

Responsible Statehood

The need for a population policy

BY JOHN R. VALLENTYNE

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Here is one of the most basic puzzles of our time. Most of us can look out the window and realistically claim to be living under the best environmental circumstances that have ever pertained; yet, at the same time, persons of intelligence and consequence are increasingly rising in our midst, prophesying doom. Is it conceivable that both might be right?

The answer to these questions can be understood through an analogy to a car, constantly accelerating on an improving road of life. Constant acceleration means a doubling of velocity over successive units of time. If a velocity of 10 mph is reached at the end of the first minute and velocity doubled each minute thereafter, the result will be 20 mph after two minutes, 40 mph after three minutes, 80 mph after four minutes, 160 mph after five minutes, and so on. At some point, unusual stresses and strains are felt. Then, just as a strange swaying motion is perceived, suddenly the car jumps out of control. Only in the instant before the crash do the occupants realize the significance of the feedback signals they have received, signals telling them to slow down.

Human population and technology have been increasing in this manner during the past few hundred years, with doubling times in the range of 15 to 100 years for population and 5 to 25 years for technology. In many instances, such as the growth of human population, the doubling times have even been shortening: the acceleration has been accelerating. At the same time, feedback signals have been appearing with increasing frequency telling us of the need to control demographic (population x technological) growth: malnutrition, organic pollution, smog, eutrophica-

tion, DDT, Torrey Canyon, thalidomide, and mercury. To a large extent we have viewed these warning signals as problems, attempting to erase them without attending to the true causes involved. This is dangerous, particularly in an age of specialization. These warning signals are symptoms, not causes; like the temperature of a body in a fever, they speak a universal language that does not have to be translated or explained to be understood.

Why do we fail to recognize the asymmetry of systems increasing at rates of compound interest, systems that double in mass or velocity over constant increments of time? Are we so naïve as not to see the consequences of the acceleration term in our population and technological growth? Would even an alcoholic consume his liquor the way we have been increasing in demographic (population x technological) growth, drinking 1, 2, 4, 8, 16 ounces of whiskey in successive units of time?

The division of labor (specialization) in human society has been the principal cause of the demographic explosion. The increased production of material and intellectual goods has nurtured and been nurtured by the expansion of human population. Yet, it is becoming increasingly obvious that there are limits to specialization and production. Jobs become less satisfying as they become more routine. Reduced feedback within human society leads to both individual and large-scale social disruptions. The coalescence of small populations governed by local feedback from the environment into larger units with feedback appearing on an increasingly global scale increases the probability of major catastrophes. With larger and larger aggregations of human populations mimicking each other in the manner of small children, conditions are ripe for an epidemic smog or a mutant virus to spread throughout major cities of the world.

One of the consequences of the division of labor is that we have been programmed mentally to think in terms of parts rather than wholes. I hope that you will not fall prey to this type of thinking in approaching the population issue. Sometimes authorities tend to separate themselves, unproductively, into two camps: those who identify misguided technology as the major cause of our environmental ills today, and those who view human population as the principal factor involved. The discussion is pointless, even counter-productive. In the first place, the accent should

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be on controls, not on causes, and second, population and technology are so intimately intertwined that both must be simultaneously regarded as cause and effect. The human species is and always has been characterized by internal (biological) and external (technological) components of mass and metabolism. I own a piece of the technology that it took to manufacture this glass; that it took to transport the water in it from Shoal Lake to the Fort Garry Hotel; that it took to make the ice. Remove my glasses and I am blind; deprive me of electrical energy and fossil fuels and I will change my way of life; erase the technology of medical practice and I am dead. There is oil in my bread.

An important implication from the acceptance of man as a demophoric species is that human population cannot be counted in terms of heads alone. The demophoric momentum inherent in the present human population of the Earth is of far greater consequence than is implied by numbers alone; our children will vastly out-distance our parents in terms of resource depletion. Furthermore, recent discussions on energy supply and inflation show that we do not live in isolation; that rising needs and aspirations of people in underdeveloped countries can have a pronounced economic impact on those living in the more technologically developed arts of the world.

