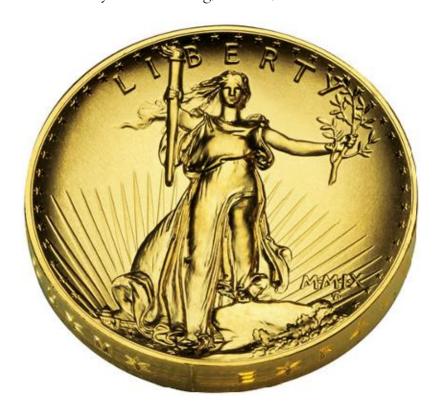
THE PRINCIPLES OF ECONOMICS & EVOLUTION II

In Search of Evolutionarily Stable Banking, Finance, & Alternative Investment Strategy^{\$}



July 4th, 2010

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The past is secure. It is unalterable. The seal of eternity is upon it. The wisdom, which it has displayed, and the blessings, which it has bestowed, cannot be obscured; neither can they be debased by human folly, or by human infirmity. The future, is that, which may well awaken the most earnest solicitude, both for the virtue and the permanence of our Republic. The fate of other republics, their rise, their progress, their decline, and their fall, are written but too legibly on the pages of history, if indeed, they were not continually before us in the startling fragments of their ruins. Those republics have perished; and have perished by their own hands. Prosperity has enervated them; corruption has debased them; and a venal populace has consummated their destruction... They have disregarded the warning voice of their best statesmen; and have persecuted and driven from office their truest friends. They have listened to the councils of fawning sycophants, or base calumniators of the wise and the good... They have surrendered to faction, what belongs to the common interests and common rights of the country. Patronage and party, the triumph of an artful popular leader, and the discontents of a day, have outweighed, in their view, all solid principles and institutions of government. Such are the melancholy lessons of the past history of republics down to our own....

In theory, a government may promise the most perfect harmony of operations in all its various combinations. In practice, the whole machinery may be perpetually retarded, or thrown out of order by accidental maladjustments.... Every change discomposes for a while the whole arrangements of the system. What is safe, is not always expedient; what it new, is often pregnant with unforeseen evils, or attracts only by imaginary good.

⁻Joseph Story, A Familiar Exposition of the Constitution of the United States, 1840

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EPIGRAPH

In Honour of F.A. von Hayek (1889 – 1992),^{\$}
Henry C. Wallich (1914 – 1988),[£]
Thomas M. Hoenig,[£]
Daniel S. Loeb,
Charles D. Fowler,
&
Donald E. Funk

\$ In the worldwide economic contraction of the early 1930s, the inflationist arguments that appear during any economic crisis once again came to the fore. Countries worldwide devalued their currencies in hopes of solving a problem they did not understand, but their main effect was to shatter the world monetary system that had been painfully reconstructed during the 1920s....

Wasn't the Fed created to solve economic crises? And didn't it solve these crises by "lowering interest rates?" Apparently so, but only liquidity-shortage crises, not crises caused by the tax and currency disasters of the 1930s. But this distinction was already lost. The publication of Keyne's *General Theory* in 1936 gave academics a justification for inflationist arguments that had been burbling for decades, if not centuries. Keynes, in the *General Theory*, cites at length the influence of Silvio Gesell, who, writing in 1906, recommended that an interest rate eventually of zero....

Keynes, and the hordes of young economists who followed in his footsteps, had a new vision of a government solution to an apparently unstable capitalist system. The problem of recession and unemployment could be solved, they thought, by "lowering interest rates," and the mechanism by which this would be accomplished it was the open market operations of the Federal Reserve and institutions like it that had been created around the world.

Keynes himself had long been steeped in the classical system, as his earlier writing shows, and adopted his inflationist tendencies primarily as a reaction to the immediate economic conditions of the mid-1930s. He later returned somewhat to his classical roots. His friend and intellectual sparring partner throughout the 1930s, Friedrich Hayek, recalled:

It was early in 1946, shortly after [Keynes] had returned from the strenuous and exhausting negotiations in Washington on the British loan.... A turn in conversation made me ask him whether he was not concerned about what some of his disciples were making of his theories. After a not very complimentary remark about the persons concerned, he proceeded to reassure me by explaining that those ideas had been badly needed at the time he had launched them. He continued by indicating that I need not be alarmed; if they should ever become dangerous I could rely upon him again quickly to swing round public opinion — and he indicated by a quick movement of his hand how rapidly that would be done. But three months later he was dead.

- Nathaniel Lewis, Gold: The Once and Future Money, 2007
- When the governors discussed the question, Volcker conceded that, legally, they could refuse Carter's request. But, the chairman asked, do you really want to go against the President?

Wallich was the only one who did. "It's not an easy thing to vote against a President's wishes," Wallich said. "But what are we appointed for? Why are we given these long terms in office? Presumably, it is so that not only the present but the past and the future have some weight in our decisions. In the end, it may be helpful to remind the President that it's not only his present concerns that matter." Wallich voted no.

- -William Greider, Secrets of the Temple: How the Federal Reserve Runs the Country, 1987
- € Information received since the Federal Open Market Committee [FOMC] met in April suggests that the economic recovery is proceeding and that the labor market is improving gradually. Household spending is increasing but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software has risen significantly; however, investment in nonresidential structures continues to be weak and employers remain reluctant to add to payrolls. Housing starts remain at a depressed level. Financial conditions have become less supportive of economic growth on balance, largely reflecting developments abroad. Bank lending has continued to contract in recent months. Nonetheless, the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, although the pace of economic recovery is likely to be moderate for a time....

The Committee will maintain the target range for the federal funds rate at 0 to 1/4 percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period....

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; James Bullard; Elizabeth A. Duke; Donald L. Kohn; Sandra Pianalto; Eric S. Rosengren; Daniel K. Tarullo; and Kevin M. Warsh. Voting against the policy action was Thomas M. Hoenig, who believed that continuing to express the expectation of exceptionally low levels of the federal funds rate for an extended period was no longer warranted because it could lead to a build-up of future imbalances and increase risks to longer-run macroeconomic and financial stability, while limiting the Committee's flexibility to begin raising rates modestly.

- Board of the Governors of the Federal Reserve System, Press Release, 23 June 2010

MATT FUNK

17 Olde Brighton Lane - Charlottetown - Prince Edward Island - Canada - C1A-OA7

Gold still represents the ultimate form of payment in the world. Fiat money in extremis is accepted by nobody. Gold is always accepted.

- Alan Greenspan, Speech to Senate Banking Committee, 1999

President Barack Obama
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500
The United States of America

CC: President Thomas M. Hoenig Federal Reserve Bank of Kansas City 1 Memorial Drive Kansas City, MO 64198 The United States of America

URGENT

Dear Mr. President.\$

I am writing to inform you that you have made several great mistakes.

I emphasize the greatness of these mistakes because they wield destabilizing effects upon the global financial markets, threaten national security, and, moreover, dim the prospects for long-term human survival.

On 4 July 2008, I sent a letter to President Bush (see 3), warning him of a pending global economic collapse; the previous winter, on 31 December, 2007, I left my room at The Union League Club (see **APPENDIX III**), walked across the Federal Building courtyard, and hand-delivered a letter to Kenneth Griffin (see 4), warning likewise (and, naturally, proposing that we reap profits from the fall).

But it seems neither President Bush nor Kenneth Griffin[€] took my advice.

^{\$} Few of the records preserved by the National Archives and Records Administration are quite as grand as the Charters of Freedom, but one type of document is both common and special at the same time—letters. Letters may be mundane, or memorable, personal accounts of our lives at a moment in time. They become noteworthy in a different way when written to public figures, especially Presidents of the United States. Without question, it requires special motivation to sit down and write: 'Dear Mr. President.' This salutation means we have something important to say, and we expect the most powerful person on earth to pay attention to our concerns (1, p 12).

[£] The country we love is in trouble. In truth we are in grave danger of declining as a nation. If we do not act quickly, that decline will become

The signs of trouble are clear for all to see. Only those in deliberate denial could fail to notice (2, p 3; see APPENDIX I-II).

[€] Hedge-fund titan Kenneth Griffin lost \$8 billion of his clients' money last year.

Now, he is trying to persuade investors to trust him with more.

[&]quot;We showed a level of human fallibility," he told his staff at a late-September lunch in Manhattan.

The price of fallibility: a 55% loss in the big hedge funds at his firm, Citadel Investment Group. His funds' declines far outstripped the 19%, on average, that hedge funds lost as a whole, according to Hedge Fund Research Inc. For the past year, Citadel prevented investors from withdrawing money they wanted to take out from his two main funds (5).

Warren Buffett recently testified that he did not see the global crisis coming; in fact, it seems he couldn't even see as it was happening: On 17 October 2008 the DJIA closed at 8,852 as the headlines read: "Buffett Says Now Is the Time to Buy U.S. Equities" (in March of 2009 the DJIA fell as low as 6,626 – but that's merely one aspect of a more sinister picture) Indeed, Buffett's 17 October 2008 "buy" recommendation was clearly not that great, but perhaps you may be saying to yourself that it wasn't that bad?

But it *was* quite bad. In fact, it was terrible because, naturally, we must also keep in mind that the US dollar, has, predictably, been falling like a rock – but before we go there, let's briefly recap Q2 2010 with a Market-Beat snapshot from Friday's *Wall Street Journal* – July 2, 2010, 5:46 PM ET:

Dow Industrials, down 457.33 points this week, or 4.51% to 9686.48.

- Down 7.31% over the two week period.
- Largest weekly point and percent drop since the week ended May 7.
- This is the worst five-day percent performance leading up to July 4 since 1896 when it fell 6.21%.

As if that wasn't bad enough, these data points are actually much, much worse than they appear.

As noted, on 17 October 2008 the DJIA at 8,852, or just over 11 ounces of gold,[£] with gold trading at \$785 per ounce. Thus, as you can clearly see, in keeping with the highly fashionable Kensian-dollar-devaluation-strategy, an investment in the DJIA on 17 October 2008 had actually *lost about one-third of its value* by 2 July, 2010 (at 9,686, or 7.8 ounces of gold with the dollar worth \$1,235 per ounce – the closing spot price of yesterday's trading in Shanghai)!

