

## A CHANGE OF BIBLICAL PROPORTIONS

BY

TIMOTHY GRAYSON

I've come to believe that the technological developments of the modern period represent change of Biblical proportions. It's probably not as dramatic as "cats sleeping with dogs," as Ghostbuster, Bill Murray, ranted. But, the hyperbole gets attention even from the converts to the religion of technology. My own assessment is more antiseptic and just something to ponder.

Even those of us who can not quote Scripture will remember—or think we remember—somewhere in the Old Testament are passages referring to the ages of the people: this one was 800 years, another lived 600, etc., etc. Relatively far fetched by most standards, and certainly enough to set many off to search for the elixir that would provide such longevity. Did not Ponce de Leon search for and believe he'd found the fountain of youth? I would propose that technology, commencing predominantly with the industrial revolution but certainly taking hold with the information revolution, has uncovered what Ponce did not.

Consider for a moment our forefathers and mothers living near the end of the 19<sup>th</sup> century: they lived out their 68 years often without straying more than 20 miles from the place where they arrived on the planet and departing from within that perimeter as well. We, today, have not actually progressed that much in terms of physical years

beyond their contributing lifespans as part of the thin film of life on this rock. If, however, we evaluate the essence of life not as *time served* but rather as *experience gained*, I think there is a different story to be told.

I'm an historian by nature and training, so forgive me some liberties with the implications and magnitude of changes I see. Nevertheless, what if we consider 1901 or so to be a baseline year on our "experiential scale"? The world is fairly normal: years pass without significant change from one to the next. Seasons change, some are born, some die; life goes on. Sixty-eight years pass with alarming regularity except that for the first third of the years strength, ability, knowledge, and interest arc upward followed by another 45 to 50 years of slowly progressing decline. Experience comes primarily from variations on a repeating theme.

Then came the automobile. The locus of geographic intimacy expanded dramatically. Radio and television came on and commercial air travel replaced the lumbering drudgery of ocean voyage, each bringing descriptions and visions of ways of life foreign to us into clear and real focus. Their impact being to transfer thinking and methods far afield much more rapidly. Again, the magnitude of experience, albeit often vicarious, expanded for everyone—willingly or not. But it was the unleashing of personal computing power and the

subsequent information age, culminating (today) in the Internet taking everyone with access to a PC on a tour of the world—if not the universe, that has geometrically expanded the range of sights, sounds, and experiences available to an extraordinarily broad part of the modern world.

So, while our physical number of years alive has increased marginally in the past hundred years, thanks to the assistance of science and medicine, in terms of relative experience we have come a long way. Against the turn of the century experiential baseline, I would say that the magnitude of change and experience each person unwillingly, never mind ambitiously, undergoes today is five—maybe ten—times greater. Engineers say that any 10-fold quantitative change represents a qualitative change. On that basis and scale, each of us lives 300 to 700 years, representing a truly qualitative change to life. Now that's a lifetime of Biblical proportions.

Given the half-life of computing power and the technology that goes along with it, the nagging question is how much faster and further can we go? I have no doubt that silicon will be replaced by something faster. Thus computers will soon be making an unbelievable number of calculations per millisecond, opening the door to new, more powerful applications of artificial intelligence. All of which will ratchet up the speed at which we encounter and acquire unique experiences. An experiential lifetime against a turn of the 20<sup>th</sup> century baseline could be a thousand years or more before the end of this just-started decade.

The obvious next important question is: despite the fact that the human mind makes calculations at a speed and in a way that artificial intelligence can not (yet) mimic, can we sustain the magnitude and pace of these developments and experiences? Can the “natural” human being continue to operate at this “unnatural” level? Our hardware may or may not be ready to keep up with the pace of work and experience: consider the number of stress- and travel-induced illnesses, coronary problems, and other assorted breakdowns that continue to attack our medically-protected bodies. And, the software: what about the “burnouts”, nervous breakdowns, and other habitual pathologies we develop to cope

with the inescapable frenzy of the work environment?

Perhaps the magnitudinal development of pace and experience is simple and Darwinian: the strong, as determined by ability to cope at higher operating speeds and greater rate of change, are being (un)naturally selected to succeed into the new information-based era. This would be kind of like the development of the species (through the course of millions of years, though) from homo erectus to homo sapiens. Could we be at the cusp of an evolutionary change? Or are we simply setting ourselves up for another fall from Grace? Either way, that definitely would be a change of truly Biblical proportions!

XXX

©2000, Timothy Grayson