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An essay presented to the Chit Chat Club

## THE PARADOX OF THE PERPETUAL REVOLUTION: CHANGE VS. RESISTANCE

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In 1841, Scottish journalist Charles Mackay posited in his *Extraordinary Popular Delusions and the Madness of Crowds* (1980) that it is possible to identify signs of euphoria in order to sidestep market bubbles. However, spotting trends is very difficult and the most successful outliers, whether in finance or in the not-for-profit world, are those who both anticipate change and manage the transformation from “the way it is” to “the way it will be.” That is the challenge we all face, especially in this world of accelerating communication, sound bites and fifteen minutes of fame. If you, as do I, are already feeling like an antique as you witness the staggering multitasking activities of young people, then the following story will not make you feel any better.

I recently attended a parent-toddler event, primarily comprised of moms and their 18-month-old infants. There was only one dad and I chatted with him. Invariably, the conversation moved to occupations. He said that he was a cell phone application designer, developing applications for major text book publishers. With that, he handed his cell phone to his child who could not yet speak and said, “Ruby, show the rabbi the story that you love.” And with a few swipes of a little finger across the face of the cell phone, there was an animated story about a rabbit. Show the rabbi this, show the rabbi that, and with equal agility, Ruby navigated from site to site. As many of you know, children reared on such technology are being called “internet natives;” and those of us struggling to keep up with them are more like “internet greenhorns.”

In 1975, the Eastman Kodak Company developed the first digital camera. Its management faced what Clayton Christensen terms the *Innovator's Dilemma* (1997), the title of his landmark book. With the benefit of hindsight, we now know that the digital camera would become what Christensen termed a “disruptive innovation,” a revolutionary product that displaces an existing technology and creates new value. Those who ignore such innovation ultimately lead their enterprises into a tailspin, or worse—the graveyard. Eastman Kodak executives ignored their transformative digital photography because they believed that the technology would cannibalize high-margin film sales. They did not recognize that they could not hold back progress and that eventually someone else would market the technology that not only would cannibalize film sales but also would bring that bell-weather blue-chip company to bankruptcy! Twenty years later, when Kodak started selling digital cameras at a loss to keep up with the leading manufacturing innovators, it was too late; last February, bankrupt Kodak ended all camera production.

Harvard Business School Professor Christensen posits that executives ignore disruptive innovations because their value may be difficult to recognize or the new product may negatively impact profit margins by competing with existing profitable designs. Corporations that failed to transform established technology, even when it was clear that innovation would ultimately overtake their products include: Digital Equipment, Data

General, Wang, and Apollo—all crashed and burned in less than a decade; their blindness to transformative PC technology resulted in certain death. Conversely, Intel Corporation avoided the junk heap in the 1980s by shedding its memory-chip business, laying off thousands of workers and focusing on microprocessors. And now, cloud computing is doing to PCs what PCs did to mainframes. Data centers are powering information processing just as electric utilities power appliances, resulting in more smart phones and net books now being sold than PCs.

Christensen also focused disruptive innovation in the education arena. In his book, *Disrupting Class: How Disruptive Innovation Will Change The Way The World Learns* (2008), Christensen envisions customizing the delivery of information to the needs of different kinds of learners through heavy reliance on computers. Given the limited resources, uneven proficiency standards, learning differences and motivation of children, difficulty obtaining and retaining skilled teachers and professional administrators, and over-loaded schedules of students and their families, individualized computer instruction will get superior competency-based results at a lower cost than the mediocre educational results that are currently being produced in this country. How we deploy our resources will determine our ability to achieve favorable educational outcomes as educators rethink their mission, especially in the face of Rice University sociologist Michael Lindsay's stinging comment about religion that can be applied to much of American education today. He said that it is "3,000 miles wide but only three inches deep." Writing in *The Jewish Review of Books*, Leon Wieseltier (2012) captures the sorry state of Jewish knowledge with a comparable comment: "Owing to the magnitude of their illiteracy, American Jews have broken new ground in Jewish incompetence." But his comment can be applied not only to all religious education but also to the majority of educational outcomes.

Never underestimate the power of inertia. The challenge before us is to overcome doing things the way we always have and getting the results we have always gotten.

