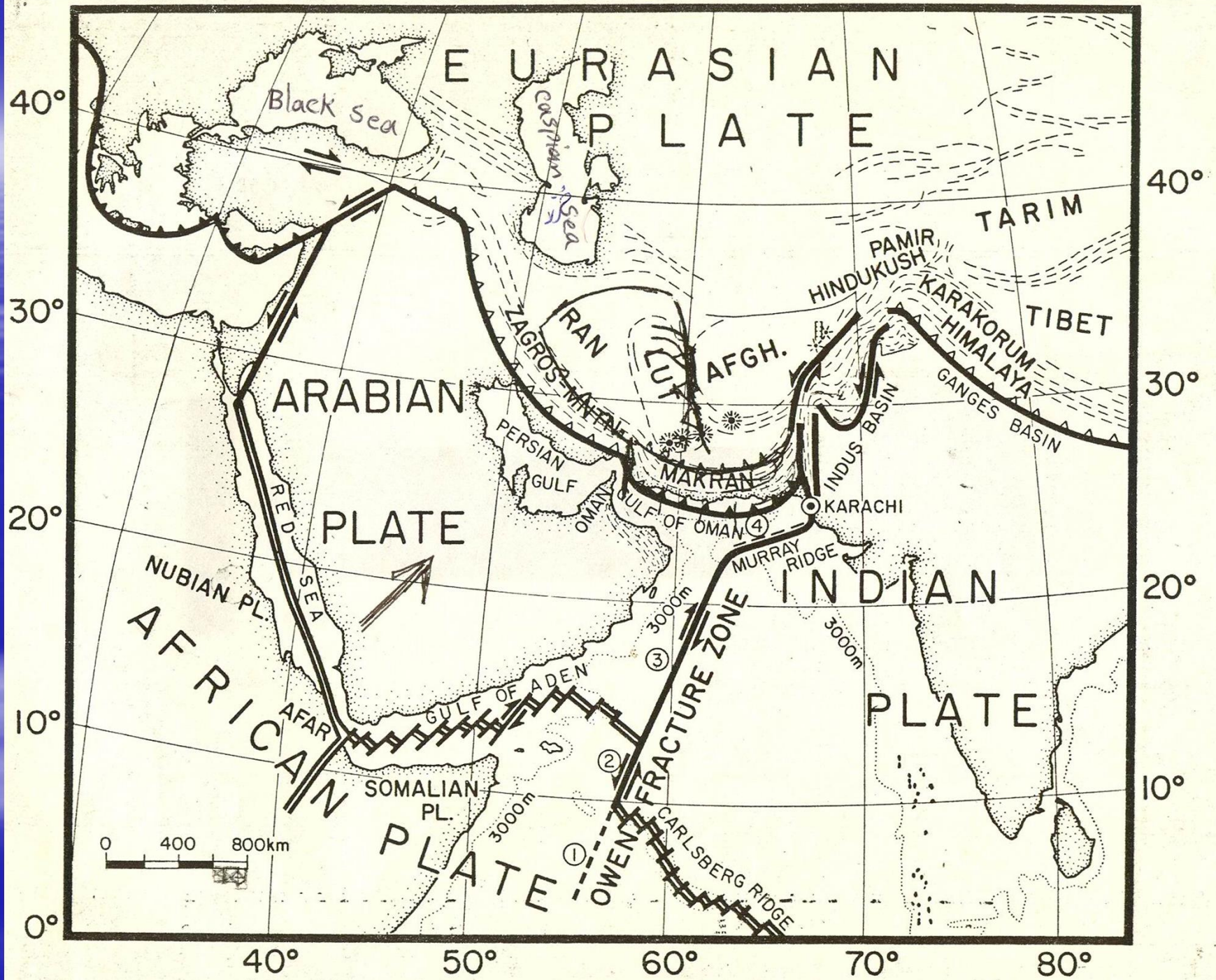
شکل ۴-۴۰. نمایش طرح گونه ارتباط سنی دو نقطه مجاور بر روی یک سیستم شکستگی.

Plate boundaries and western N. America



Juan de Fuca (JDF) plate, Pacific plate (PA), and North American plate (NA) all interact

Explains why you get volcanoes the Cascades and the types of earthquakes you have in California.



