



Spiral tectonics

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Spiral Tectonics (ST) is a new window to global tectonics introduced as alternative model for Plate Tectonics (PT). ST based upon Dahw(rolling) and Tahw(spreading) dynamics. Analogues to electric and magnetic components in the electromagnetic theory we could consider Dahw and Tahw as components of geodynamics, when one component increases the other decreases and vice versa. They are changed to each other during geological history. D-component represents continental crust and T-component represents oceanic crust. D and T are two arm of spiral-cell. T-arm 180 degree lags behind D-arm so named Retard-arm with respect to D or Forward-arm. It seems primary cell injected several billions years ago from Earth's center therefore the Earth's core was built up first then mantel and finally the crust was build up. Crust building initiate from Arabia (Mecca). As the universe extended gravitation wave swirled the earth fractaly along cycloid path from big to small scale. In global scale (order-0) ST collect continents in one side and abandoned Pacific Ocean in the other side. Recent researches also show two mantels upwelling in opposite side of the Earth: one under Africa (tectonic pose) and the other under Pacific Ocean (tectonic tail). In higher order (order-1) ST build up Africa in one side and S.America in the other side therefore left Atlantic Ocean meandered in between. In order-n e.g. Khor Musa and Bandar-Deylam bay are seen meandered easterly in the Iranian part but Khor Abdullah and Kuwait bay meandered westerly in the Arabian part, they are distributed symmetrically with respect to axis of Persian Gulf(PG), these two are fractal components of easterly Caspian-wing and westerly Black Sea-wing which split up from Anatoly. Caspian Sea and Black Sea make two legs of Y-like structure, this shape completely fitted with GPS-velocity map which start from PG and split up in the Catastrophic Point(Anatoly). We could consider PG as remnants of Ancient Ocean which spent up after one revolution of Mecca-Spiral. Position of Mecca as a geodynamic pole (as well as contribution of lands and waters) satisfies golden ratio with respect to North/South-Pole and Hawaii-Meridian. Mecca with minimum magnetic inclination is a nucleus of global sigmoid (GS). Scorpion-like GS which bended around geomagnetic axis is mature form of primordial Mecca-spiral. Himalaya in the head-center, Rocky/Ands in the tail-bends and Pacific spread between inverse rotations of head-tail. East and West part of GS represent D and T arm respectively. Extended D-arms after one revolution meet each other around Iceland and make constructive interferences therefore highest gravity anomaly formed in the north Atlantic but T-arms after one revolution meet each other in the Indian Ocean and make destructive interferences so lowest gravity anomaly occurred. Earth's face partitionized via tectonic domains each domain has local east and local west and all of them related fractaly to GS. Also we could dissolve earth face via basic topological shape such as sigmoid, Mobius, cup-like, scorpion-like , etc. all of them originated from cycloids.