Partha Dasgupta. *Time and the Generations: Population Ethics for a Diminishing Planet*. New York: Columbia University Press. 2019. 344 pages. \$28

Partha Dasgupta is one of those rare economist-philosophers (not unlike eminent contemporary thinkers, such as Amartya Sen, John Broome, or Marc Fleurbaey) who approach extraordinarily difficult problems with the sophistication of both philosophical argument and the formalism of economic science. More than 50 years ago, Dasgupta published a classic article on optimal population size, "On the Concept of Optimum Population" (Dasgupta 1969). His latest monograph, *Time and the Generations: Population Ethics for a Diminishing Planet*, might be considered the culmination of his neo-Malthusian research, which addresses crucial questions regarding optimal global population levels, economic growth, and resource scarcity.

Dasgupta's book is an assemblage of various parts, including a memorial to Kenneth Arrow (the monograph is an expansion of Dasgupta's 2011 Kenneth J. Arrow Lecture at Stanford entitled, "Persons and Time in the Welfare Economics of Climate Change"), a Forward by Robert M. Solow, and forty-six pages of appendices. The main show is Dasgupta's extended essay entitled, "Birth and Death," with intriguing commentary by Scott Barrett, Eric Maskin, and Joseph Stiglitz. The book also includes an epilogue or rejoinder by Dasgupta and a co-authored chapter, with Aisha Dasgupta, which broaches the topic of population policy in the context of family planning programs.

Dasgupta's book does not contain one long argument for a specific philosophical thesis. Instead, Dasgupta wrestles with some of the brightest philosophers to put pen to paper, including Henry Sidgwick, Derek Parfit, Samuel Scheffler, Bernard Williams, and Thomas Nagel. Through this process, he reaches various conclusions and then uses them to specify and justify his abstract ecological-economic models. The main part of Dasgupta's book consists of three such models, which depict a timeless world, a two-stage setting, and an indefinite succession of generations. Most iterations of these models depict a total output made available for consumption, which is jointly determined by a stock of resources (natural, manufactured, human capital) and some population level, *N*. Following standard economic analysis, Dasgupta represents human well-being with a utility function that increases in consumption at a decreasing rate. Throughout his analysis, Dasgupta posits a Decision-Maker (*DM*) who must decide on the optimal *N* and per capita consumption (and, therefore, per capita well-being).

Readers of this journal will be familiar with Derek Parfit's 'repugnant conclusion.' Originally, Parfit formulated the repugnant conclusion in his *Reasons and Persons* (1984) when he states, "for any possible population of at least ten billion people, all with a very high quality of life, there must be some much larger imaginable population whose existence, if other things are equal, would be better even though its members have lives that are barely worth living" (Parfit 1984). While Parfit took the repugnant conclusion to be grounds for rejecting utilitarianism, Dasgupta addresses it directly by insisting that one should accept that a life for a person is good at *any* standard of living exceeding zero utility (p.54). While this response might fail to persuade some value theorists, Dasgupta ends up rejecting the population ethical principle – 'Total Utilitarianism' – that would recommend the undesirable state of affairs filled with many lives barely worth living.

Instead, Dasgupta follows Nagel, Williams, and Scheffler to develop what he terms, 'Generation-Relative Utilitarianism.' According to this amended theory, the *DM* makes decisions as a potential parent would. As Dasgupta argues, "potential parents evaluate states of affairs on the basis of a weighted sum of personal well-beings, where the weight they place on potential well-

beings of children they could have is less than the weight they place on their own well-being and on the well-being of children they already have, knowing in advance that they will want to share resources with the children they produce on an equal basis with themselves" (p. 28). In the end, Generation-Relative Utilitarianism recommends a smaller population with more consumption per capita than Total Utilitarianism.

Ultimately, Dasgupta argues that we humans are living beyond our means and that if the goods and services required for human well-being are to be sustained over time, then the world population must be significantly lower than the current global population level.

On the whole, *Time and the Generations* is a welcome contribution to the growing interdisciplinary literature on population ethics. Dasgupta's hybrid philosophical-economic analysis is, arguably, second to none. Some environmental philosophers, particularly those wishing to rekindle questions of optimal population size, will find much to be admired in Dasgupta's book (Crist *et al.* 2017). While others might be troubled by Dasgupta's anthropocentrism, I doubt that it would require much imagination to extend his models to include the well-being of non-human sentient creatures. While some might balk at Dasgupta's treatment of nature as possessing mere instrumental value, he extends an olive branch to environmental ethicists when he questions whether people have given sufficient attention to the intrinsic value and ethical treatment of Nature (p. 120). In any case, Dasgupta's conclusion – that humanity's current trajectory is highly unsustainable – will surely find adherents among the readership of this journal.

Bibliography

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