Earth's surface is a mosaic of 13 major rigid plates of lithosphere, as well as a number of smaller plates, that move slowly over the asthenosphere.

The numbers next to the arrows indicate the relative plate speeds in millimeters per year.

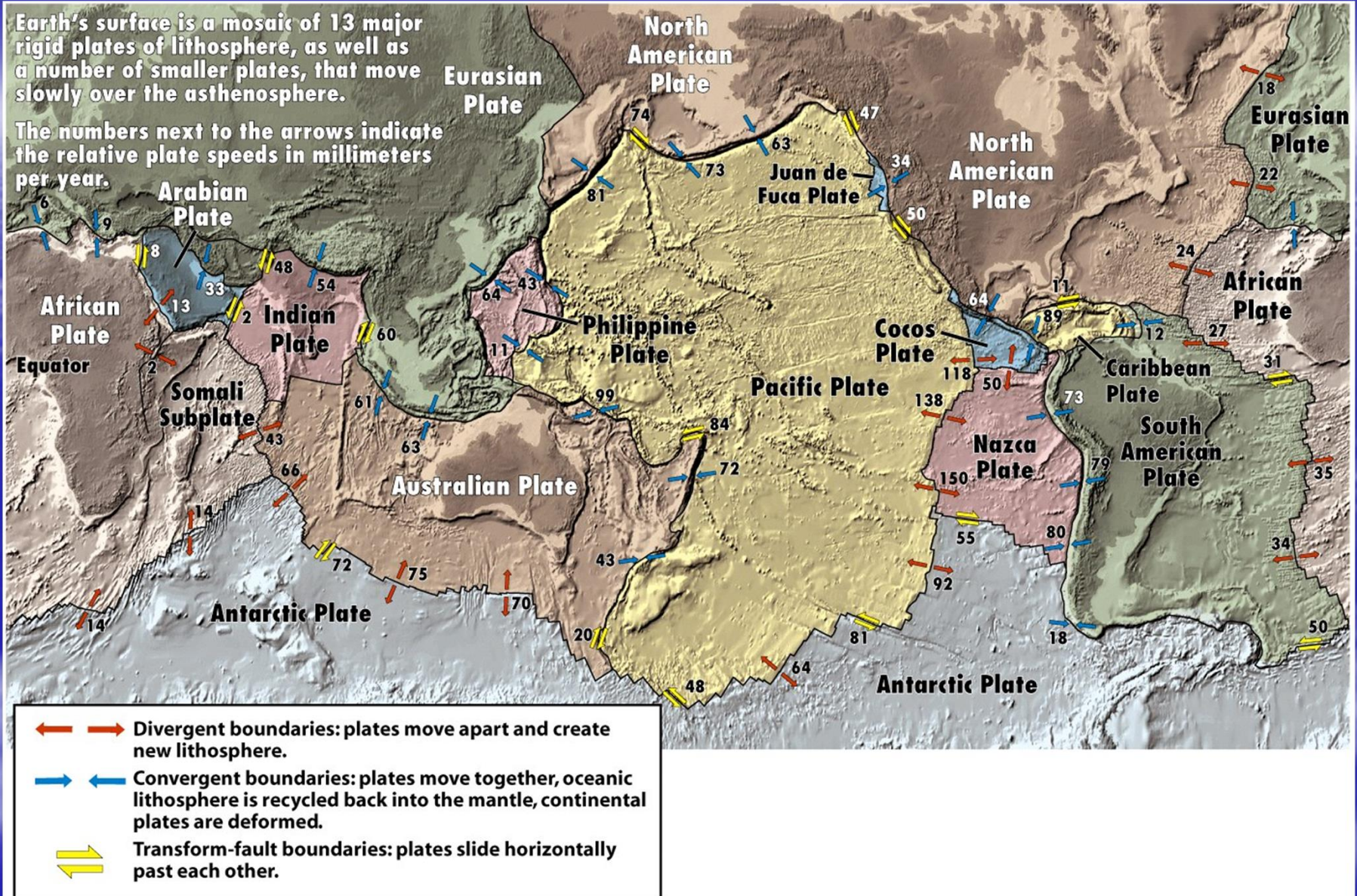


Figure 2-5
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