If these rising needs and aspirations are to be fulfilled—and I do not believe that a substantial part of them can or should be avoided by Canadian citizens—global population balance must be achieved. Governments throughout the world have been grossly derelict in toying with population phenomena without ever concerning themselves with the need for balance. The improvement of health, the prolongation of life, the postponement of death—whatever one wishes to call it—can have only one effect if not balanced by a reduction in birth. Population has to go up. The state has acted irresponsibly in not balancing improvements in public health (death control) with parallel measures over the control of births.

Population is regulated like the flow of water through a bath-tub. If the flow down the drain is restricted without a corresponding decrease in the incoming stream from the tap, the level will rise and eventually overflow the tub. Put in more concrete terms, if the state continues to improve health without balancing population through the regulation of births, nature will move in. Population will be regulated through increased deaths.

The prime reason why population, and specifically birth control, needs a strong accent in this regard is because of the long time lag (approximately 70 years) between the initiation of a change in the schedule of births and the final numerical effects in terms of population. It is like a bath-tub with a 70-year graduated tie delay on the tap. Without a policy of population balance we will one day discover that we have entered into a state of diminishing returns from overpopulation. Will we then tell our children to wait for

70 years before the full effects of new policies will be visible?

The first recommendation under the heading of Population at the November 18–22, 1973, Man and Resources Conference was as follows:

Deeply concerned with the impact of growing environmental problems on the quality of both urban and rural, life and by the wasteful consumption of natural resources, we call on all governments to (1) develop an explicitly national population policy which would accommodate the growth inherent in present population but also allow for a leveling off of further growth by the year 2000.

I strongly urge that this recommendation be acted on before we find ourselves in a situation that is difficult to reverse. Let us not be deceived by the view out the window.

DISCUSSION

MR. ARENSON: Thank you very much, Dr. Vallentyne. Questions? Comments: I don't think that Dr. Vallentyne explained that the word "demophoric" is a word of his own creation. You're among the first people to be able to have the opportunity of appreciating that concept publicly. "Demophoric" has very significant implications for understanding the dimensions of the problem.

MR. MORELY: I was just wondering, Dr. Vallentyne, if you'd like to speculate publicly on some of the reasons that you foresee as inhibiting the Governments at both the Provincial and Federal levels from developing the kind of positive policy to deal with population?

VALLENTYNE: I think, first of all, most governments and people in them are not attracted by change, and this is calling for change. Second, I think the people in government—and this is just as true of the city council as it is of the federal government—tend to be people who are oriented towards growth.

I remember very well one of Mr. Jack Davis's speeches a couple of years ago. [Davis was a politician who held many offices in the federal government. At the time of Vallentyne's talk, Davis was, ironically, Minister of the Environment, the first such in the English-speaking world. —Editors]. The initial sentence began something like "Canada can support a population of 50 million people." [In 1974 the population of Canada was about 23 million]. Third, I think there is a citizen factor involved in this that is two-fold. One is the general lethargy that we have as people on most issues. We let somebody else solve the problem. But more than that, when we get into the question of controlling population, we move into that area that I think you were discussing, namely where it begins to be looked at as some kind of interference with our rights—our procreation rights, and second, I think many people find the issue of abortion rather confusing, even though early

abortion, prior to something of the order of three or four months is not a part of criminal law. As one man put it, it's within any individual's right to flush an embryo down the toilet at the age of three months, prior to the time that it gets an independent life.

Nevertheless, those issues are very earthy issues to many people, and not only to people with religious background that is predisposed to be against them. So I think when we get into the realm of procreation and fertility it's an area that has been open for discussion literally for about 15 years. I think one of the first statements that opened it up on this continent was in the U.S. when Eisenhower was forced to make some statements about it

on the eve of his retirement in relation to monies that were going to India because some of his economic advisors had advised against economic support without some kind of population control measures simultaneously. I think it was 1958 really that was the first time that the whole subject has been discussed at all in the U.S. Congress, and it's even later than that in Canada.

Things are moving fast. I don't think we have the time to play with it, and it's an issue really that is an issue of management. When you're talking about population, you're not talking about people. I can persuade a person, but I can't persuade a population. I can manage a population but I can't persuade them because they don't have a mind. ■