

Over the past two decades, a number of issues have enjoyed public attention, all of which are directly or indirectly related to, or influenced by, the question of human population growth; its absolute size, distribution and rate of change.

The first of these was the population question itself, brought forcefully to the fore by Paul Ehrlich with the publication of *The Population Bomb* in the late 1960s. This was accompanied by the now-forgotten hearings on population problems by Alaska's Senator Gruening, and the appointment by President Nixon of the Commission on Population Growth and the American Future. In 1968, Dr. Ehrlich helped form Zero Population Growth as a vehicle for work on these issues.

During the 1970s, domestic birth rates fell and immigration rates rose, calling into existence in 1979 the Federation for American Immigration Reform (FAIR), when existing population groups declined to tackle the new issue of immigration policy. Then, as large scale immigration raised the specter of division along language and cultural lines, U.S. English entered the fray in 1983. Finally, as of the late 1980s, there developed a ground swell of concern throughout academe and society in general about the proper relationship of individuals to one another, and of the individual to the larger community we call society. Many looked at the problems of our society and began inquiring as to the corresponding responsibilities, duties and obligations that go along with our rights, liberties and entitlements, so much emphasized in the last two decades. This led to the formation of the American Alliance for Rights and Responsibilities (AARR). It is this theme of balance between rights and responsibilities that suggested we resurrect the phrase "The Social Contract" as the name for our journal, since so many of the questions we face are ethical and contractarian ones. Who gives, who gets, and how much?

I have singled out these organizations only because I'm the most familiar with them. Along the way many others have contributed to the dialogue: Population/Environment Balance (nee *The Environmental Fund*), Negative Population Growth (NPG), Californians for

Population Stabilization (CAPS), the Center for Immigration Studies (CIS), the Immigration Reform Law Institute (IRLI), to mention a few on the U.S. domestic level. In addition, there is another set of groups working on the international scene.

In the development and elaboration of any social idea, literary efforts of different types are needed. In general, the groups mentioned above have been strong on the production of short tracts and newsletters, and have generated a few books, but very few of the magazine-length articles that would fill in the gap between these two extremes. In addition, such articles as have been produced are widely scattered, being just occasional items in publications with other chief foci.

The lack of any journal dealing with these related topics has meant that there has been no epicenter for their discussion, and no coherent body of literature to which staff people who come along can be referred. Older items of lasting value tend to be lost from view - that is one reason we are re-publishing Garrett Hardin's celebrated essay, *The Tragedy of the Commons*, in this, our initial issue. Many of us would benefit from reading it again, and many of the generation that follows mine, to whom the standard must be passed, will never have read it at all.

The absence of a journal has meant that it is harder for new young authors to find a place to publish their nascent ideas. It has also meant the absence of an editor, one of whose main jobs would be to look over the whole field, to see which ideas are weak or missing, and to solicit articles to treat them. Some of these might be assigned to those new, young writers wanting to get started, to help them develop their talents and reputation. Finally, many of us have articles and other items we would like to share with colleagues, but few of us have the facilities or financing to do much of the time-consuming copying, collating and mailing. This leaves us all at a disadvantage.

These deficiencies, then, give us our general publication plan:

1. We will use a great deal of reprinted material,

drawn from a wide variety of sources, in an effort to develop a collected body of writing on our topics. Our contributing editors have among themselves agreed to survey about sixty publications, and send us items to be considered for republication.

2. Since the past is prologue to the present, in each issue we intend to present some items from the recent or more distant past that bear on our general subject areas. Sometimes the wheel has already been invented!

3. In a departure from common journal practice, we plan to reprint good items from the daily press, including syndicated columnists, and possibly with letters-to-the-editor responses to their articles.

4. Speeches, memos, testimonies, and the like that should see wider distribution will also be included.

5. The publication will contain the standard items of an editorial, letters to the journal, and gradually, over time, more of the original articles that we solicit to fill the gaps in our information and understanding.

The journal will not be refereed as we have no academic pretensions. This is a publication of activists, by activists, for activists: people in the daily battles who want some return for their efforts in the not-too-distant future. We will also solicit items from our "opposition," seeking to offer debates in print.

Thus, The Social Contract, as we envision it, is a bit unusual in format - which we hope will make it all the more useful to you. When you run across an item that you would like others to see but find you just don't have the time, energy or facilities to copy and send around, send it to us and let us take care of that function for you.

