the domain observed as being dominated by simple-shear is much thinner, due to the more effective accumulation of the pure-shear type of deformation.

Such a deformation history is accompanied by strike-slip partitioning, which develops in areas with strong vertical anisotropy originating in more distant pure-shear dominated areas. As the indenter approaches this domain, instantaneous simple-shear dominated deformation creates high shear stress on pre-existing planes thus enhancing possible strike-slip faulting. We therefore, define a critical distance from the indenting zone where strike-slip zones parallel to the indenter develop.

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Intraplate collisional regimes on the eastern margin of Barguzin microcontinent (Baikal region) in Early–Middle Paleozoic

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Arc of the Baikal orogen belt was formed due to destruction of continental crust in Late Proterozoic, accretion of island arc and microcontinental terranes in Late Riphean time and intraplate collision in Early–Middle Paleozoic. In the inner part of this orogen belt are areas of granitic pluton formation, that are evidence of existence large massif with continental crust (Barguzin microcontinent). The structure of Paleozoic tectono-sedimentary units on the eastern edge of Barguzin microcontinent formed due to collision of it with southerly laying passive margin of Siberia in Early–Middle Paleozoic times. There two types of intraplate collisional regimes occurred, that controlled settings in regional tectonic framework. (1) The evolution of post-collisional basins along Precambrian suture was terminated by intraplate transpression. Internal structure of these transpression zones such as Kelyana–Irakinda may be interpreted as a group of numerous blocks which are bounded and separated by thrust, reverse-slip, strike-slip and oblique slip faults. (2) The structure of Early and Middle (?) Paleozoic sedimentary cover in internal part and eastern margin of the Barguzin microcontinent are defined by thrust development as a result of basement – cover interaction. Strain data collected from Upper Riphean–Paleozoic tectono-–stratigraphic units demonstrate that complex regional strain pattern was created by northward displacement of Barguzin microcontinent or composite terrain during the Early–Middle Paleozoic stage. This massif may be interpreted as indenter, that defined collisional faulting and deformation.

Tertiary evolution of the Carpatho-Pannonian region: an interplay of subduction and back-arc diapiric upraise in the mantle

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The Tertiary evolution of the Carpathian arc and Pannonian Basin is generally interpreted as a coupled system of the (1) gravity driven subduction of oceanic or suboceanic lithosphere underlying former flysch basins, (2) back arc extension associated with the diapiric upraise of asthenospheric mantle and (3) lateral escape of lithosphere from the Alpine collision assisted by transform faults. The gravity driven subduction involves an exchange of space, which requires a