Devaluation can have a tremendous effect on the stock market, though it is often masked by rising prices. In 1929, the DJIA hit a high of 381, or 19 ounces of gold when the dollar was worth \$20.67 per ounce. The DJIA fell to 41 in 1932, or two ounces of gold. In 1966 the DJIA hit 1,000, or 29 ounces of gold at \$35 per ounce. In 1980, the DJIA was around 800, or one ounce of gold with the dollar at... \$800 per ounce – a decline of over 96 percent in gold terms and half the value it was in the depths of 1932! Most people still say the "stock market was flat" during the 1970s. The two-decade stock market boom of the 1980s and 1990s merely brought the DJIA back to where it was in 1966, or about 29 ounces of gold, a DJIA of 10,000 with the dollar around \$350 per ounce (7, p 79).

Date: Sat, 18 Oct 2008 02:41:46-0300

From: Matt Funk To: Warren Buffett

Funk says Buffett is wrong.

^{\$} Subject: Buffett Says Now Is the Time to Buy U.S. Equities

[£] The most important thing about money is to maintain its stability... You have to choose between trusting the natural stability of gold and the honesty and intelligence of members of the government. With due respect for these gentlemen, I advise you, as long as the capitalist system lasts, to vote for gold (6).

Although this startling analysis may appear revolution and new, it's as old as our nation;⁵ as Adam Smith duly noted in 1776:

[Currency devaluation] occasions a general and most pernicious subversion of the fortunes of private people; enriching in most cases the idle and profuse debtor at the expense of the industrious and frugal creditor, and transporting a great part of the national capital from the hands which were likely to increase and improve it, to those which are likely to dissipate and destroy it (8).

I'm afraid the "Oracle of Omaha's" advise is worth about as much as a wooden nickel, and, since I've mentioned June 29th, I'll mention another relevant point regarding this date:

Perhaps, the harshest critique your administration has faced crossed the wire on 29 JUNE 2010 at 4:06 P.M.

UN Report: Dollar Should Be Replaced As Main Reserve Currency

NEW YORK (Dow Jones) – The dollar should be replaced as the main global reserve currency in order to achieve greater stability in the world financial system, a United Nations report urged Tuesday.

"The dollar has proved not to be a stable store of value, which is a requisite for a stable reserve currency," said the World Economic and Social Survey 2010 [9].

The report said a new system should be developed, which "must not be based on a single currency or even multiple national currencies." Instead, the report advocates the increased use of International Monetary Fund accounting units called Special Drawing Rights as a reserve asset....

The U.N.'s suggestion is the latest in a series of proposals that have gained prominence since the financial crisis. Last year, Nobel laureate economist Joseph Stiglitz led a U.N.-appointed panel that also urged the replacement of the dollar as the world's reserve currency. Developing nations with high currency reserves, led by China, have also been vocal about the need to create a new global reserve currency (10).

As clearly illuminated in a forthcoming publication, *On the Origin of Mass Extinctions: Darwin's Nontrivial Error* (11), long-term human survival — and thus national security, naturally — will require unprecedented levels of human cooperation and crystal clear communication (which both require reliable information in order to be completely effective). Thus, it comes of no surprise that,

throughout history, humans have sought the most stable money attainable, because stable money, or uncorrupted information, allows greater productivity and prosperity, while unstable money, or corrupted information, cripples productivity and prosperity. It is impossible to improve the system's productivity by corrupting the information that enables it to function. Such a corruption may result in more production—a greater volume of goods and services, a greater number of hours worked or employees hired, a blip in statisticians' charts—but much of the increased production will be wasted, or the greater effort will produce less results, and thus true productivity declines....

The problem, first, is that nobody apparently knows what exactly this stable money consists of. Second, nobody knows how to accomplish the task of creating and maintaining it.

But even the briefest study of history shows that today's condition of floating currencies is a very new

^{\$} Although the economic theory presented here may seem unorthodox, that's because its roots are so old that much of the knowledge has been forgotten by today's academics and monetary authorities. A hundred years ago, much of it was conventional wisdom, so self-evident that it hardly needed repeating. The proof of the pudding is in the eating: This theoretical structure produced decades and even centuries of stable money and economic abundance. It has been thoroughly tested, and it works (7, p 18).

phenomenon. It began August 15, 1971, the day Richard Nixon severed the dollar's link with gold and destroyed the world monetary system, which at the time went under the name of the Bretton Woods system. In the three centuries before 1971, the world for the most part had stable money. After 1971, or more properly after a series of steps in the late 1960s and the early 1970s, it did not. The capitalist economy since the Industrial Revolution, and a long time earlier as well, was based on stable money. The advocates of laissez-faire never ceased to support stable currencies. Their critics, the early socialists and communists, agreed with them on little other than the necessity of a sound unit of account. Floating currencies are not a phenomenon of the free market but the market's inevitable reaction to unceasing currency manipulations by world governments. Since the system today is the exception rather than the rule, it should be easy to find a solution to the monetary problems that plague humanity on a daily basis (7, pp 14-15).

The solution is indeed easy and simply – in fact, I may even be able to begin to administer a solution single-handedly (of which, more to follow) – but of course your assistance could help.

But it seems you may be unlikely to offer such cooperation if I am unable to illustrate a broad range of interrelated and systemic errors; so let's begin with this recent observation by Daniel S. Loeb:

Perceived by some to be the least important measure of overall confidence is investor confidence, also known as "sentiment." Sentiment is usually backward looking and is incorrect so frequently that it is often used by professionals as a counter indicator of market direction. While I agree that sentiment is often wrong in predicting overall market movements, it has been interesting to see how the market reacts in real time to announcements of policy or other government – driven events in today's post – crisis environment. For example, on the day of President Obama's January speech introducing the Volcker Rule, markets swooned 2% and financial stocks declined by 3%. ...On the day the government brought its action against Goldman Sachs for its mortgage – backed CDO activities, the S&P dropped 2% in minutes. ...The indices dropped 3% on disappointing employment numbers that the Administration had gone out of its way to hype throughout the previous week. [And, your recent G7 economic stimulus strategy comments in Ontario and your curious interview with Bernacke (of which, more to follow) have, no doubt, contributed to the worst five-day DJIA percent performance leading up to July 4 since 1896]. Confronting these massive swings in the markets (still the resting place for most Americans' retirement and pension funds), many politicians minimize the significance of confidence among investors, on the grounds that Wall Street professionals are prone to be emotional, trigger happy, and unduly focused on the short run.

But confidence on the part of consumers and business managers as drivers or detractors of economic growth cannot be so readily dismissed by policy makers. Business owners make vital decisions about capital expenditures, R&D spending, inventory stocking, and hiring based not only on what they see in the rear-view mirror of their recent sales, but also on their levels of "confidence." What we are finding throughout industries and with investors, unfortunately, is that it is very difficult to maintain confidence when the rules are continually changed, and the goalposts repeatedly moved. The Administration appears unable, or unwilling, to let free-market capitalism resume. Indeed, it is neither health care nor financial reform which has stressed markets most in 2010, but rather the continued politicizing of the regulatory process and the abandonment of free market capitalist principles that have undermined investor confidence.

While the Administration seems perfectly willing to allow this "regulatory volatility" to send markets for a tailspin every few weeks, it does not seem to understand that the corresponding diminution of confidence by allocators of capital in financial markets runs a high risk of spilling over into the decisions by business people to allocate resources to the "real economy". "Main Street" is not independent of Wall Street. We are each part of an

^{\$} Because the effects of poor regulation are more readily apparent, people often focus on regulatory reform or privatization as a means to enhance economic growth and productivity. This is by all means a worthwhile endeavor, but its effect is often not great. Most regulations deal with only a tiny segment of the economy. Deregulation of airlines, for example, may cause enormous productivity gains in the airline industry, but the airline industry is perhaps only 0.5 percent of the entire economy. Also, such regulatory reforms tend to be exceedingly complex, politically difficult, may take years to implement, and may be ultimately unsuccessful (7, p 128; also see **APPENDIX IV**).

intricate ecosystem and the failure to lay out clear rules of the road in intellectually honest tones is beginning to show signs of sabotaging the overall recovery.

.... We invested your capital across markets last April when it appeared that the worst was behind the U.S. financials' sector. As most of you know, I talked about our re-initiated long positions in Bank of America and Citigroup at our annual Investor Presentation on January 20th. However, the next morning, upon seeing on a calendar of the day's Washington events that President Obama was scheduled to speak on financial reform at 11:00AM, a mere two days after the Democrats lost Ted Kennedy's Senate seat to Republican Scott Brown in a stinging defeat, I became concerned that he would take a politically popular populist (and therefore negative) stance on the banks, and so sold our significant positions in those two financials as well as most of our position in Barclays. Although we have traded around these stocks since, at present we have no position in any commercial banks (except for a small residual position in a regional bank amounting to less than 1%).

These stocks are still statistically cheap, generally trading around 6x "normalized" earnings. However as an allocator of capital, I have no confidence in the politicized approach to financial reform and worry that our legislators will enact laws that will weaken rather than stabilize the financial system. Accordingly, we have also jettisoned our position in Wellpoint, a health care company that trades at less than 7x earnings because we could not predict how legislation or regulation may affect it. We have come to the realization that from a risk management perspective, the anti-business, short-term politically motivated activities we're seeing in Washington make investments in certain industries simply impossible to evaluate (12, pp 1-3).

In short, what Loeb was trying to say, was that your administration appears unaware that Keynesianism is dead:

Keynesianism, as a school in itself, was largely discarded after the failure of the 1970s. Nobody now believes that it is possible to finetune the economy with the judicious application of public-works spending and interest rate manipulation/currency devaluation (7, p 225).

I'll take this thread a bit further, but I should mention a crucial point first: Although *most* of what I have to say echoes ancient (and long forgotten) truths, I should emphasize that I have enclosed a original solution to the single-most long-standing, open problem in economics: I began my letter to President Bush (see 3) by noting that, on 2 August 1939, Einstein sent a letter to President Roosevelt because he had recognized a solution to a national security threat; in this spirit, **APPENDIX I** introduces a revolutionary solution (**APPENDIX II**) to other mission-critical threats to national security and the very survival of the human race.

That is, in brief, is all that I have to say. However, I realize the significance of **APPENDIX II** may not be immediately clear. Indeed, you may turn these pages with skepticism; afterall, much precedent suggests such skepticism is warranted. For example, in December of 1970, a man walked up to the White House's northwest gate and handed the following letter to the agent on duty...

The most difficult subjects can be explained to the most slow-witted man if he has not formed any idea of them already; but the simplest thing cannot be made clear to the most intelligent man if he is firmly persuaded that he knows already, without a shadow of doubt, what is laid before him (13, p ix).

Dear Mr. President.

First, I would like to introduce myself. I am Elvis Presley and admire you and have great respect for your office. I talked to Vice President Agnew in Palm Springs three weeks ago and expressed my concern for our country. The drug culture, the hippie elements, the SDS, Black Panthers, *etc.* do not consider me as their enemy or as they call it the establishment. I call it America and I love it. Sir, I can and will be of any service that I can to help the country out. I have no concern or motives other than helping the country out.

