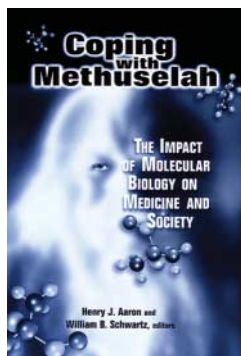


Preparing for eternity

Suresh I.S. Rattan

**Coping with Methuselah:
The Impact of Molecular Biology
on Medicine and Society**
by Henry J. Aaron
and William B. Schwartz (eds)
Brookings Institution Press, Washington,
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While reading this book, I was reminded of an amusing story about statistical extrapolations. If one considers the rate at which progressive reduction has occurred in the time taken to run the 400 metres

during the past century of modern Olympics, then by the year 2180, athletes will be able to run this distance instantaneously! Most of us can easily see the obvious blunder of ignoring the biological limits of the human body in making such an extrapolation. Surely the same is true when some gerontologists, demographers and others who should know better predict future human lifespans of almost a thousand years, comparable with the longest-lived biblical figure, Methuselah. Until now, 122 years, 5 months and 14 days is the longest lifespan that any human being has ever attained, and no doubt a few more individuals will cross that limit, even without any major interventions through biomedicine and biotechnology.

However, the main thesis of *Coping with Methuselah* is that future developments in molecular and supramolecular

biomedicine will really enable us to defy the evolutionary constraints of body design and biochemistry, and that lifespans of hundreds and thousands of years will be attainable by most, if not all. Without really seriously questioning this assumption, 17 highly knowledgeable sociologists, economists, demographers and bioethicists have tried to deal with the social, economic, political and moral implications of such a possibility. Most of the contributors are from the Brookings Institution in Washington, DC, USA, which is "...an independent organisation devoted to nonpartisan research, education, and publication in economics, government, foreign policy, and the social sciences...", a kind of 'think-tank'. This book is the result of a planning meeting held at Stanford University (CA, USA) in 2001, followed by a conference held at the Brookings Institution in 2002. All seven chapters of the book are excellent examples of scholarly academic writing, and six of them have additional comments by at least one of the other attendees of the conference.

The introductory chapter by editors Henry J. Aaron and William B. Schwartz is a good summary of what follows in the book, and puts the whole debate into a socio-political perspective. The chapter by John T. Potts and Schwartz discusses the expected impact of the revolution in biomedical research on life expectancy by the year 2050, and tries to cover all of molecular biology, genetics, genetic diseases, gene therapy, proteomics, regenerative medicine, infectious diseases, lifestyle diseases, age-related diseases, anti-ageing approaches and ethical issues. It is just too much to include in one chapter of about 30 pages, and as a result almost every issue is dealt with superficially. Furthermore, this is the only chapter that unsuccessfully deals with what is the sub-heading of the book—the impact of molecular biology on medicine and society. In

his critical comments at the end of this chapter, Nicholas Wade has tried to give a gist of the article by reformulating some of the main issues discussed within. However, most other chapters have avoided the temptation of trying to cover everything, and have remained focused on their specific topics. Some of the chapters that I found to be very informative include those by Alan M. Garber and Dana Goldman on the changing face of health care; by Gary Burtless on the labour market effects of extended longevity; and by John B. Shoven on the impact of increased lifespan on the financing of social security and health care. The discussion of the ethical aspects of intervention, prevention and therapy in ageing by Alexander Capron is thorough and thought provoking.

I would not say that *Coping with Methuselah* is an easy, or even an entertaining, read. The contributing authors are all members of an established intellectual and politically influential group. It appears that their target readership is not the general public, nor do they want to engage their readers in any discussion. This commanding compendium is aimed mainly at the policy makers who may not actually read and/or understand everything written in these articles, but who will love to include such a collection of scholarly writings in their repertoire. For others, it would have been nice if these ideas were written in a clearer, simpler and not-so-dry way, so that they could also join in the discussion of these important issues that affect us all. In its present form, coping with the book *Coping with Methuselah* is a challenge that you may like to take up, and if you succeed, you will surely be much wiser and better informed.

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