My first experience with computers was with mainframe computers that filled rooms equipped with special ventilation systems and raised floors to accommodate the network of wires and cables between components. Punch cards were used to input information and teams of people managed and operated the equipment. The “state of the art” calculators we used consisted of a central electronic cabinet and about five keyboards to allow use by five people. In the late 1960s they cost about $5000, which was about half a year’s pay for an engineer. Technology moved quickly from there. In a few years we had $50 calculators and then $5 calculators. Computers went to “mini” computers to desktop and now a cell phone has more capability than the old mainframes.

Dealing with the old mainframes was very frustrating and slow. A single wrong hole in a punch card could cost a day of time and several thousand printed pages of nonsense. In spite of the inefficiencies, we designed complex systems and I had some experience with what is now known as artificial intelligence where the computer is programmed to make new calculations based on a failed result and selection of possible changes that would correct the failure. I found the computer to be a useful tool but did not enjoy working with it. Fifty years later I feel the same way.

Computers today are many orders of magnitude more capable of doing computations and I no longer work with them directly for that purpose. I now work with others who do computer aided design (CAD) and similar work, but most of my direct computer experience is with gathering information. The world is incredibly interconnected compared to the early years and the amount of information is orders of magnitude greater on virtually any subject, but useful information is getting harder to find because it is buried in a massive amount of useless information (including a lot of advertising). Much of the useless information is not even true because opinions are treated as pieces of information. The problem is compounded by opinions put out to purposely hide a reality and censorship is a real problem. Much of what is put forth as information is nothing but useless and damaging gossip.

In spite of 70 years of exponential development of digital technology, the actual knowledge of the average person seems to be decreasing. This is probably most evident in the governmental and political arena but deception there has a multi-thousand year history. Victors write the history and that has not changed. Today the truth, or close to it, can be found but it is so thoroughly buried in the propaganda that it takes dedication, judgment and intelligence to find the reality and when found it will only be believed by a few and if they present hard facts, they often have strange accidents. The rest believe the lies as they always have but there are more people, more activity and more lies than in the past. Unfortunately, science has not benefited as it should have for similar reasons. Fundamental scientific understanding of the universe has not progressed nearly as fast in the last 50 years as it had in the previously 50.

The Big Bang became the new religion regarding the origin of the universe decades ago and even though further exploration with much better telescopes has made it look weak and even silly, it is still the answer according to the average person and most scientists. Don Hotson proposed a theory regarding the universe involving an aether and some thoughts about the nature of gravity in IE 43, 44 and 86. It included an energy balance of negative and positive energy that in theory could answer the biggest problem with theories about the origin because it required no input of energy or matter. Thinking like Hotson presented is very difficult and way beyond what a computer could do. It is also way beyond what the average go along/get along scientist is capable of so the Big Bang lives on until it is very clear that there are a great number of galaxies that are older than the Big Bang universe.

Search for Extraterrestrial Intelligence (SETI) is an organi-
though there is strong evidence for it. The existence of ETs 
telepathic, virtually instantaneous communication even 
hundreds or thousands of credible sightings and encounters, 
communicate but “science” does not accept ideas such as 
not be discredited is proof of existence and there are many 
should be beyond doubt because a single incident that can -
many from military pilots, and the obvious idea that if these 
ETs wanted to communicate, they are perfectly capable of 
doing so and probably not via radio waves. In fact, they do 
computer is doing is obvious once the path is shown. There may 
be billions of paths that are tested but all “within the box.” This 
kind of work is well beyond what people can do and that is why they invented computers and they are a major 
part of our mechanized environment. The most important 
element of thinking is to envision something out of nothing. It is what has driven civilization as we know it. The very 
small portion of humanity that has had that ability over time has enabled the rest to live in greater comfort and 
abundance. These are the ideas that come into the mind by an unknown process but are what makes civilization; com-
puters cannot do that.

Arthur C. Clarke wrote a book called The City and the Stars. 
The city existed about a billion years in the future and was 
completely run by computers. The people lived a set lifetime 
and then went in hibernation and had a later rebirth. There 
was essentially nothing that a person actually had to do to 
survive in the complete luxury as envisioned. However, the 
city planners of a billion years earlier realized that there 
could be changes that were out of the scope of even these 
incredibly powerful computers and the associated mecha-
nisms, so they built into the system a means by which a per-
son was born every thousand years or so that would have a 
free mind of high intelligence and curiosity so that if radical 
changes were needed he might be able to make them. Clarke 
was envisioning that even in a billion years with the evolu-
tionary digitally driven changes over that time, that com-
puters would not be able to think out of the box.

Operation of computers over time has required less thinking 
and more rote memory of access of the rapidly increas-
ing options. Many more programs are available with more 
options within each. This increase seems to be exponential 
and results in most options not being used, but just the fact 
of offering the option forces the operator to scan a greater set 
of instructions and remember more essentially otherwise 
useless information that can change any time. I can see this 
resulting in most working people devoting most of their 
time inputting decisions into computers. This is the exact 
result of the mentality that is needed to get truly creative 
ideas. On the other hand, the military industrial complex 
could support wars that were fought robotically so that no 
lives would be lost in direct combat. The only things lost 
would be civilization and the natural environment.