So I wish not to be given a title or an appointed position. I can and will do more good if I were made a Federal Agent at Large and I will help out by doing it my way through my communications with people of all ages. First and foremost, I am an entertainer, but all I need is the Federal credentials. I am on this plane with Senator George Murphy and we have been discussing the problems that our country is faced with.

Sir, I am staying at the Washington Hotel, Room 505-506-507. I have two men who work with me by the name of Jerry Schilling and Sonny West. I am registered under the name of Jon Burrows. I will be here for as long as long as it takes to get the credentials of a Federal Agent. I have done an in-depth study of drug abuse and Communist brainwashing techniques and I am right in the middle of the whole thing where I can and will do the most good.

I am Glad to help just so long as it is kept very private. You can have your staff or whomever call me anytime today, tonight, or tomorrow. I was nominated this coming year one of America's Ten Most Outstanding Young Men. That will be in January 18 in my home town of Memphis, Tennessee. I am sending you the short autobiography about myself so you can better understand this approach. I would love to meet you just to say hello if you're not too busy.

Respectfully,

Elvis Presley.

P. S. I believe that you, Sir, were one of the Top Ten Outstanding Men of America also. I have a personal gift for you which I would like to present to you and you can accept it or I will keep it for you until you can take it (1).

As if your job was not difficult enough, it seems you are also charged with the unenviable task of discerning whether letters from concerned citizens warrant "Einstein 1939" or "Presley 1970" attention.

So perhaps I should emphasize that, as appealing as a Federal-Agent-at-Large credential may sound, I table no such request — as much as I would enjoy meeting you to say hello, I beg you to lend your precious time to the remainder of this letter, instead — and, unlike Mr Presley, my motives happen to be purely selfish, because, like President Roosevelt, I happen to recognize that a great nation thrives, prospers, and survives because its interests happen to be identical with those of the individual (see **APPENDIX I**).

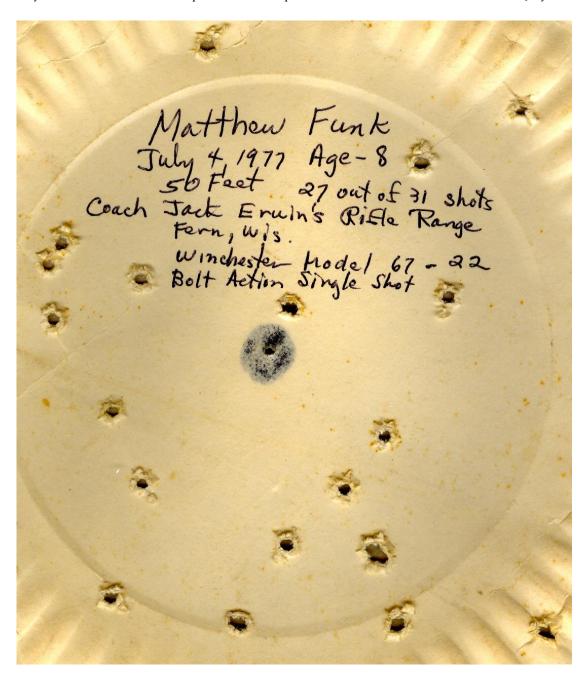
However, like Elvis, I am entertaining in certain circles, and I to have a personal gift for you, too: *On the Problem of Economic Power: Lessons from the Natural History of the Hawaiian Archipelago* – http://mpra.ub.uni-muenchen.de/19371 (14).

E Kalani e, the problems at hand are so difficult and complex that I have nearly given up trying to explain all this to anyone. With all due respect, Sir, it appears that your errors are founded in a lack of sufficient understanding of the principles of economics and the principles of evolution. Alas, it's not easy explaining the principles of economics or evolution — and it's certainly not easy to do both things at once.

And, to make matters worse, we don't have much in common. We don't share many "frames of reference".

I am a Hoosier from the very, very old school – so old, in fact, my unfashionable agrarian (and thus inherently evolutionary) worldview traces its philosophical roots to Hesiod, *c.* 750 BC (see 15).

Despite the fact that we're not that far apart in age – you were born on 4 August 1961, I was born on 13 August 1968 – we both lived in Honolulu during our early developmental years, and we both attended University in Los Angeles, it seems our most influential and fundamental childhood experiences and traditions were millions of miles and many generations away from each another, so to speak. For example, this is how I celebrated the Fourth of July in 1977:



But as my wife and I celebrated Canada Day in Ottawa (I'm a U.S. citizen who won the Canadian lottery by marring a stunning and extraordinary Canadian nurse) — as we stood before the US Embassy watching awe-inspiring fireworks light up Ottawa's mid-summer nightscape — I was moved to search for the means, method, and the power to sit down and celebrate today by writing this letter to you. And, for the past three days, as I've walked long the canals, roamed the beautiful parks, sat on the beach at Meech Lake, toured the currency museum at the Bank of Canada [see "Bank of Canada 2010" at http://www.funkisland.org, strolled by the Byward Market to pick up a maple leaf cookie, and discussed this prospect with my good friend, Dr Any Roberts (who's valuable insights have been much appreciated), I searched for common denominators with which to frame and contextualize this celebratory discourse: We're both islanders, we've both made the same mistake, we're both by-products of extraordinary feats of long-distance dispersal, and we're both fathers.

We're both Islanders. As detailed in a recent two-volume publication (16-17): THE PRINCIPLES OF ECONOMICS & EVOLUTION: A Survival Guide for the Inhabitants of Small Islands, Including the Inhabitants of the Small Island of Earth, I was flattered to discover that I was able to illuminate several dimly seen aspects of the Scottish Enlightenment and the University of Edinburgh to a Scottish scholar from this very university (16, pp 60-66), and thus it is my hope that if you should discover that I am able to illuminate a few crucial aspects of cultural evolution in the Hawaiian Archipelago and the true nature of economic power for you (i.e., 14), then perhaps the strong arguments presented herein may warrant your careful consideration. Also, you may take special interest in the epigraph to this recent publication, which reads:

The following essay owes its origin to a [forthcoming book, an open letter to President Barack Obama, regarding] the future improvement of society, and the Author at first sat down with an intention of merely stating his thoughts to [President Obama], upon paper, in a clearer manner than he thought he could do in conversation. But as the subject opened upon him, some ideas occurred, which he did not recollect to have met with before; and as he conceived that every least light, on a topic so generally interesting, might be received with candour, he determined to put his thoughts in a form for publication....

He presumes... that the facts which he has adduced will be found to form no inconsiderable evidence for the truth of his opinion respecting the future improvement of mankind. [The Author] hopes it will appear that... he is actuated solely by a love of truth, and not by any prejudices against any particular set of men....

The view which he has given of human life has a melancholy hue, but he feels conscious that he has drawn these dark tints from a conviction that they are really in the picture, and not from a jaundiced eye or an inherent spleen of disposition.

The theory... he has sketched... accounts to his own understanding..., but whether it will have the same effect upon others must be left to the judgment of his readers.

If he should succeed in drawing the attention of more able men to what he conceives to be the principal difficulty in... society and should, in consequence, see this difficulty removed, even in theory, he will gladly retract his present opinions and rejoice in a conviction of his error.

-Thomas Malthus, An Essay on the Principle of Population, 1798 [16, epigraph]

Yes, in reality, I've been thinking about writing this letter for a rather long time (ever since the first few days of your Presidency, as a matter of fact), and have been diligently detailing my thoughts in one very long argument (3,000 manuscript pages), my forthcoming *magnum opus* which, naturally, I hope to share with you and my fellow Americans soon.

But, in the meantime, this letter succinctly summarizes my core findings.

We've both made the same mistake. Until relatively recently (2005, to be exact), I held many -if not most - of your political positions, and, in general, we shared the same worldview.

Fortunately, however, I recognized, and have since endeavoured to correct my errors. I also detailed this humbling and humiliating chapter of my life within a game-theoretical exploration of *The Problem of Sustainable Economic Development* entitled, *On the Truly Noncooperative Game of Life on Earth: In Search of the Unity of Nature & Evolutionary Stable Strategy* (19).

We're both by-products of Long-distance Dispersal. This frame of reference is as complex as it is uncommon, but if you're interested in this unusual exploration, I dedicated and published a long letter on this topic one year ago, today: On the Truly Noncooperative Game of Island Life: Introducing a Unified Theory of Value & Evolutionarily Stable Island Economic Development Strategy (20).

We're both Fathers. After much consideration and deliberation, I've decided there may be no more powerful nor fitting connection and frame of reference than fatherhood — and, thus, I will focus upon this common denominator.

Yes, we're both fathers – and I understand today happens to be your eldest daughter's birthday – naturally I wish her all the best and a very happy birthday.

I happen to have a precious seven year-old Son, William.

Here's how we celebrated July 4th, 2009 at our family cottage in Michigan [you may find more photos in my "Lake Gogebic 2010" & "Lake Gogebic 2009" galleries at http://www.funkisland.org]:

^{\$} If our civilization is to survive, we must break with the habit of deference to great men. Great men may make great mistakes... Their influence, too rarely challenged, continues to mislead those on whose defense civilization depends, and to divide them. The responsibility for this tragic and possibly fatal division becomes ours if we hesitate to be outspoken in our criticism of what admittedly is a part of our intellectual heritage. By our reluctance to criticize some of it, we may help to destroy all of it (18, inscription).



And, as a matter of fact, at this juncture I'll let you in on a little secret: Although we're waiting a few more days to break the great news to our families and friends, my beautiful wife, Marcy, is nine weeks pregnant; and to this point, it is my hope that the miracle of fatherhood may help bridge our considerable differences of opinion and, moreover, illuminate the difficult personal dilemma this curious letter may create for you because, as you may discover in due course, you may choose to hold your ideological ground and remain faithful to the principles of your political party, or you may choose to endeavour to struggle to increase the prospects for my childrens', my childrens' children, your children, and their childrens' survival – but you can't choose both.§

Our civilisation depends, not only for its origin but also for its preservation, on what can be precisely described only as the extended order of human cooperation, an order more commonly, if somewhat misleadingly, known as capitalism. To understand our civilisation, one must appreciate that the extended order resulted not from human design or intention but spontaneously: it arose from unintentionally conforming to certain traditional and largely moral practices, many of which men tend to dislike, whose significance they usually fail to understand, whose validity they cannot prove, and which have nonetheless fairly rapidly spread by means of an evolutionary selection – the comparative increase of population and wealth – of those groups that happened to follow them. The unwitting, reluctant, even painful adoption of these practices kept these groups together, increased their access to valuable information of all sorts, and enabled them to be 'fruitful, and multiply'... This process is perhaps the least appreciated facet of human evolution.

