

human behaviour is to set out to punish those acts that are deemed undesirable, as proposed in the bills which we will be debating in a few weeks. The motion before us, however, recognizes the importance of the environmental, physical and social aspects in shaping the human condition.

Thomas Edison thought he was constructing a better candle when he invented the light bulb. History proved him to be quite wrong because the light bulb did not just produce a better form of light, it changed our society. The effect of the light bulb was to bring in shift work and to transform the lives of men and women in North America. Likewise, the women's liberation movement is not a product of women per se but rather the aftermath of technology and technological development. The new role of women is brought about largely by the dishwasher, the automatic laundry, drip dry fabrics, instant foods, flush-a-bye diapers, contraceptive devices, television, and many other products of technology.

Similarly our hope for human happiness lies in our understanding and control of our physical and emotional environment. We watch television programs such as "Untamed World" and "Outdoor Canada" and we learn about the space requirements for the Canada goose and the travel patterns of the red fox, but we fail to concern ourselves with the crowding in urban areas, the lack of daylight in many of our apartments, the lack of green areas and places for children and adults, the harshness of noise. We note that the places we allow for children and adolescents are largely restricted to places where an adult is necessary to organize the child's play.

Simply put, Canada today is quite a different Canada from that of 100 years ago. One hundred years ago 80 per cent of Canadians lived in rural communities. Today more than 80 per cent of Canadians live in urban areas. It is predicted that 95 per cent of all Canadians will be living in urban areas by the year 2,000. In the single decade from 1961 to 1971 over 179,000 people left the rural communities on the prairies and migrated to cities.

Let us take a look at some of the changes that are taking place in our society as a result of the tremendous emphasis on urbanization. U.S. studies indicate that cities of 100,000 people cost an X number of dollars to police. Therefore, a city with one million people would cost 10X dollars to police. It would seem mathematically correct. The fact of the matter is that it costs 60 times as much to police cities with one million people as it does those of 100,000. What that illustrates is that the more dense our population is in the cities, the more negative is the behaviour of the population.

The increasing density of our population results in the increase in murders, suicides, robberies, and rapes, in fact an increase in the incidence of behaviour which we assume to be negative in our society. We could ask then, why do we continue to debate the issue of capital punishment, the issue of punitive measures, without at the same time focusing on preventive measures and looking for conditions which would induce a more positive human relationship in the country.

We have debated capital punishment previously, but this time the difference will only be in the speakers. I am referring to the speeches made on the private members' bill

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in 1924, in the joint committee in 1956, on the private members' bill in 1960, on the Criminal Code amendments in 1961, on the private members' motion in 1966, on Bill C-168 in 1967, on Bill C-2 in 1973 and 1974, and on Bill C-84 in 1976. It is high time that our society began to focus intelligently on what are the environmental conditional changes which can be made that can lead to a more positive kind of behaviour.

We know, for example, that when rats are crowded together they stop breeding and finally resort to eating one and other. We know that horses on a wild range land have a conception rate of nearly 100 per cent but under domestic conditions they have a conception rate of only 30 per cent. What we are really talking about is the biochemistry of our environmental changes. We also know that architecture and architectural changes in the styles of our homes and apartments have an effect on human behaviour.

Let me give the example of what happened in an Italian village following World War II. In the 20 years that followed the destruction of the village by bombing during the war a whole new community arose and all the negative behaviours in society, such as murders, rapes and suicides, increased to an abnormal rate. It was discovered through psychological probing of that community that what was fundamentally wrong was that the community had been rebuilt under the Marshall Plan and architects and engineers from the United States were employed in the rebuilding. The building was done without any relationship to Italian architecture. It is simply an example to point out the importance of design and architecture and space relationships to human behaviour. We can give a large number of examples of how we design and put together the world in which we live and how in fact it changes the biochemistry of people, and subsequently their behaviour.

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All the following animals will show aggressive or adverse behaviour due to crowding. The sika deer will abandon its young, canines will fail to nurse their young and commence fighting, the Norway rat will begin to eat itself or to eat others, and fight. Those things are all due to crowding, yet on the North American continent today we find that almost 95 per cent of our people are clustered into large urban areas without respect for the full consideration of what might happen in terms of human behaviour.

Over and over again throughout the century we have been contemplating the question of capital punishment and whether we should have stiffer jail sentences, but obviously one of the things we should be focusing on is whether we ought to be concentrating on our real relationships with one another as a result of the environment which we create.

Let us look at pollution. I should like to quote from the book "The Crisis of Survival" by William Steiff, which deals with the city of Los Angeles "where the birds cough". Mr. Steiff writes:

... Or consider the experience of the 22 men working the toll booths at either end of the Brooklyn battery tunnel—all but one in their twenties and thirties. More than half were found to have dizzy spells from a higher than average concentration of carbon monoxide in their lungs. Over the one month period in which the 22 were studied, five of the men had blackouts.