The ability to develop and utilize such instruction will determine which educational institutions will survive. Survival lies in innovative self-paced, online and blended-learning. Evidence the power of such an education model:

- Wireless Generation, founded in 2000, began its meteoric rise by testing 55,000 New York City middle school students for mathematical skills and individualizing instruction for each student, a technology now being utilized by schools throughout the country, including the wildly successful NYC School of One. Ten years later the company was sold to News Corporation for \$360 million.
- The Kahn Academy's 2800 YouTube tutorial videos, from algebra to zoology, draw over four million world-wide viewers per month in what Salman Kahn has called "a global one-world classroom."
- Four-year-old Knewton Corporation's software collects five to ten million student data points from thousands of students' computer activity per day—scores, speed, accuracy, delays, and so forth. A student goes at his own pace and the software continuously adapts to and cajoles students to learn based on individual learning

style. Aleks, Grockit, Blackboard, Coursekit and 2tor are among other tech companies shifting education to online learning.

- The number of college students enrolled in at least one online course has risen from 1.7 million to 6 million since 2002. Last year, educational publisher Pearson provided online homework and assessment programs in its remedial online college course offerings to 5 million students. Five thousand freshmen at Arizona State U enroll in Knewton's remedial math courses where instructors can monitor their dashboards for students falling behind who require help. Half finish the course four weeks early.
- Last fall, two Stanford University professors offered their artificial intelligence course online for free, modeled on MIT's OpenCourseWare decade-old initiative of online lectures, syllabi and homework for all of the university's 2100 courses. More than 160,000 students, ranging from junior high school to retiree from 190 countries, signed up. Over 20,000 students took the midterm and turned in weekly assignments. One hundred participants volunteered to translate the course into 44 languages. The top 1000 students with perfect or near-perfect scores were asked to submit their resumes to be passed along to leading tech companies. Now Stanford, Princeton, Penn, and Michigan have joined forces with Coursera free classes, while Harvard and MIT have teamed up to create a similar venture called edX. Co-founders, of the Stanford University model, Sebastian Thrun and Peter Norvig, have moved this experiment to the for-profit sector with KnowLabs and Udacity, anticipating that in 50 years, using this web model for reaching global students, there may only be 10 institutions of higher learning left in the world, as students see less value in the expensive on-campus experience when open online courses provide low-cost education with the very best educators.
- The Yuma Arizona Carpe Diem Charter School provides self-paced computer and classroom instruction that substitutes technology for labor. One math instructor can teach math to 240 students in grades 6-12.
- The CK12 Foundation offers three versions of free customized open source K-12 FlexBooks: grade level, remedial and advanced.
- Los Angeles Stephen S. Wise Temple is in its fourth year of blended education. Students attend mid-week afternoon Hebrew instruction at home on their computers and gather as a community on site on Sundays.
- Florida Virtual School (flvs.net) provides virtual K-12 accredited classes to students utilizing an e-Learning model. Founded in 1997 as the country's first state-wide Internet-based public high school, the FLVS offers more than 100 courses, including core subjects, world languages, electives, honors, and Advanced Placement courses to students in all 67 Florida districts, 49 states, and 57 countries.

If we were not afraid of change and what it might mean to existing models, more educational institutions would be able to get ahead of the curve in developing hybrid in-

person and online software for students and professionals, and most importantly, we would be turning out more knowledgeable “products.”

By way of example, you may find it to be of interest that Temple Emanu-El is transforming the congregation’s religious education model with the use of the technological tools of the 21<sup>st</sup> century in order to create more literate Jews than we are currently producing. Beginning this fall, our students are able to move at their own speed through an innovative a customized competency-based, self-paced learning model. For example, beginning language students will work in small six-student learning-center “pods” to acquire knowledge of the liturgy. When competency is demonstrated, the student moves onto the next and then the next pod, establishing a Hebrew core at his own pace. In addition, we can track students falling behind and customize learning-style and remedial instruction. The Temple website provides new technological tools. The entire Hebrew liturgy curriculum is posted online with descriptions, Hebrew characters and mp3s of each chanted prayer (<http://www.emanuelf.org/mechina>). Pockettorah is our app for out-loud practice at any location. It can be downloaded to Apple or Droid phones and tablets and features all Torah and prophetic portions chanted as each word is highlighted. Class communications are all online. And this is only the beginning of the revolution to transform existing educational models into tailor-made learning.

Any educational enterprise that hopes to survive must cast aside the we’ve-always-done-that-way mindset. No institution that slams the door on innovation will survive for long. Of course, many institutions that believe they allow for change are victims of what Victor Hugo called “gradualism”—evolutionary incremental changes that take so long to respond to needs and assessments that it leaves them behind the necessary quantum leaps that would prevent them from becoming increasingly irrelevant. Religious institutions in survival mode fail to be innovation driven.

