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LITORAL THEORY OF HOMINIDS III: 3 STAGES, 3 PHASES IN ODONTOMETRY

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It is often assumed that anthropoids originated in tropical forests and radiated ("pulsed") outwards into more marginal habitats. ERWIN (1979) described the phenomenon of such "taxon pulses", relating the speciation of organisms to distribution of biotopes. Vectors of speciation are oriented from equatorial, lowland, well vegetated, humid regions towards high latitudes, mountain tops, deserts and other more marginal habitats. Ever since DARWIN (1871) it has been suggested that humans evolved in response to the occupation of open county habitats ("Savannah Hypothesis"). The most comprehensive restatement is COPPENS (1983) hypothesis that hominoids confined to forested and well wooded regions west of the great rift valleys evolved into todays african great apes, while those stranded at the eastern side which became drier and more open over time, through modified foraging and and dietary strategies became bipedal hominoids. "Installation of this group of hominoids in large parts of semi-arid to sub-humid Africa, followed by its evident success in terms of adaptation to dry habitats , led to a second phase of taxon pulses during which the genus homo evolved" (PICKFORD. 1987). But palaeoecological studies from hominoid fossil sites ranging from Fort Ternan (KAPPELMANN) to Bacinello (HARRISON), from Laetoli (ANDREWS) to Shungura, Omo Basin (HOWELL) and Senga, Zaire (HARRIS) to Makapansgat (CADMAN) suggest contrary to such taxon pulses: migration within highly conservative refugial biome of the littoral double niche - thereby becoming biome generalist. A general marine, riverine, lacustrine refugial hominoid habitat ranges in time from the mangrove swamps of the Fajum, to the Maremma swamp of Tuscany (Tortonian) on mammal landbridge island arc from Africa to Europe. Paralleled to the south by the Red Sea Danakil-bay mangrove-swamps on the mammal landbridge to Eurasia, interrupted by Red Sea rifting in the Messinian crisis, Danakil turns into an arid-deforested, volcanic island`s refugial shore biome (Stage I). Via Afar, the habitat can be followed to the East African Rift`s riverine, deltaic, lacustrine refugia (Stage II), from closed-wet, closed-dry, open-arid water-marginal biomes to forest margin, open grassland, extreme habitats (Stage III).

Due to the Miocene, Pliocene, Pleistocene geoclimatic events, hominisation went through 3 adaptive phases or major shifts, all within this littoral double niche, functionally resulting in the neurobiological triade for cortical growth and syntactic creative intelligence (BUJATTI, 1986; 1997 a,b; 1990 a,b; 1991). The 3 phases transform the corresponding 3 morphological stages: I Oreopithecus (C,P Dental-stage) into II Australopithecus (Biped-stage) and III Homo (Cortex-stage) reflected distinctly by 6 odontometric sets.

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