Socialists take a different view of these matters. They not only differ in their conclusions, they see the facts differently. That socialists are wrong about the facts is crucial to my arguments... I am prepared to admit that if socialist analyses of the operation of the existing economic order, and of possible alternatives, were factually correct, we might be obliged to ensure that the distribution of incomes conform to certain moral principles, and that this distribution might be possible only by giving a central authority the power to direct the use of available

And on this crucial note, perhaps I should mention why I have copied Thomas M. Hoenig with this letter.

President Bush, Kenneth Griffin, and Warren Buffett were far from the only three people I had attempted to warn about the financial crisis which has come to pass, continues to create extraordinary challenges, and threatens to toss us about in the stormy seas of uncertainty – in fact, I spent over two years trying to warn just about anybody who would listen (17, pp 455-464); and, to this point, as noted in **APPENDIX I**, in September of 2008, I sent out yet another SOS of sorts, relaying a communiqué President Hoenig had delivered in Argentina that day. And, by the way, if you haven't had the opportunity to review *Too Big has Failed* (22), and *The High Cost of Exceptionally Low Rates* (23), I highly recommend both; as implied by my **EPIGRAPH**, I submit Hoenig may be the only FOMC member whom has not fallen under the spell of *The Problem of Keynesian Economics*, a complex problem which may requires a long discourse of its own. §

I will, however, attempt to capture the essence within this rapid narrative stream.

If you surf the web a bit, visiting home-pages of our 12 Federal Reserve banks, perhaps you may notice a few distinct differences which reflect their independence. In fact, an illustrative publication linked at the top of the Kansas City (10th district) branch's homepage really says it all: *The Balance of Power: The Political Fight for an Independent Central Bank.* Although I'm not able to find it now, several years ago the 10th district's homepage also featured a great

resources, and might presuppose the abolition of individual ownership of means of production. If it were for instance true that central direction of the means of production could effect a collective produce of at least the same magnitude as that which we no produce, it would indeed prove a grave moral problem how this could be done justly. This, however, is not the position in which we find ourselves. For there is no known way, other than by the distribution of products in a competitive market, to inform individuals in what direction their several efforts must aim so as to contribute as much as possible to the total produce.

The main point of my argument is, then, that the conflict between, on one hand, advocates of the spontaneous extended human order created by a competitive market, and on the other hand those who demand a deliberate arrangement of human interaction by central authority based on collective command over available resources is due to a factual error by the latter about how knowledge of these resources is and can be generated and utilised. As a question of fact, this conflict must be settled by scientific study. Such study shows that, by following the spontaneously generated moral traditions underlying the competitive market order (traditions which do not satisfy the canons or norms of rationality embraced by most socialists), we generate and garner greater knowledge and wealth than could ever be obtained or utilised in a centrally-directed economy whose adherents claim to proceed strictly in accordance with 'reason'. Thus socialist aims and programmes are factually impossible to achieve or execute; and they also happen, into the bargain as it were, to be logically impossible.

This is why, contrary to what is often maintained, these matters are not merely ones of differing interests or value judgements. Indeed, the question of how men came to adopt certain values or norms, and what effect these had on the evolution of their civilisation, is itself above all a factual one, one that lies at the heart of the [matter]... The demands of socialism are not moral conclusions derived from the traditions that formed the extended order that made civilisation possible. Rather, they endeavour to overthrow these traditions by a rationally designed moral system whose appeal depends on the instinctual appeal of its promised consequences. They assume that, since people had been able to generate some system of rules coordinating their efforts, they must also be able to design an even better and more gratifying system. But if humankind owes its very existence to one particular rule-guided form of conduct of proven effectiveness, it simply does not have the option of choosing another merely for the sake of the apparent pleasantness of its immediately visible effect. The dispute between the market order and socialism is no less than a matter of survival. To follow socialist morality would destroy much of the present humankind and impoverish much of the rest (21, pp 6-7).

^{\$} Gold: The Once and Future Money reveals truth. As the late Ferdinand Lipps wrote, "The modern gold standard [of the nineteenth century] evolved naturally and was not the result of any conference, but rather the product of many centuries of experience and practice. It grew step by step, almost by accident, through its own force and because of the logic and experience gained with debasement of currencies in the past." The United States dollar circa 2007 and beyond is not likely to escape the inevitable march of history. The story of humanity suggests we will see a new and improved gold standard once again. Nathan Lewis helps us understand how (7, p viii).

documentary narrated by Hoenig, which ended with his apt description of the economy as a living and constantly *evolving* creature. In short, I've copied Hoenig with this letter because I wanted to bring a relatively objective, independent, third-party into this discourse – someone, perhaps, with whom you may wish to confer on the conjectures presented herewith.

I believe the best way to tie this all together may be through an evolutionary analysis of guns and gold, an interrelated arena often relegated to cranks and crackpots. But, as J.K. Galbraith explained, it's all in the eye of the beholder: "The effects of Keynes's *General Theory* was to legitimize ideas that were in circulation. What had been aberrations of cranks and crackpots became now respectable scholarly discussion." Thus it may be of no coincidence that guns & gold — which hold such low esteem amongst contemporary scholars whom imagine their untenable theories float upon pixie dust, high above such crude realities in their lofty ivory towers (see 24, p 317).

But of course President Reagan recognized what I'm about to say is true. Jack Kemp recognized that what I'm about to say is true. And I have no doubt that John Paulson, I'm Rogers, George Soros, Ron Paul, Thomas Hoenig, and several others, including Alan Greenspan, would recognize this truth:

"Gold and economic freedom are inseparable," wrote the former Federal Reserve chairman Alan Greenspan in 1966. "In the absence of the gold standard, there is no way to protect savings from confiscation through inflation. Gold stands as the protector of property rights. If one grasps this, one has no difficulty understanding the statists' antagonism toward the gold standard." Bring this up in a cocktail party full of Wall Street economists, hedge fund managers, or Beltway public policy wonks today and you'll be roundly laughed out of the punch bowl line. All they lack, we humbly submit, is a little imagination (7, p xiv).

Or, as J.P. Morgan simplified in 1912, "Gold is money. That's it."

In fact, I'll distill Morgan's conjecture further yet:

Gold = Money.

Yes, this truth is well known and has been chronicled in such great detail that there's really little left to add to this topic. But if we build upon this axiom, we find much left to explore with the following conjecture...

^{\$} Paulson & Co. is SPDR Gold Shares biggest investor, with 31.5 million shares, regulatory filings show.
With each share representing a 10th of an ounce of gold, Paulson's hedge fund firm controls the equivalent of about 96 tons of gold, exceeding the holdings of Australia and Kuwait (25).

[£] A recent SEC filing shows Soros Fund Management LLC — which manages about \$25 billion — increased its investment in the SPDR Gold Shares ETF..., the world's largest gold ETF, by 152% in the fourth quarter of last year (25).

[€] CONGRESSMAN PAUL: Your point is well taken. It's interesting that the blame for the Great Depression was misplaced. They blamed the gold standard. We all remember that wonderful article that Greenspan wrote in the *Objectivist*, "Gold & Economic Freedom." He was right on that. He blamed the Great Depression on the lack of a gold standard or the abuse of the gold standard. He said all the right things. Of course, he has rejected those ideas in his later years when he was able to join the establishment (26).

Gold + Guns = Survival.

And herein lies the difficulty, because, despite the fact it seems Soros would concur with Morgan's theory regarding guns & gold, I believe he would dissent with my theory regarding guns, as would Elena Kagan, Sonia Sotomayor, and Mayor Richard Daly, for that matter. Fortunately, as confirmed by the Supreme Court last week, their positions do not reflect the will of the American people.

In fact, if you have the opportunity, you may wish to encourage Mayor Daly to actually *read* this historical judgement, as he has recently made it painfully clear that he is unable to grasp its central thesis. ϵ

E Kalani, "the most potent defense of the Second Amendment requires the most adamant exercise of the First Amendment (28)"; and, though you may recognize that this letter may represent an adamant exercise of both Amendments, it is indeed much, much more than that — for, as I have suggested, it tables a unified theory, a solution to the most fundamental problem in economics (i.e., **APPENDIX II**).

So we must press on, exploring my conjecture that "Gold + Guns = Survival" in greater detail by developing an indirect proof - reductio ad absurdum - for this theorem.

We shall begin with a two-part post-script with which I ended an equally long and spirited letter to Daniel S. Loeb last October (the entire contents of which you may find in 17, pp 424-464)...

Two years ago, in *District of Columbia v. Heller*, 554 U. S. ____, this Court held that the Second Amendment protects the right to keep and bear arms for the purpose of self-defense and struck down a District of Columbia law that banned the possession of handguns in the home. Chicago (hereinafter City) and the village of Oak Park, a Chicago suburb, have laws effectively banning handgun possession by almost all private citizens. After *Heller*, petitioners filed this federal suit against the City, which was consolidated with two related actions, alleging that the City's handgun ban has left them vulnerable to criminals. They sought a declaration that the ban and several related City ordinances violate the Second and Fourteenth Amendments. Rejecting petitioners' argument that the ordinances are unconstitutional, the court noted that the Seventh Circuit previously had upheld the constitutionality of a handgun ban, that *Heller* had explicitly refrained from opining on whether the Second Amendment applied to the States, and that the court had a duty to follow established Circuit precedent. The Seventh Circuit affirmed, relying on three 19th-century cases—*United States v. Cruikshank*, 92 U. S. 542, *Presser v. Illinois*, 116 U. S. 252, and *Miller v. Texas*, 153 U. S. 535—which were decided in the wake of this Court's interpretation of the Fourteenth Amendment's Privileges or Immunities Clause in the *Slaughter-House Cases*, 16 Wall. 36.

Held: The judgment is reversed, and the case is remanded (27).

[£] Heller points unmistakably to the answer. Self-defense is a basic right, recognized by many legal systems from ancient times to the present, and the Heller Court held that individual self-defense is "the central component" of the Second Amendment right. 554 U. S., at ____, ___. Explaining that "the need for defense of self, family, and property is most acute" in the home, ibid., the Court found that this right applies to handguns because they are "the most preferred firearm in the nation to 'keep' and use for protection of one's home and family," id., at ____, ____. ____. It thus concluded that citizens must be permitted "to use [handguns] for the core lawful purpose of self-defense." Id., at ____. Heller also clarifies that this right is "deeply rooted in this Nation's history and traditions" (27).