Norman Davies’ book: *Vanished Kingdoms: The Rise and Fall of States and Nations* (2011) builds on the terse comment of 6<sup>th</sup> century Heraclitus, the “weeping Greek philosopher” who stated, “everything is in flux” and “the same river can never be crossed twice.” The recurring theme of not doing things in the same manner is not new. Centuries before Heraclitus, Ezekiel (46:9) noted: “...whosoever enters by the north gate...shall leave by the south gate; and whosoever enters by the south gate shall leave by the north gate. They shall not go back through the gate by which they came in, but shall go out by the opposite one.”

Davies expands Heraclitus’ maxim:

...students of history need to be constantly reminded of the transience of power. . . Sooner or later, all things come to an end. Sooner or later, the centre cannot hold. All states and nations, however great, bloom for a season and are replaced. . .”

He further notes that at the height of greatness, the Greeks discovered the statues of the Egyptian pharaohs buried in the desert sands, as Shelly envisioned:

“My name is Ozymandias, King of Kings,  
Look on my works ye Mighty, and despair!”  
Nothing beside remains. Round the decay  
Of that colossal Wreck, boundless and bare  
The lone and level sands stretch far away...

Davies caution is instructive:

For ships of state do not sail on forever. They sometimes ride the storms and sometimes founder. On occasion they limp into port to be refitted; on other occasions, damaged beyond repair, they are broken up; or they sink, slipping beneath the surface to a hidden resting place among the barnacles and the fishes.

I spoke to Los Alamos theoretical physicist, Geoffrey West, past president of the Santa Fe Institute, in an effort to understand the longevity of religious institutions. Dr. West’s studied 23,000 publicly traded companies and concludes that corporate growth is akin to human development: humans and corporations are born, grow rapidly, taper off at maturity and begin the gradual decline that ends in death. “When a company starts out, it’s all about the new idea,” West says. “And then, if the company gets lucky, the idea takes off. Everybody is happy and rich. But then management starts worrying about the bottom line, and so all these people are hired to keep track of the paper clips. This is the beginning of the end.” Efficiencies of scale become outweighed by the burdens of bureaucracy. Dr. West explained that established corporations become entrenched, bureaucratic, risk averse and unwilling to entertain new ideas. That is why few corporations are over 100 years old. Those few survivors have non-evolving products, such as the Morton Salt, founded in 1885, Levi Strauss founded in 1873, or the Bowmore Scottish Distillery founded in 1779.

I asked Dr. West about religious institutions that face the very same longevity challenges. He suggested that a different dynamic is at work because people are comforted by their perception that religion and canon are static, even if they are not. Nevertheless, I wonder if expectations are so low because people do not demand much, even if they vote with their feet! Surveying the religious landscape, I look at formerly vibrant institutions like Christian Science or the bankrupt Garden Grove, California Crystal Cathedral Ministries, whose eye-catching cathedral was recently sold to the Archdiocese of Los Angeles, and see that religious institutions also follow the human lifecycle model. When I discussed this with Rabbi Harold Kushner, best known for his best seller: *When Bad Things Happen to Good People*,” I was amused by his tragic/comic comment about failed religious institutions: “Some of them have died,” he said, “but no one has noticed.”

When the Surrealistic Art Movement originated in Paris in the 1920s, artists like Marcel Duchamp, Max Ernst, Joan Miro, Jean Arp, Salvador Dali, Rene Magritte, Alberto Giacometti, and even Pablo Picasso aimed at establishing a perpetual revolution that would disrupt and disorganize both art and society. Only such a perpetual revolution is equipped to transform obsolete and isolating forms of past centuries.

Yehudah Amichai in "My Parents' Lodging Place" identified the tension between present and past:

...I want to add Two to the Ten Commandments:  
the Eleventh Commandment – "Thou shall not change."  
And the Twelfth Commandment – "Thou must surely change."  
So said my father and then he turned from me and walked off  
Disappearing into his strange distances.

When the author of the Book of Lamentations (5:21), surveyed the destruction of the ancient Jerusalem, he expressed hope in this phrase: "Make new our days as of old." He didn't say: "Give us back the good old days," but rather "make our days full of newness, as You did long ago." Our job is not to become stale, but to reinvent ourselves, a fateful commencement that calls us into a new age. Thank you!

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