We invite contributors to send along with these submissions a paragraph or two on why they feel this particular item should be seen by others (if the reason is not obvious on its face). We will use these to prepare an introductory note.

Our goal is not to increase your reading load but to decrease it some since our contributing editors, through their survey of a wide range of literature, will be doing some work for you. Their work will also, doubtless, bring to your attention items that you would otherwise miss. Who can keep up with a dozen publications, much less sixty?

This journal is available to the general public through subscription, and we hope that some organizations may wish to offer and promote it to their membership. We hope, too, that the "opposition" will come to feel it is something they MUST read in order to keep track of what we're thinking.

#### CRITERION FOR SUCCESS

Our sole criterion for success will be the usefulness of the journal to the activists who receive it. An important measure of this will be their response in the form of items sent in for inclusion in the journal. Since this is not a commercial venture, the size of the circulation will be of little import. Its effect will be the measure of its success.

So, here we go!

John H. Tanton, M.D.

He who molds public sentiment  
goes deeper than he who enacts  
statutes or pronounces decisions.  
He makes statutes or decisions  
possible or impossible to execute.

--- Abraham Lincoln during  
the Lincoln-Douglas debates

*"What's past is prologue." So wrote William Shakespeare in "The Tempest". In honor of Garrett Hardin's 75th birthday THE SOCIAL CONTRACT proudly reprints his seminal article "The Tragedy of the Commons" in which he argues cogently for the ethics of "carrying capacity." Dr. Hardin is a former professor of biology at the University of California, Santa Barbara. This is the best known of his many writings on population topics, which have played a central role in shaping thinking and action in population matters. In keeping with a judgment that each generation of activists needs to know the best of past scholarship, we have selected Professor Hardin's work as our "What's Past Is Prologue" item for this first issue.*

## THE TRAGEDY OF THE COMMONS

By Garrett Hardin

At the end of a thoughtful article on the future of nuclear war, Wiesner and York(1) concluded that: "Both sides in the arms race are...confronted by the dilemma of steadily increasing military power and steadily decreasing national security. It is our considered professional judgment that this dilemma has no technical solution. If the great powers continue to look for solutions in the area of science and technology only, the result will be to worsen the situation."

I would like to focus your attention not on the subject of the article (national security in a nuclear world) but on the kind of conclusion they reached, namely that there is no technical solution to the problem. An implicit and almost universal assumption of discussions published in professional and semipopular scientific journals is that the problem under discussion has a technical solution. A technical solution may be defined as one that requires a change only in the techniques of the natural sciences, demanding little or nothing in the way of change in human values or ideas of morality.

In our day (though not in earlier times) technical solutions are always welcome. Because of previous failures in prophecy, it takes courage to assert that a desired technical solution is not possible. Wiesner and York exhibited this courage; publishing in a science journal, they insisted that the solution to the problem

was not to be found in the natural sciences. They cautiously qualified their statement with the phrase, "It is our considered professional judgment..." Whether they were right or not is not the concern of the present article. Rather, the concern here is with the important concept of a class of human problems which can be called "no technical solution problems," and, more specifically, with the identification and discussion of one of these.

It is easy to show that the class is not a null class. Recall the game of tick-tack-toe. Consider the problem, "How can I win the game of tick-tack-toe?" It is well known that I cannot, if I assume (in keeping with the conventions of game theory) that my opponent understands the game perfectly. Put another way, there is no "technical solution" to the problem. I can win only by giving radical meaning to the word "win." I can hit my opponent over the head; or I can drug him; or I can falsify the records. Every way in which I "win" involves, in some sense, an abandonment of the game, as we intuitively understand it. (I can also, of course, openly abandon the game - refuse to play it. This is what most adults do.)

The class of "No technical solution problems" has members. My thesis is that the "population problem," as conventionally conceived, is a member of this class. How it is conventionally conceived needs some comment. It is fair to say that most people who anguish over the population problem are trying to find a way to avoid the evils of over-population without relinquishing any of the privileges they now enjoy. They think that farming the seas or developing new strains of wheat will

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*"The Tragedy of the Commons", originally given as an address to the Pacific Division of the American Association for the Advancement of Science, is copyright by the AAAS and is reprinted with their permission from SCIENCE 13 December 1968, vol. 162, pp. 1243-48.*