[€] Chicago enacted its handgun ban to protect its residents "from the loss of property and injury or death from firearms."The Chicago petitioners and their *amici*, however, argue that the handgun ban has left them vulnerable to criminals. Chicago Police Department statistics, we are told, reveal that the City's handgun murder rate has actually increased since the ban was enacted and that Chicago residents now face one of the highest murder rates in the country and rates of other violent crimes that exceed the average in comparable cities (27).

- PS. In the meantime, Daniel, I'll leave you with two pieces of advice:
- (i) I just received a letter from Wayne LaPierre which began: Dear Matt: It is my great pleasure to present you with your new National Rifle Association membership card. Carry it with pride knowing that you're doing more than most Americans will do in a lifetime to promote firearm safety, share your enjoyment of the shooting sports and defend freedom today and for future generations. Advice #1: Send the NRA \$1,000 for a lifetime membership.
- (ii) I noticed that, on 28 April, 2009, you noted that "we have closed out all of our 'doomsday,', 'fat tail risk' trades (including gold-related investments)" [29]. Thus I might suggest that, after reviewing the paper enclosed herewith, you may want to rethink your long-term position on gold; spot gold traded at \$1068 and change on the 13th, which means, of course, that if you would have moved into gold, rather than moving out, theoretically you could have saved yourself 169 days of dodging bullets and drunk drivers along 8 Mile Road (and the bleary eyes and "investor fatigue" that came with it) [see 29], spent some of that time hunting or fishing, instead—and netted yourself a nifty 62.19% annualized rate of return. I might also add that any of my family members, friends, colleagues, the SEC Chairman, or readers of Forbes.com (see **APPENDIX IV**) who may have headed my advice regarding gold on the 18th of August could have (again, theoretically, of course), stood with 112.02% annualized rate of return on the same day—and, not to mention, of course, stood with much greater liquidity and faced much less systemic risk, and exposure to the rampant dollar devaluation which is presently en voque.

Your job is hard enough the way it is, why make it any harder?

If you'd like to know why - since the 1971 - the global markets have mispriced and continue to misprice gold, I'd be happy to forward a detailed explanation.

Well, first and foremost, this letter offers, to a certain extent, the explanation I had offered to forward to Loeb.

Yes, gold has indeed surged over the past year, but this observation is quite secondary to the fact that gold offers *evolutionary stability*.

Central banks were created to serve as lender-of-last resort during financial crises, and, under gold standards, that was their sole purpose. However, things became infinitely more complicated with the advent of free-floating currencies. After much trial and error, to keep this complex argument simple, the object of the contemporary central banking game is countercyclical in nature, to "lean against the wind", or, "to take away the punch bowl as the party gets going."

But as inferred by my **EPIGRAPH**, it appears Hoenig is the sole FOMC member brave enough to take away the punch.

To this point, during your recent trip to Ontario to attend the G-7/G-20 meetings, perhaps you had sensed that, not only had Bernacke, Geither, and other members of your administration pimped you out to sell punch so long after the party was over that all the other revellers had nursed their hang-overs and were hard at work on their austerity plans.

I picked up a great book at the Bank of Canada today – By All Accounts: Outside Perspectives on The Bank of Canada

(30) – which included a great quote from the July/August 2009 edition of *TheWalrus*:

Former Fed Chairman William McChensey Martin once quipped that the job of a central bank was to take away the punch bowl just was the party gets going — but as of 2009, bank officials the world over have found themselves setting out shooters the morning after a drunken debauch (30, p 118).

Also, it seems to be that you, Chairman Bernacke (although the Federal Reserve Bank is a rather uniquely independent institution, I noted that you did say "we" several times when Chariman Bernacke posed uncomfortably with you during an interview a few days ago) and your administration remain as the last bartenders standing.

In any case, I do hope that you may have time to discuss this with President Hoenig because, despite my belief that you are indeed an intelligent man, no President of the United States has ever sufficiently grasped the esoteric realm of the Federal Reserve (see 24).

The fundamental relationship between the supply of money and the price of money, better known as interest rates, was obvious to [some] economists — if supply shrinks, interest rates go up. It was not so obvious to many noneconomists, including the President of the Unites States. In fact, Volcker kidded the Administration economists on this point. Charles Schultze recalled: 'Paul said to us, 'It was really a meeting with Jimmy Carter that gave me the idea. Carter said to me, 'Why can't you control the quantity of credit without raising interest rates?' Volcker told us that's what gave him the idea to target money supply instead of interest rates.' Volcker's remark was facetious, of course, an inside joke among professionals about a layman's ignorance of the fundamentals....

Jimmy Carter, like all his modern predecessors, did not have a strong grasp of the issues of monetary policy. Nothing in the experience of of American political leaders prepared them to deal with the subject; the tradition of Fed independence encouraged the notion that money regulation was something left to the experts, a forbidden area where politicians were not supposed to intrude. Richard Nixon, who was well trained for the Chief Executive's job as any modern President, told an interview years later that one of his greatest regrets was that he never mastered an understanding of what went on at the Federal Reserve. Most of the politicians who served in the White House, as well as in Congress, could make a similar confession. As Tony Solomon observed:

No President really understands these things, but the disturbing thing about Carter was that he tried to use the economic jargon as though he did. He tried to make it seem that he understood the technical arguments when he clearly didn't. A President like Lyndon Johnson never pretended to understand all these things – he was only interested in the bottom line. He would ask: What were the political effects? What would happen to interest rates? What did he have to do in order to deal with it? Carter would enter into technical discussions which he only partially understood.

And perhaps one of the greatest ironies (and tragedies) is that your man Volcker – arguably the most influential Chairman of the history of the United States Federal Reserve – didn't have a much firmer "grasp upon the issues" than

In the American system, citizens were taught that the transfer of political power accompanied elections, formal events when citizens made orderly choices about who shall govern. Very few Americans, therefore, understood that the transfer of power might also occur, more subtly, without elections. Even the President did not seem to grasp this possibility, until too late. He would remain in office, surrounded still by the aura of presidential authority, but he was no longer fully in control of his government.

The American system depended upon deeper transactions than elections. It provided another mechanism of government, beyond the reach of the popular vote, one that managed the continuing conflicts of democratic capitalism, the natural tension between those two words, "democracy" and "capitalism." it was part of the national government, yet deliberately set outside the electoral process, insulated from the control of mere politicians. Indeed, it had the power to resist the random passions of popular will and even to discipline the society at large (24, p 11).

Carter, because, despite the fact that Nixon, as previously noted, is regularly lambasted for severing "the dollar's link with gold and [destroying] the world monetary system", by Volcker own admission, s this was ultimately Volcker's doing, not Nixon's:

Volcker engineered the most fundamental change in the world's monetary system since World War II - the dismantling of the Bretton Woods agreement that had made the U.S. dollar the stable bench mark for all currencies (24, p 68).

Of course Volcker was also responsible for the Carter-era Milton Friedman Monetarist Experiment, which imploded with the greatest roller-coaster-volatility that our nation's economy has ever experienced; and this example happens to resonate in a special way, today, as Henry Wallich was the sole voice of reason at the Federal Reserve during Volcker Chairmanship much in the same way that Thomas Hoenig walks "The Road Less Travelled" and stands alone during the present Bernacke Chairmanship:

In Henry Wallich's thinking, the dizzying volatility was the "pact with the devil" he had warned against — the very consequences he predicted when Paul Volcker first proposed the monetarist system the previous autumn. In theoretical terms, Wallich felt vindicated. The policy dilemma was an inevitable outcome of trying to target the fluctuations of reserves precisely while ignoring the impact on interest rates. In his judgement, this was a fundamental flaw in monetarism that its many advocates ignored or denied. As he explained:

There are only two things we can peg, interest rates or reserves. I've always believed that whichever of the two things you don't peg will move around rather drastically. If you peg reserves, interest rates will more more drastically. If you peg interest rates, then the money supply will move more. I never believed what the monetarists believe — that if you stabilize one, you will probably destabilize the other. The supply can be held stable, but the demand always varies — so interest rates are very volatile (24, pp 202-203).

Later Wallich added:

By holding steady to the money supply, you get extreme swings of interest rates, followed by extreme swings of the money supply. The economy is kicked back and forth from the floor to ceiling by a stable money supply. This is how this method would stabilize the economy – by kicking it through the ceiling and the floor (24, p 220).

Thus you may begin to grasp why I may not share your confidence in Paul Volcker.

But in any case, perhaps President Reagan may have been the most well-versed contemporary U.S. President

^{\$ [}The] subtleties were lost on the President who made the choice. "Poor old Nixon, Volcker said, "was not a deep thinker in these matters. He had no intellectual conviction about floating. His position was, 'You tell me which rules you want to play under, fixed or floating, and I'll play it that way, but you're to make sure the best interests of the United States are taken care of" (24, p 339).

[£] The financial markets had never witnessed anything so stark and sudden, so dizzying. In early April, the Federal Funds rate hit a peak close to 20 percent. Ten weeks later, it had fallen to 8.5 percent. Commercial paper, certificates of deposit, three-month Treasury bills – all of the many instruments of short-term borrowing followed the same steep plunge, falling by as much or more in two months' time.

The Federal Reserve, when it seized the initiative in the Fall of 1979, had forced up the prince of money by nearly 100 percent in order to combat inflation. Now the Fed was allowing the prince of money to fall, even more rapidly, back to the original level.

^{....} Paul Volcker would confide to colleagues later that he considered the dramatic easing of interest rates executed in the spring of 1980 as perhaps his largest mistake as Federal Reserve Chairman (24, p 206).

insofar as these complex issues are concerned, but even he was not confident enough of his grasp upon it to follow through with what he ultimately wanted to do, which was, of course, attempt to restore the stable, centuries-old institution that Volcker had hastily dismantled:§

Paul Volcker's domain – monetary policy – was itself a large mystery to most of the men gathered around the President.

Ronald Reagan, ironically, had a surer grasp of the subject than any of his senior political advisers — ironic because, in most realms of government policy, Reagan was a passive executive, with a weak grasp of details. He often left both the particulars and the strategic choices to his circle of advisers. They worked out a consensus among themselves, then brought the decision to him for ratification. When it came to money, however, Reagan knew what he wanted and expressed it forcefully.

"Most of the major players in the White House – Baker, Meese, Mike Deaver – don't know much about monetary policy," one of their colleagues explained. "The President probably has the most developed understanding of any of them" (24, p 379).

