

Thoughts Following the Conservation Foundation's  
"Conversations" of May 20 and 21, 1969  
on Population and the Environment

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## Food and Famine, Zoos and Nature

In the beginning was the word, and the word was in God, and the word was God. . . And you shall conquer and subdue the earth, reproduce your kind and fill the earth to its ends.

However we remember these words, present circumstances create doubts about their continuing validity. We have done a remarkable job of filling the earth with mankind. So well have we been doing this job that we are in the dilemma of not being able to feed all the new mouths. Before twenty more years have passed, the world population will be at least more than 50% greater than present. By that time lagging food production may well culminate in the death from starvation of 1/5 of the then total population, one billion persons dying from hunger. Such is the very real prospect revealed by the studies of those who <sup>have</sup> thought most diligently about this matter.

But man has a dual hunger, a hunger for food for the body and a hunger for food for the mind. Man remains unchanged from his primitive hunting and gathering ancestors in needing somewhere between 1500 and 3000 calories of food per day to maintain his body and to permit reproduction. The need for food for the mind has become more and more insatiable. Each passing generation needs more information, more ideas, that will help him relate to his fellows and make more effective use of natural resources without destroying them for future generations. This means that each passing generation must create more new ideas



than did their parents. Just creating the ideas is not enough. Ideas locked away in individual minds, hidden in technical tomes, or bottled up by traditional worshipping of outmoded ways or by cultural barriers lead to starvation of the mind and the spirit just as assuredly as holding grain in granaries feeds no bodies.

Here lies the crux of the matter--to feed the body we need first to feed the mind and spirit. We need to seek The Word in all its diverse forms, Jehovah, Allah, Buddha, humanism, philosophy, science, technology, art and poetry. This search is the continuing creative revolution which is the hallmark of man. It is a revolution which preserves and conserves all past heritage, physical, biological and cultural, which contributes to the future of man, and to the future of the earth of which he is caretaker. It is a revolution, at the same time, which requires rejection of some past no longer harmonious with the emerging future; while at the same time it requires creating new insights and promoting their spread and implementation.

The catastrophists of today, our Jobs, see the world doomed by two explosions, the bomb and the population. That either of these two explosions can doom the earth and can end the human experiment, there is no doubt. Whether they will or not depends upon whether or not we fail to ignite two other explosions, that of increasing the opportunity for creativity and that of enhancing our ability to alter our images of



reality and their attendant changes in value systems and ways of behaving. That is not to say we should forget about controlling the bomb and controlling population increase. But we must recognize that there are essential priorities for attention and action, more important than the bomb and more important than population.

Creativity is fast supplanting motherhood as the prime generative function of mankind, or perhaps it is more accurate to say that creativity has the beginning opportunity of so doing. Nothing is more defensive than the mother of her child. Male aggression in defense of the family, the tribe, the nation, becomes but an extension of the defense of her children by their mother. Commitment to promotion of the acceptance by others of the ideas one has acquired or created becomes a sublimation of this basic aggressive tendency. We must similarly work toward the sublimation and transformation of War Departments into Creativity Departments to develop the mechanisms for fostering creativity and for designing the strategies with which conflicting ideas, images of reality, may confront each other in an arena of compassion and tolerance, of a readiness and openness to consider new avenues toward the future. To win, we must lose, must give up old ideas. This is the rub, our Rubicon. It is much easier to express the aggressive-like commitment to the development and spread of ideas. The submission of accepting new ideas, and of changing our ways of



behaving comes much more reluctantly. But submit we must, and accept we must to avoid the two twin explosions of the bomb and population.

Buffering the impact of this submission requires attention to alerting and dialogue. We need to develop more effective techniques of exposing ourselves to the ideas which lie half submerged all about us, and to the recognition of the options they open for us. But, whereas recognition may be fostered while we remain in seclusion, that dialogue of muted confrontation with our fellows alone can suffice to lead us to that submission of effectively altering our values and images of reality as each participant gives and loses in the process of mutual adjustment toward a more meaningful future, meaningful in the sense of information becoming more relevant to survival.

"Conquer and subdue". What meaning have these words? Some see a rape of the environment or a plundering of our planet. Surely man has often been unheeding of his actions in the past, and all too often continues to take blind action, ignoring its consequences. But just as surely man has grown in stature as caretaker or steward of himself, his actions, and his surrounds. We are a visual animal, offspring of our distant past, and often have difficulty visualizing the implications of our caretakership. Perhaps the image of the zoo will convey the nature of our present circumstances and developing future. Each of us in some way is both a zookeeper and a resident in the zoo.



As residents of the zoo each of us inhabits one or more very small compartments, such as our homes, rooms in them, our neighborhood, schools, and places of work or relaxation. As residents with some control over the character of these compartments, and as keepers for other residents, we wish to see these compartments become more effective for the gratification and living and loving of their inhabitants. Over historical and prehistorical time the diversity and complexity of these cages have increased. We will wish this trend to continue and not be replaced by uniformity and conformity. Just as we live in physical, spatial compartments, so our zoo also consists of ideational and spiritual cells of great diversity which we will wish to further enhance.

Sometimes we close ourselves off in tiny spatial and ideational cages avoiding contact with any interpretation of life differing from our own narrow one. Such was the original policy of zoological parks. Each individual or a very few of each particular species were confined to a small cage with minimal internal structuring. Over time there has been a change toward making the cells richer in their design and then connecting different kinds of cells to form a complex community simulating that found naturally. In the early days of our own ancestry, each band set itself off in a territory, its self-made cage, with as little contact as possible with neighboring bands. But gradually man discovered, what nature discovered long



before--he discovered how to make bridges of communication between differently structured cells. Thus it is that man has culturally progressed in similar fashion to the biological evolution of nature. Most rapid adaptation to changed circumstances occurs when channels of contact develop between groups whose partial isolation has permitted them to differentially specialize one from another. Neither complete isolation nor complete integration has proved evolutionarily most profitable for survival. So there remains very little question about the broad goal of our role as zookeepers: Through the promotion of the twin "explosions" of enhancement of creativity and enhancement of ability to change our values, we will wish to design a zoo where the contained cells become more diverse but with each cell, whether spatial or ideational, interconnected or linked to several other cells of differing kind.

This extended zoo involves more than the immediate privacy and relations among men. Much of the natural habitats that were formerly interconnected have been isolated nearly completely by the nodes and routes of intensive use by man. The number and size of these cells also continues to decline. Natural evolution is being brought to a halt. Our own selfish interests could permit this contraction and isolation to continue to the point where only a few kinds of plants survived, and in sufficient abundance to provide us with the necessary oxygen. But fulfillment of our caretaker role requires that attention be given to increasing the interconnectedness between the cells we



reserve primarily for other forms of life. Where this interconnectedness is insufficient to assure continuance of the evolutionary process, we will need to assume a more active role in the periodic transfusion of each cell with differing hereditary material from other cells. And just as for ourselves, where we are assuming a conscious role in increasing the diversity and complexity of cells reserved mostly for man, so must we also begin to guide the structure of cells reserved for plants and other animals until they too become more complex and diverse.

Sometime during the next century, but beginning with actions taken now, man can terminate his population growth, and balance this termination with a food production meeting the needs of his biological body. But this can only be if as much attention is given to feeding the mind and spirit as feeding the body. If we fail, Orwell's "1984" will be a paradise compared to reality. 15 Years! The most critical years of decision in all of human evolution, from thousands of years in the past to thousands of years through the future are just these between now and 1984. We can smother the explosions of bomb and population only by igniting the bombs of creativity and value change.

Optimists must be "suffering servants".

I hope that I can be numbered among the optimists.