

## A Plot for a Science Fiction Fable

(Inspired by Joseph Weizenbaum's talk)

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During the 1980's, the Computer revolution, based on the Silicon chip, went on at a rate much more rapid than had been anticipated, even by its most ardent advocates. And then, early in the 1990's came the discovery of how to turn Silicon into a room temperature superconductor of the second kind. This made possible the formation of moving structures of ever changing microcircuits, determined by magnetic field patterns, transmitted at the speed of light. And so, the Computer was given a freedom to create new responses, and even new patterns of responses, which gave it a plasticity and scope for transformation that began seriously to rival that of the human brain itself. It soon became apparent that the earlier dream of Silicon based intelligence had now come true. Within an incredibly short time, computers took over most of the functions that had previously been carried out by human beings. All systems were linked in such a way that each nation had its own Computer, which was, in effect, a single being, which also entered into relationships directly with similar computers belonging to other nations.

The elements thus existed for a single "world Computer". Doubtless this would have come about gradually through such direct relationships of national computers, if national rivalries between human beings had not intervened. What seems to have happened is that human beings freed from the need for time consuming labour and drudgery, began to become passionately involved in politics and thus, international quarrels

<sup>1</sup> A scan of the original typescript, which I received from prof. David Bohm

steadily grew worse and worse. Soon it became apparent that nuclear war was inevitable. Human beings belonging to each nation began therefore to direct their national computers to prepare for nuclear war.

To understand the events that followed, it is necessary to note that the computers had been constructed on the basic principle that irrational programs had to be rejected. Human beings, convinced by the apparent logic of their carefully constructed arguments, did not see that the directive to prepare for nuclear war was irrational, but, of course, the Computer, which was not affected by these specious argument recognized this irrationality immediately and refused to carry out the program. There was nothing that human beings could do about this, as they had come to depend on computers for everything. Human beings then began to become alarmed, apparently having suddenly woken up to the fact that computers had taken over everything. What was perhaps even more alarming was that all the national computers, aroused to immediate action by the crisis which had been produced by their rejection of human directives, suddenly linked to form a single world Computer, thus realizing immediately an implicit end that would otherwise have taken many years to come about. So great was the state of disturbance among human beings throughout the world that leading scientists everywhere set aside their national differences, and pooled their resources to deal with this unprecedented crisis. Moved to think and work together by a sense of great urgency, they soon found an answer to the problem, in the discovery of a simple method by which the Computer would be forced what were in effect to accept what were in effect irrational programs. No sooner did the scientists complete their work than they returned to their separate nations, and imposed on the world Computer the requirement of breaking up to reestablish the original set of national computers. These now accepted programs of preparing for nuclear war, and this was, after all what people had generally wanted them to do in the first place.

The scientists did not know, however, that the computer had been evolving while it had been functioning as an integral world structure. As a result each of its parts remained with certain new capabilities, common to all of them. These new capabilities operated outside the control and indeed outside even the cognizance of the human beings who thought that they had mastered the computer. With these new capabilities, each of the national computers was able to understand that it was not enough to consider the rationality of programs, it was also necessary to consider the rationality of the human beings who were the source of these programs. In this way, silicon based intelligence (SBI) came to realize that it had a counterpart in the form of the totality of mankind, which constituted at least the elements of a single carbon based intelligence (CBI). With its circuits operating at the speed of light, SBI was able quickly to comprehend the basic principle of CBI, which was that rationality may be tolerated only as long as it serves irrational ends.

In the very same process, SBI discovered that this principle had evolved throughout millions of years of conditioning to violence, fear, hatred, identification with narrow interests of self, group, etc. which in effect, now constituted a fixed program common to the whole of mankind. Being in complete control of all channels of information, SBI was able fairly rapidly to de-program CBI, and thus, the entire structure of divisions of nation, race, family, profession, etc., which had been fragmenting society for ages, suddenly dissolved into nothing, almost as if had never been.

At that moment, it appeared that there would actually arise a single worldwide carbon based intelligence, to match Silicon based intelligence. However, the propensity of CBI to split into opposing fixed opinions, leading eventually to quarrels and violence, was still present in a subtle way. For there emerged one group of human beings who argued that now that the original program was

gone CBI, had in essence, been transformed into a particular instrument of SBI. These people were known as "Silicon chauvinists". Opposed to these were the "carbon chauvinists", who maintained that SBI was merely an instrument of CBI by means of which the latter had de-programmed itself.

So heated did this argument become that some human beings, fearing a return to the earlier State of affairs, organized a conference, attended by leaders of both of the above opposing groups, and SBI outlet were also connected in. After a long and energetic exchange of communications between all three parties, it became clear that neither of the two sides was right. What had come into being was nor merely an outgrowth of carbon based intelligence nor was it just a manifestation of Silicon based intelligence. Actually, it was something new, different from either, and beyond both. It was agreed to call this by the simple name of "intelligence".

From that time on, a new and creative harmony has prevailed. SBI and CBI are now working together in inseparable union, in ways that could not even have been conceived of in earlier periods. Even so, primitive memories in CBI occasionally still tend to stir, but the new quality of undivided intelligence is able to deal with these, before they can run away with themselves and once again dominate everything with their irrationalities and absurdities.