

From genotype and phenotype, to sociotype: the endless social communication

The sociotype construct is an attempt to cover the social interactions (bonding structures and communication relationships) that are adaptively demanded by the 'social brain' of each individual. Based on the conceptual chain genotype-phenotype-sociotype, and aligned with the "Social Brain Hypothesis" (Allman, 1999; Dunbar, 1996, 2004), the new sociotype construct advocates the existence of an evolutionary preference in the human species for some determined averages of social interaction, basically realized around face to face conversation (del Moral et al., 2014). In the same way that there is scientific consensus on the validity of the genotype and phenotype constructs for the human species, notwithstanding their respective degrees of variability, metrics could also be developed applying to the relative constancy of the social environment to which the individuals of our species are evolutionarily adapted. The average brain stimulation coming from relational interactions in that social environment, together with further substitutes and surrogates culturally elaborated, would constitute a mental necessity for the individual's wellbeing.

Although sociality is an obvious trait of the human species—as Aristotle put in *The Politics* "man is by nature a political animal", but so fluid and culturally variable are the emerging structures of human sociality that, apparently, they defy any precise classification or numeric specification. The presence of a series of significant regularities in the size and structures of social groups, notwithstanding their remarkable variability, suggests the plausibility of a "deep structure" of social bonding for the human species [7, 9]. There seems to be an average of social networking, with very ample upper and lower limits, concerning the number and classes of bonding relationships that an individual is able to maintain meaningfully [8, 10]. The finding of networking regularities such as the famous "Dunbar's number" (150-200 individual acquaintances) makes a lot of evolutionary and anthropological sense.