



Cities in Evolution

'Healthy life is completeness of relation of organism, function, and environment. Life and progress involve the interaction of people with work and place, as well as of place and work with people. Cities in Evolution and People in Evolution progress together.'

Cities in Evolution, p. 153

'Hence the Tangled Evolution of Cities will be more clearly unravelled and interpreted, the Revivance of Cities more effectively begun.'

Cities in Evolution, p. 161

Why city evolution? How is evolution different from development? Geddes published *Cities in Evolution* (1915) almost 60 years after Darwin published *On The Origin of Species by means of natural selection* (1859). Darwin's contribution to the theory of evolution was to realise that the mechanism for the evolution of species was natural selection by adaption to the environment. Species evolve because some individuals within the species are better adapted to their environments than others. *Evolution* thus focuses attention on the relation of populations to cities, whereas *development* focuses more narrowly on cities. On this evolutionary view, transport infrastructure is a material environment that people use and adapt to their needs, even as they adapt to it, not simply a machine for moving people. Geddes' thinking machine diagrams document his struggle to understand changes to populations and environments in terms of how they organize each other. It is not the city or the population that evolves, but city and population that evolve together as one complex and heterogeneous formation.