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SILICON VALLEY CEO, GM OF INTEL (RETIRED)

John McNulty has been a driving force in the technology industry for almost forty years. He was the General Manager at Intel in 1980, moved to Senior VP & GM roles at two other firms, and became the CEO of four technology companies in the software, hardware, networking, and communications industries.

Mr. McNulty is widely recognized for his ability to build great teams and teamwork. He has achieved recognition for successfully managing rapid growth opportunities and challenging turnaround situations, and for pioneering new technology and markets. He has extensive experience in both public and private company mergers and acquisitions. As a CEO, he is experienced in dealing with the demands of public company compliance and governance, and in managing investor-Wall Street relations.

He has served as a director on multiple public and private boards. He retired for the third time in 2015 and insists that it’s the last. Today, Mr. McNulty serves on the Board of Directors of a private technology company cPacket Networks and is also a member of the University of Notre Dame College of Engineering Advisory Council.

The Gift Giver that Keeps on Giving

JOHN E. MCNULTY

Man-made technologies don't spontaneously emerge fully-formed. Technological progress is instead the product of experimentation and iteration. Take aviation. Super-sonic jets didn't emerge overnight. There was a continual evolution from the Wright brothers' primitive flying craft to modern-day airliners.[1] Looking back on the development of all this technology, one can easily trace the numerous iterations as they progressed from point A to point B. How, then, can we explain the existence of advanced knowledge and technology that appeared spontaneously, without any record of more primitive earlier steps?

Arguably the most consequential technology of history is alphabetic writing. Before the first alphabet, writing consisted of pictograms on cave walls, cuneiform tablets, and Egypt's hieroglyphics. The earliest alphabet, Proto-Sinaitic script,[2] discovered near Mount Sinai, dates to the time of the Sinai Revelation.[3]

One would expect the earliest writings in alphabetic language to be quite primitive. But the earliest books of the Bible are anything but primitive and seem to violate the "rules" of incremental progress. How is it that we leaped from engraving letters into turquoise stones to the Five Books of Moses,[4] written with more nuance and complexity than any writing known on Earth?[5] The early books of the Bible comprise an exhaustively comprehensive system of philosophy, law, and ethics, and appear precisely when this form of writing emerged. Where are the transitional writings? Where is the transitional "See Spot Run'' book?

A second example that defies the "rules": We know from nautical engineering studies conducted in the 1990's that to design a boat for maximum buoyancy, the width should be 1/6th its length, and the height, 1/10th its length.[6] Is it a coincidence that in Genesis, the first book of the Bible, Noah was told to make an Ark 300 cubits long by 50 cubits wide by 30 cubits tall?[7] Noah's Ark, constructed 700-800 years before Greek physics,[8] around when Homer wrote "The Iliad" and "The Odyssey,"[9] had the precise dimensions necessary for maximum buoyancy. How did Noah, a farmer, know this secret? Were there any seafaring nations that passed their collected, iterative knowledge on to him? Where is the record of tinkering with the dimensions of a ship until someone discovered this precise formulation?

A third example: Calculating the exact length of a lunar month requires a colossal amount of specialized astronomic knowledge and tools. The second book of the Bible, Exodus, relates the command to the enslaved Jews in Egypt to maintain an accurate lunar calendar.[10] In the Talmudic corpus canonized millennia ago, Jewish tradition records the precise length of a lunar month, down to 1/10th of a second.[11] All other ancient calendars were notoriously haphazard and imprecise, but against the most advanced astronomical tools at our disposal today, this ancient calendar calculation holds true. How did the Jews of antiquity figure this out?

The explanation for the sudden appearance of specialized, accurate, knowledge in antiquity is that God, the Gift-Giver that keeps on giving, is also the Revealer of this knowledge.

Footnotes:

1. Computers are another example of this phenomenon: High-speed micro-processing chips did not emerge overnight. There was a 75+-year progression in the component world that made computing possible – from vacuum tubes, to transistors, to integrated circuits, to today's most advanced chips, the size of a small fingernail, containing over seven billion transistors that utilize 7-nanometre process technology.
2. In the winter of 1904-1905, Sir William Flinders Petrie discovered the inscriptions at Serabit el-Khadim (a location in the southwest Sinai Peninsula where turquoise was mined in antiquity) that became known as "Proto-Sinaitic" script.
3. The Mount Sinai Revelation, where God gave the Ten Commandments, occurred in 1312 BCE.
4. The first five books of the Bible are called "the Five Books of Moses" and contain the books of Genesis, Exodus, Leviticus, Numbers, and Deuteronomy.
5. David Porush, "Torah Shmooze."
6. *Torah, Chazal, and Science*, Moshe Meiselman, Israel Bookshop Publications, 2013, pp. 10-16.
7. This early knowledge is not only in the text of the Bible, but it is in one of the earliest parts of the Bible. In Genesis/ Noach/chapter 6/verse 15, it says, "This is how you should make it – Three hundred cubits the length of the Ark; fifty cubits its width; and thirty cubits its height." According to Hindawi Journal of Anthropology, "Archeology and literature suggests an average length for the common cubit of 44.5 cm (17.5 inches)," so the Ark was approximately 450 feet long, 75 feet wide, and 45 feet tall.
8. "Physics, the study of the nature of things, began seriously in Greece in the 6th Century BC. With few exceptions (e.g. the work of Aristotle and Pythagoras), the study was an intellectual pursuit unaided by much in the way of controlled experimentation, which is standard practice today." https://en.wikipedia.org/wiki/History_of_physics
9. "The Iliad and Odyssey are conventionally dated to the late 8th or early 7th century BC."
   https://www.bing.com/search?q=When+was+Noah%27s+Ark+built%3F&form=ANNTH1&refig=0407d7957b2f496c860445be63a61351
10. Exodus/chapter 12/verses 1-2: "HASHEM said to Moses and Aaron in the land of Egypt, saying, 'This month shall be for you the beginning of the months, it shall be for you the first of the months.'"
11. Their system of calculating the length of the lunar month, broke down an hour into 1080 "chalakim," meaning that each minute is 18 chalakim long. It states that a lunar month is exactly 29 and 1/2 days and no less than 793 chalakim, or 29 days, 12 hours, 44 minutes, and ~3.3 seconds.