

The Fates of Nations: A biological theory of history, Paul Colinvaux, 1980

Paul Colinvaux, well-known ecologist, here applies ecological analysis to the questions of human history with its recurrent wars, nation-building and technological innovation. As with all animals, humans live in balance between prosperity and bare survival. When there is food in plenty, population expands. In times of scarcity, population is held in check or declines. Humans rarely change their basic breeding strategy (have as many children as you think you can afford) so that population tends to expand even while food is becoming scarce. Overpopulation then leads to looking for resources in neighboring lands, through trade, in colonies across the seas or in technological breakthroughs which intensify food/resource production. For trade and colonies, a nation needs a military to protect its ships and traders. Colinvaux shows how successful but overpopulated nations eventually use superior military technology to conquer other weaker nations and steal their resources to use at home. Colinvaux retells the story of Western Europe with this new, ecological population perspective. He begins with Alexander the Great, Carthage and Rome, then goes on to the conquest of the New World by Europeans, the industrial revolution and the First and Second World Wars. Colinvaux is not a moralist, he explains the recurrent drama of human expansionism as simply each generation trying to provide the next with the same lifestyle that they themselves have enjoyed, or better. He keeps coming back to the basic source of conflict: overpopulation in relation to food and other resources. As long as humans do not change their breeding strategy (“have as many babies as you think you can afford”), the story will continue. He warns that nuclear arms today make the situation more critical than in the past—overpopulated nations with rising aspirations will be tempted to use their weapons to acquire the food they need. Colinvaux’s theory is consistent with that presented by anthropologist Marvin Harris in *Cannibals and Kings*, geographer Jared Diamond in *Collapse*, biologist Paul Ehrlich in *The Dominant Animal* and ecologist Garrett Hardin in *Living Within Limits*. Colinvaux's unique contribution is in showing the importance of military technology in determining the outcomes when civilizations/nations/cultures compete for survival.

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Postscript:

Applying this reasoning to post World War 2 conflicts around the world (Colinvaux ends his historical survey with the Napoleonic wars in Europe), we might well see them as being intimately related to the continuing growth of population. Interestingly, Colinvaux argues that high population growth historically does not come from better medicine and sanitation, but is due to an unchanging optimistic human breeding strategy, nourished since the Enlightenment and the industrial revolution by an overly optimistic view of human progress, in which human technology and ingenuity is seen to always rise to the occasion to solve problems and create more food, etcetera, when needed. This view of unlimited future growth must now come to an end as planetary resources are irrevocably depleted, he believes, in particular because aggression today can lead to nuclear war, a catastrophic outcome for humanity. Paul Colinvaux is not a pessimist but a realist. He warns us that behaviour change (especially in our breeding strategy) is the only way to permanently solve the planet’s environmental degradation. Along with a healthier natural environment, lower population ought to promise us more freedom from crowding, poverty, aggression and war.