

(Mr. Clarke, Sri Lanka)

Let me give an example: few things would seem more remote from military affairs than the geodetic satellites used to detect minute irregularities in the earth's gravitational field. At first sight, this would seem to be of interest only to scientists; nevertheless, these subtle variations are of vital concern to the designers of intercontinental missiles, because unless the earth's gravitational field is accurately mapped, it is impossible to target a missile with precision. Thus purely scientific satellites, by greatly increasing the accuracy of warheads, can have a major impact on strategy. Yet does anyone suggest that they be prohibited?

Even meteorological satellites, one of the most benign of all applications of space technology, because they have already saved thousands of lives, are of obvious military importance.

Similarly, communications satellites would play an absolutely vital role in military operations. Yet neither represents a direct threat to peace.

Just as military helicopters can be used for disaster relief work, so some military space systems can be positively benign. Indeed, we might not be alive today without the stabilizing influence of the reconnaissance satellites operated by both the United States and the USSR.

Let me remind you of a piece of recent history: in the early 1960s, there was a vigorous campaign in the United States claiming that the USSR was far in advance in the development of intercontinental ballistic missiles. The so-called "missile gap" was a major theme in the Kennedy-Nixon campaign, and millions of words were written urging that the United States start a crash programme to overcome the Soviet Union's "enormous" lead.

That missile gap was a total illusion -- destroyed when American reconnaissance satellites revealed the true extent of Soviet rocket deployment. President Johnson later remarked that reconnaissance satellites had saved the United States many times the cost of the space programme, by making it unnecessary to build the counter-force originally intended.

By a fantastic coincidence, just yesterday I discovered President Johnson's actual words, and I quote:

"We were doing things we didn't need to do; we were building things we didn't need to build; we were harbouring fears we didn't need to harbour." (My italics.)

However, in a sense, that information may have come too late. One can picture the feelings of the Soviet military planners when contemplating this American debate. They knew they did not have the weapons the United States claimed, so what was the purpose of the exercise? Were the Americans deliberately creating an excuse to rearm? That might have seemed the most plausible assumption -- but in fact, ignorance rather than malice was the explanation. In any event, the Soviet Union decided it must produce the missiles which, at that time, existed only in the imagination of the Americans. So the seeds of a space arms race were planted, almost a quarter of a century ago.

It is possible to play a numbers game with payloads and launching to prove almost anything. Statistics indicate that the Soviet Union has now launched about twice as many "military" payloads as the United States -- by 1981, roughly 860 against 420.