I concur with this finding, by the way, as I once had the chance to discuss this subject with President Reagan:



And trust me, I can personally attest that President Clinton didn't grasp these complex issues, either...

^{\$} From the beginning of his campaign, Reagan was convinced that to return to full economic health, the country needed to return to a gold standard. Reagan intended to make it part of his election platform. In the primaries in 1980, when he broadcast his famous "talking head" television commercials outlining his economic plan, he had also recorded a commercial promising a return to the gold standard, which at the time had been gone for only nine years. With a gold standard, the country would avoid monetary screwups, interest rates would collapse, and there would be an even more dramatic boom as the difficulties of exchange with a floating currency evaporated.

The ad didn't run. As was the case many times both before and after, he was talked out of it by his monetarist advisers. The official 1980 Republican platform ultimately read: "The severing of the dollar's link with real commodities in the 1960s and 1970s, in order to preserve economic goals other than dollar stability, has unleashed hyperinflationary forces at home and monetary disorder abroad, without bringing any of the desired economic benefits. One of the most urgent tasks in the period ahead will be the restoration of a dependable monetary standard —that is, an end to inflation" (7, p 274).



And thus, perhaps it may prove useful to utilize a more readily accessible analogy.

The story is told of a young boy, a precocious child prodigy. No love, no nourishment, no experience, no earthly need was left unattended. He was taught to read, think, solve problems, hunt & fish; in May of 1976 he looked like this:





and, a few years later, like this...

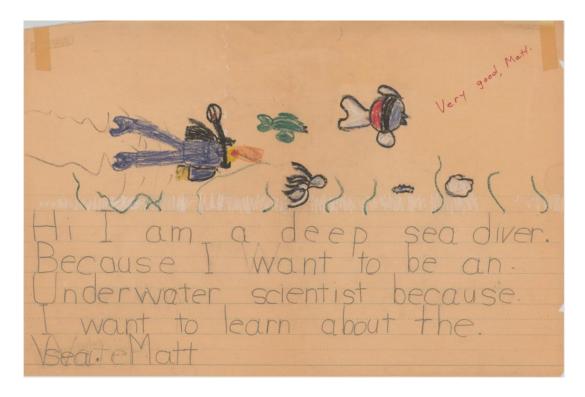


His wise parents broadened his horizons, sailed with him upon the seven seas, exploring our world of islands...

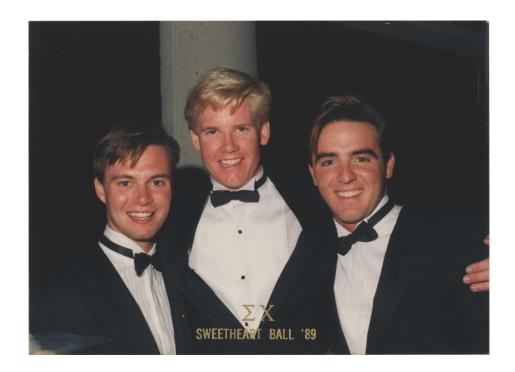


He was given brand new BMW for his sixteenth birthday because he liked to drive fast and attended boarding school in Colorado because he liked to ski even faster.

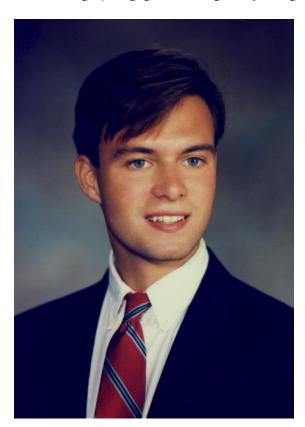
He was given a deep blue Mercedes convertible when he headed off to USC because, for as long as he could recall, he had wanted to surf and "learn about the sea":



He arrived at the University of Southern California, found fellowship in Sigma Chi,



and, generally speaking, reaped the fruits of being a young, good-looking, and privileged American...



But unexpected problems arising from unintended consequences began to surface.

He no longer yearned to hunt nor to fish; and the more refined and worldly he became – in the words of the great poet Daniel S. Loeb – the more he preferred "snacking on shrimp cocktails and sipping chilled Gewürztraminer"...



Curiously, however, his father and grandfathers continued to seek the simple pleasures of hunting and fishing, just as they had when the young man was a boy:



To make matters worse, it seems the young man's behavioural changes were accompanied other unusual traits and related behaviours.

He wanted nothing more than to read – indeed, he acquired any book his heart desired, read it at his leisure, and read it in any setting he thought most relaxing and conducive to the acquisition of truth and knowledge.

After many, many years of reading, the young man's father proposed that he may enjoy work – that is, to say, that he may wish to pursue a *career*.

The young man considered this strange proposition at length – but he had become confused, you see – and, after concluding that American industry and the American economy and American industry were causing more harm than good (see 19), decided to return to his reading instead. His father watched with curiosity. But, one day, after careful and considerable deliberation, a time-tested solution occurred:

He decided to take away the punchbowl, and see it that might help.

Needless to say, the young man was not pleased with this new arrangement, for he had developed a great taste and a considerable appetite for punch. And this is where our little story get's interesting. As it turns out, taking away punch bowls has the power to set-off the most extraordinary set of miracles, efficiencies, super-natural phenomena — including the discovery of a tenable solution to the most fundamental problem in economics (**APPENDIX II**). You may also find it curious that the young man soon found renewed interest in hunting and fishing:



And this was all, quite naturally, because the young man soon discovered that fishing was utterly necessary for survival...



In time, he began to reflect upon this priceless lesson, and - for powerful reasons which shall soon become quite clear - endeavoured to to help teach his own young son:



In time many memories began to resurface, present themselves in new light, and many, many new and interesting questions began to emerge.

His father had taken him on safari, but what was it that he was trying to teach him?

What value lessons from the pages of natural history, the *Struggle for Life*, had the *enfant terrible* – the prodigal son sporting black Ray Bans, white puka shells, and a Southern California tan – failed to see all those years ago?^{\$}



More specifically, why did his father still love to hunt and fish?

Why would a hard-working man with more gold than Croesus sit in boat on Lake Gogebic for the opening of Walleye season every spring? Why did he spend his precious leisure hours walking fence rows and and stalking forests with a double-barrel shotgun in the crook of his arm? Why would a man with one house on North State Parkway, another on the shores of Lake Gogebic, another on Key Largo, and a beautiful *Blue Star* choose such primitive pursuits, when he could, like his wayward son, once upon a time, be "snacking on shrimp cocktails and sipping chilled Gewürztraminer"?

^{\$} Nothing is easier than to admit in words the truth of the universal *Struggle for Life*, or more difficult—at least I have found it so—than constantly to bear this conclusion in mind. Yet unless it be thoroughly engrained in the mind, I am convinced that the whole economy of nature, with every fact on distribution, rarity, abundance, extinction, and variation, will be dimly seen or quite misunderstood. We behold the face of nature bright with gladness, we often see superabundance of food; we do not see, or we forget, that the birds which are idly singing round us mostly live on insects or seeds, and are thus constantly destroying life; or we forget how largely these songsters, or their eggs, or their nestlings, are destroyed by birds and beasts of prey; we do not always bear in mind, that though food may be now superabundant, it is not so at all seasons of each recurring year (31).



Why does his best friend, Ron Holden – whom happens to have as much gold or more – share his passion and join him on his hunting and fishing expeditions?

In short, after much time and consideration, the man who had been unable to grasp theses illusive truths during his youth, concluded at last that the answer is, essentially, because they are two of our truest patriots, two of the greatest super-heroes to walk the face of he earth, and, moreover, the very embodiment of *The American Dream*.

As the great hunter, fisher, and gatherer, Euell Gibbons, once wrote,

Why bother with wild food plants in a country which produces a surplus of many domestic food products?

With as much reason, one might ask, why go fishing for mountain trout when codfish fillets are for sale in any supermarket? Or why bother with hunting and game cookery when unlimited quantities of fine meat can be purchased at every butcher counter?

Why do millions of Americans desert their comfortable and convenient apartments and split-level houses for a time each year to go camping under comparatively primitive conditions in our forests and national parks? For that matter, why does anyone go for a walk on a woodland trail when one could be speeding along a superhighway in a high-powered automobile?

We live in a vastly complex society which has been able to provide us with a multitude of material things, and this is good, but people are beginning to suspect that we have paid a high price for our plenty. Each person would like to feel that he is... capable of independent existence, and this is hard to believe when everything that we eat, wear, live in, drive, use or handle has required the cooperative effort of literally missions of people to produce, process, transport, and, eventually, distribute to our hands. Man simply must feel that he is more than a mere mechanical part in this intricately interdependent industrial system. We enjoy the comfort and plenty which this highly organized production and distribution has brought us, but don't we sometimes feel that we are living a

second-hand sort of existence, and that we are in danger of losing all contact with the origins of life and the nature which nourishes it?

Fortunately, there is a saving streak of the primitive in all of us. Every man secretly believes that if he were an Adam, set down in a virgin world, he would not only be able to survive, but could also provide well for his Eve and any number of little Cains and Abels....

There are thousands of spots in this country where, with the requisite knowledge, a man could live solely on the bounty of nature... With the judicious, if incongruous, use of a home freezer, he could stay fat the year around by 'reaping where he did not sow.'

Probably very few of us will ever be faced with the necessity of living off the country for any extended period of time. The outdoor skills, necessary to the survival of our ancestors, are now utilized in the service of recreation (32, pp 1-2).

Yes, Gibbons (32) stumbled upon great truths with these words, truths that he held *intuitively*, yet did not quite fully grasp their relevance. And yes, there are countless people today – from all walks of life – who do not feel this way, who do not believe this contact with The Struggle for Life is important, and this finding happens to be consistent with a fundamental evolutionary principle, The Law of Superabundance: far more will be born than will survive. Although it is indeed true that "very few of us will ever be faced with the necessity of living off the country for any extended period of time" in the short-term horizon, this is clearly not true over the long-term horizon.

So, why does my father enjoy hunting?

Why does Ron Holden love hunting?

Why do they travel great distances and often at great expense in pursuit of this 'primitive' form of subsistence, held over from a time when man had *no* leisure time at all?

What great truth had eluded Gibbons? Why has my intense yearning to fish, hunt, forage, camp, hike, and sail as much and as often as I'm able been so vigorously re-awakened. And why, more than anything else in the world, do I want to teach my wife, young son, friends, and relatives these skills? Why should you learn and teach your daughters these skills? Why would these skills represent the greatest birthday present you, the President of the United States of America, could ever offer a family member, friend, and our fellow Americans?

I imagine neither my father nor his friend Ron have thought about this topic long and hard enough to table a specific answer to this deep question, which is quite natural, since evolution favours those who *imitate* evolutionary stable strategies without stopping to ask why (because many of our ancestors' competitors who stopped to ask why starved, were clubbed to death, eaten by a tiger, *etc.*). In short, they didn't need to ask why, they merely needed to *imitate* the *evolutionarily stable strategies* employed by their fathers, grandfathers, and forefathers whom had, most likely, been reindeer

hunters in northern Europe as the last ice-age receded.

Why imitate?

What imitation rules... should [you] choose, when [you have] the opportunity to imitate another individual in the same player position but [you're] otherwise constrained by severe restrictions on information and memory? ...If [you] want a learning rule that leads to non decreasing expected payoffs over time in all stationary environments, then [you] should (a) always imitate (not experiment) when changing strategy, (b) never imitate an individual whose payoff realization was worse than [your] own, and (c) imitate individuals whose payoff realizations are better than [your] own with a probability that is proportional to this payoff difference (33, p 9).

Yes, Gibbons had uttered great truths, truths that he held *intuitively*, yet—perhaps like most of us who hunt and fish—did not quite fully grasp their true relevance, but a very useful game-theoretical overview (*i.e.*, 19) clearly illustrates innumerable (*i*) negative externalities, (*ii*) geopolitical uncertainties, and (*iii*) astrophysical phænomena that could instantly render us all with *a'ohe nao 'ai i ka papa a*.

Please allow me to elaborate a bit on the logical implications which follow from this important point. At the outset I promised that you might discover that "you may choose to hold your ideological ground and remain faithful to the principles of your political party, or you may choose to endeavour to struggle to increase the prospects for my childrens', my childrens' children, your children, and their childrens' survival – but that you can't choose both – and this is why. If we're willing to agree that "imitate=do not change strategy" and that "do not imitate=change strategy", then perhaps you'll grasp the essence of my point because, essentially, the central thesis of the Republican party is "do not change strategy" while the Democratic party's central thesis is "change strategy". Indeed, Change was the touchstone of election campaign. And, with this touchstone in mind, perhaps somewhere in the Dakotas, Montana, Alaska, or New Hampshire, you may have encountered a bumper sticker on the back of a Ford F-250 or Chevy Silverado which read: "I'll keep my Guns, my Money, and my Freedom – you can keep the Change." And, if you had, perhaps you may have simply laughed to yourself and thought, "what an ignorant redneck." But that would have been dismissing evolutionary stability, because, even if the man behind the wheel didn't know exactly why what he was saying was true, the beauty of it all is that he didn't have to, he merely needed to trust his intuition, subconsciously realizing, perhaps, that "If you want a learning rule that leads to non decreasing expected payoffs over time in all stationary environments, then you should (a) always imitate (not experiment) when changing strategy, (b) never imitate an individual whose payoff realization was worse than [your] own, and (c) imitate individuals whose payoff realizations are better than [your] own!" He merely needed to imitate (33)!

Alas, however, this is a complex subject, and, worse yet, it appears perhaps we may lay some blame upon Charles Darwin (see 11) for your entrenched, systemic, and collective errors in this regard, since in order "to enhance the implausibility of truly catastrophic mass dying, Darwin holds that 'the complete extinction of the species of a group is generally a slower process than their production" (34, p. 1300).

In short, this has had the adverse effect of painting ourselves into a teleological corner (see 11), and, alas, has evolved into *The Problem of Keynsian Economics*. Thus it should come of little surprise that Keynes – the intellectual role-model for our most powerful and popular central bankers (including Volcker, Bernacke & Geither) – was one of the many to fall into the trap of teleological thinking. Consider a telling excerpt from *Economic Possibilities for our Grandchildren*:

For the first time since his creation man will be faced with his real, his permanent problem-how to use his freedom from pressing economic cares, how to occupy the leisure, which science and compound interest will have won for him, to live wisely and agreeably and well....

I look forward, therefore, in days not so very remote, to the greatest change which has ever occurred in the material environment of life for human beings in the aggregate. But, of course, it will all happen gradually, not as a catastrophe. Indeed, it has already begun. The course of affairs will simply be that there will be ever larger and larger classes and groups of people from whom problems of economic necessity have been practically removed. The critical difference will be realised when this condition has become so general that the nature of one's duty to one's neighbour is changed. For it will remain reasonable to be economically purposive for others after it has ceased to be reasonable for oneself.

The pace at which we can reach our destination of economic bliss will be governed by four things-our power to control population, our determination to avoid wars and civil dissensions, our willingness to entrust to science the direction of those matters which are properly the concern of science, and the rate of accumulation as fixed by the margin between our production and our consumption; of which the last will easily look after itself, given the first three.

Meanwhile there will be no harm in making mild preparations for our destiny, in encouraging, and experimenting in, the arts of life as well as the activities of purpose (35, pp 5-7)!^{\$}

^{\$} The result of the continuing dominance of the gold standard through the Bretton Woods system was that the inflationist doctrine of "lowering interest rates" was never fully debunked, and instead completely saturated the academic economics establishment. The principles of economics upon which the gold standard was founded were scrubbed clean from textbooks after World War II. Frustrated by the inability to carry out their policies to their conclusion, the descendants of Keynes instead strengthened their position by indoctrinating two generations of economists to their way of thinking.

The postwar inflationists developed all manner of intellectual constructs in flavor of their arguments to "lower interest rates." One of the most enduring has been the Phillips curve, which is the assertion that more inflation leads to less unemployment. It's merely the inflationary malinvestment boom rendered graphically.

The Keynesian inflationists set about "lowering interest rates" in earnest beginning in 1970, leading to the break of the dollar's link with gold in 1971. The result, of course, was that U.S. interest rates skyrocketed to levels not seen in nearly two centuries. The resulting turmoil caused the Bretton Woods system of fixed dollar exchange rates to finally shatter in 1973, leaving each country free to "lower interest rates" as they saw fit. The era of floating fiat currencies had begun.

The predictions of the Phillips curve never did pan out. As the inflation combined with progressive tax structures to drive economies around the world into sharp contraction, inflation and unemployment rose in tandem, a condition that was known as stagflation. From the classical perspective, this was blandly predictable—currency instability and rising taxes are always the primary suspects in any serious economic downturn—but from the standpoint of a theoretical structure that touted the virtues of inflation, it was shockingly converse. Unable to conceive of the idea that 40 years of indoctrination into inflationism would deprive them of the tools for dealing with an inflationary recession, the inflationists piled on more of the same bad medicine: more inflation to take care of the unemployment and higher taxes and price controls to take care of the inflation. In the United States, this policy mix was touted by James Tobin of Yale University.

The notion of inflation itself had become queerly divorced from any concept of monetary mechanisms. By disguising the devaluation as "lowering interest rates," the Keynesians eventually fooled themselves (7, pp 204).

In any case, since you may be wondering just how I intend to help fix this mess, I'm pleased to report I have a rather simple solution:

Chairman Bernacke and Secretary Geither appear to me as two teenagers, cruising around in a brand new Hanna red BMW and deep blue Mercedes convertible *that someone else had paid for* – that my children, your children, and our grandchildren will struggle to *continue* to make payments on for years on end.

Thus it also occurred to me that someone had to figure out how to take away their punch bowl.

And, in fact, it may not be all that hard to do.

It might begin with something along these lines:

Subject: On the Problem of Keynesian Economics^{\$}
Date: Sun, 27 Jun 2010 22:51:19 -0300
From: Matt Funk <matt@funkisland.org>

To: prid@opec.org

Greetings,

I have an important communiqué (relating to Article 2 of your Statute) which I would like to email to Mr Salem El Badri and Dr Qabazard.

Please advise.

Sincerely, Matt Funk

In case you're wondering, I haven't heard back from Mr El Badri or Dr Qabazard.

Indeed, I sympathize with young Alexander, whom, upon hearing of the infinite nature of the universe, wept.

"When his friends asked him what was the matter, he replied, 'Is it not a matter for tears that, when the number of worlds is infinite, I have not conquered one?" (37).

^{\$} The Gulf States' dollar peg is causing... harm. One of the world's leading international macroeconomists argues that they should "peg the export price" as this delivers automatic accommodation to terms of trade shocks while retaining the credibility-enhancing advantages of a nominal anchor.

The possibility that some Gulf States, particularly the UAE, might abandon their long-time pegs to the dollar is getting increasing attention. It makes sense. The combination of high oil prices, rapid growth, a tightly fixed exchange rate, and the big depreciation of the dollar against other currencies (especially the euro, important for Gulf imports) was always going to be a recipe for strong money inflows and inflation in these countries.

The economic dynamism – most striking in Dubai – is admirable and fascinating, but also now clearly indicative of overheating. Indeed inflation, as predicted, has risen alarmingly. Among other ill effects, it is producing unrest among immigrant workers. An appreciation of the dirham and riyal is the obvious solution.

Most often discussed as an alternative to the dollar peg is a peg to a basket of major currencies. This would be an improvement. Kuwait, for example, made this switch a couple of years ago.

But a basket peg does not address the fact that when oil prices rise generally (not just against the dollar), as in recent years, monetary policy is constrained to be looser than it should be. Similarly, when oil prices fall generally (not just against the dollar), as in the 1990s, monetary policy is constrained to be tighter than it should be (36).

However, I trust that, in time, I will have the opportunity to get my message through. And, despite the fact that my plan is not exactly new news for them, I do not believe the *basis* for my suggestion has been tabled – that is, namely, to help stabilize the global economy by taking away the Fed's punch bowl.

You see, if OPEC and other oil-producing nations were able to see the merit of pegging oil to gold rather than the dollar, it would also effectively *force* G-8 nations to adopt gold-standard like monetary and fiscal policies — it would, in essence, take away the punch bowls; this argument is long and complex (see 38-45), but, naturally, I would be happy to elaborate upon request.

In the meantime, however, I'll leave you with this final thought:

It took philosophers... John Locke and... Adam Smith to provide the intellectual leadership to bring the Western world onto a hard currency. Academics didn't fully accept today's softmoney rationalizations until after 1936, years after it had become commonplace in world governments. Even so, it took John Maynard Keynes, the self-taught writer with a bachelor's degree in mathematics, to lead the change. When ambitious academics sense that supporting hard money will advance their careers, rather than retard them, they will support it *en masse*. As the political tide flows away from soft money and toward hard money, when the wheel has turned once again as it has so many times in the past, the economic *intelligentsia* will sense the change and produce a flood of rationalizations about why the world needs a gold standard, just as they now produce a flood of rationalizations about why the world does not.

Good money will once again be recognized as a cornerstone of good government. After a few years, nobody will remember that it had ever been any other way (7, pp 420-421).

Happy Independence Day, Sir.

Sincerely,

Matt Funk, FLS^s

[§] If this [letter] shall but inspire the rising generation with a more ardent love of their country, and unquenchable thirst for liberty, and a profound reverence for the Constitution of the Union, then it will have accomplished all that its author ought to desire. Let the American youth never forget that they possess a noble inheritance, bought by the toil, and sufferings, and blood of their ancestors; and capable, if wisely improved, and faithfully guarded, of transmitting to their latest posterity all the substantial blessings of life, the peaceful enjoyment of liberty, of property, or religion, and of independence. The structure has been erected by architects of consummate skill and fidelity; its foundations are solid; its compartments are beautiful, as well as useful; its arrangements are full of wisdom and order; and its defences are impregnable from without. It has been reared for immortality, if the work of man may justly aspire to such a title. It may, nevertheless, perish in an hour, by the folly, or corruption, or negligence of its only keepers, THE PEOPLE. Republics are created by the virtue, public spirit, and intelligence of the citizens. They fall, when the wise are banished from public councils, because they dare to be honest, and the profligate are rewarded, because they flatter the people, in order to betray them (46, p 326).

- 1. Young D (2007) Dear Mr. President: Letters to the Oval Office from the Files of the National Archives (Random House, New York).
- 2. Bowen D (2007) A Letter to America (Univ of Oklahoma Press, Norman).
- 3. Funk M (2010) On the Problem of the Island of Earth: Introducing a Universal Theory of Value in an Open Letter to The President of the United States. MPRA 14489, http://mpra.ub.uni-muenchen.de/14489/
- 4. Funk M (2008) On the Problem of the Hedgeless Hedgefunds of Sleepy Hollow. *MPRA* 14487:1-13 http://mpra.ub.unimuenchen.de/14487/
- Strasburg J, Patterson S (2009). A Hedge-Fund King Comes Under Siege. 20 November 2009.
- Shaw G (1928) The Intelligent Woman's Guide to Socialism and Capitalism.
- Lewis N (2007) Gold: The Once and Future Money (Wiley & Sons, New York).
- Smith A (1776) Inquiry into the Nature and Causes of the Wealth of Nations (Strahan & Cadell, London).
- 9. United Nations (2010). World Economic and Social Survey 2010: Retooling Global Development (United Nations, New York).
- McInnis F (2010) UN Report: Dollar Should Be Replaced As Main Reserve Currency. Dow Jones Newswires.
- Funk M (2009) On the Origin of Mass Extinctions: Darwin's Nontrivial Error. MPRA 20193:1-13, http://mpra.ub.uni-muenchen.de/20193/
- 12. Loeb D (2010) Q1 Letter to Investors (Third Point LLC, New York).
- 13. Tolstoy L (1897). As cited in M Lewis' 2010 The Big Short (Norton & Co., New York).
- 14. Funk M (2009) On the Problem of Economic Power: Lessons from the Natural History of the Hawaiian Archipelago. *MPRA* 19371:1-19, http://mpra.ub.uni-muenchen.de/19371/
- Hanson V (1997) Fields Without Dreams: Defending the Agrarian Ideal (Free Press, New York).
- 16. Funk M (2010) The Principles of Economics & Evolution: A Survival Guide for the Inhabitants of Small Islands, including the Inhabitants of the Small Island of Earth. Lifeboat Foundation Scientific Advisory Report, http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution.pdf (Lifeboat Foundation, Minden).
- 17. Funk M (2010) "Digital Supplement" to *The Principles of Economics* & *Evolution* (3). Lifeboat Foundation Scientific Advisory Report http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution.digital.supplement.php (Lifeboat Foundation, Minden).
- Popper K (1945) The Open Society and its Enemies. Vol II (Routledge, London).
- Funk M (2008) On the Truly Noncooperative Game of Life on Earth: In Search of the Unity of Nature & Evolutionary Stable Strategy. MPRA 17280:1-21, http://mpra.ub.uni-muenchen.de/17280/
- 20. Funk M (2009) On the Truly Noncooperative Game of Island Life: Introducing a Unified Theory of Value & Evolutionary Stable 'Island' Economic Development Strategy. MPRA 19049:1-113, http://mpra.ub.uni-muenchen.de/19049/

- 21. Hayek F (1988) The Fatal Conceit: The Errors of Socialism (Routledge, London).
- 22. Hoenig T (2009) *Too Big has Failed* (Federal Reserve Bank of Kansas City, Kansas City).
- 23. Hoenig T (2010) *The High Cost of Exceptionally Low Rates* (Federal Reserve Bank of Kansas City, Kansas City).
- 24. Greider W (1987) Secrets of the Temple: How the Federal Reserve Runs the Country (Simon and Schuster, New York).
- 25. McCoach G (2010). George Soros Bets on Gold: Soros Fund Increases Stake in Gold ETF. Wealth Daily. Friday, March 5th, 2010
- Taylor J (2006). Congressman Ron Paul Talks About Gold, Oil & the Economy.
 Gold. Mar 17, 2006 (http://www.321gold.com).
- US Supreme Court (2010) MCDONALD et. al. v. CITY OF CHICAGO, et. al. No. 08–1521. Argued March 2, 2010, Decided June 28, 2010.
- NRA (2010). Statement From The National Rifle Association On H.R. 5175, The Disclose Act. 15 May 2010.
- Loeb D (2009) Q1 Letter to Investors (Third Point LLC, New York).
- 30. Nankivell N (2010). By All Accounts: Outside Perspectives on The Bank of Canada (Bank of Canada, Ottawa).
- 31. Darwin C (1859) On the Origin of Species (Murray, London).
- 32. Gibbons E (1962) Stalking the Wild Asparagus (McKay, New York).
- 33. Weibull J (2002) What Have we Learned from Evolutionary Game Theory So Far? (Inst for Intl Econ Studies, Stockholm).
- 34. Gould S (2002) Structure of Evolutionary Theory (Harvard Univ Press, Cambridge).
- 35. Keynes J (1930) Economic Possibilities for our Grandchildren.
- Frankel J (2008). UAE & Other Gulf Countries Urged to Switch Currency Peg from the Dollar to a Basket That Includes Oil. 9 July 2008 http://www.voxeu.org/index.php?q=node/1381
- 37. Plutarch (c. 100 AD) On Peace of Mind.
- 38. Frankel J (2002). Should Gold-Exporters Peg Their Currencies to Gold? (World Gold Council, London).
- 39. Frankel J (2009). A Comparison of Monetary Anchor Options for Commodity-Exporters in Latin America and the Caribbean. World Bank, September 17-18.
- 40. Frankel J (2008). UAE & Other Gulf Countries Urged to Switch Currency Peg from the Dollar to a Basket That Includes Oil. *Vox.* 9 July.
- 41. Frankel J (2005). Peg the Export Price Index: A Proposed Monetary Regime for Small Countries. *Journal of Policy Modeling*. June.
- Frankel J (2003). Iraq's Currency Solution? Tie the Dinar to Oil. Inter Econ. Fall.
- 43. Frankel J (2003). A Crude Peg for the Iraqi Dinar. Financial Times. June 13.
- 44. Frankel J (2003). A Proposed Monetary Regime for Small Commodity-Exporters: Peg the Export Price ('PEP'). *Inter Finance* 6:61-88.
- Frankel J, Saiki A (2002). A Proposal to Anchor Monetary Policy by the Price of the Export Commodity. J of Econ Integration 17:417-448.
- 46. Story J (1840) A Familiar Exposition of the Constitution of the United States. 1997 Ed (Regency Gateway, Lake Bluff).

APPENDIX I

EVOLUTIONARILY STABLE CENTRAL BANK STRATEGY

When the course of civilization takes an unexpected turn — when, instead of the continuous progress which we have come to expect, we find ourselves threatened by evils associated by us with past ages of barbarism — we naturally blame anything but ourselves. Have we not all striven according to our best lights, and have not many of our finest minds incessantly worked to make this a better world?... We are ready to accept almost any explanation of the present crisis of our civilization except one: that the present state of the world may be the result of genuine error on our own part and that the pursuit of our most cherished ideals has apparently produced results utterly different from those which we expected....

How sharp a break not only with the recent past but with the whole evolution of Western civilization the modern trend toward socialism means becomes clear if we consider it not merely against the background of the nineteenth century but in a longer historical perspective. We are rapidly abandoning not the views merely of Cobden and Bright, of Adam Smith and Hume, or even of Locke and Milton, but one of the salient characteristics of Western civilization as it has grown from the foundations laid by Christianity and the Greeks and Romans. Not merely nineteenth and eighteenth century liberalism, but the basic individualism inherited by us from Erasmus and Montaigne, from Cicero and Tacitus, Pericles and Thucydides, is progressively relinquished.

-F.A. von Hayek, The Road to Serfdom, 1944

Joanne Caron^s
Bank of Canada
234 Wellington Street
Ottawa, Ontario
K1A 0G9
CANADA

10 June 2010

RE: Director (FSD-SO-001-10 RL)

Dear Joanne:

Perhaps the most important letter in the history of Western civilization began as follows:

Sir:

Some recent work by E.Fermi and L. Szilard, which has been communicated to me in manuscript, leads me to expect that the element uranium may be turned into a new and important source of energy in the immediate future. Certain aspects of the situation which has arisen seem to call for watchfulness and, if necessary, quick action on the part of the Administration....

In the course of the last four months it has been made probable through the work of Joliot in France as well as Fermi and Szilard in America — that it may become possible to set up a nuclear chain reaction in a large mass of uranium, by which vast amounts of power and large quantities of new radium-like elements would be generated. Now it appears almost certain that this could be achieved in the immediate future.

This new phenomenon would also lead to the construction of bombs, and it is conceivable – though much less certain – that extremely powerful bombs of a new type may thus be constructed.

^{\$} Qualified candidates are required to submit a detailed resumé and a covering letter highlighting how their education, training, and experience meet the above-mentioned Screening Criteria and Position Requirements. Applications should be sent by 10 June 2010 to Joanne Caron at jcaron@bankofcanada.ca (1).

Of course this was Albert Einstein's priceless letter to F.D.R., dated 2 August 1939.

Today the difficult task before me is explaining to you and your colleagues at the Bank of Canada why this letter, dated 10 June 2010, is arguably *more* important and *more* valuable than Einstein's Promethean communiqué of 1939.

I am able to wrangle this monumental challenge – to a certain extent – with a tenable solution to the most long-standing, fundamental, open problem in economics: *Truly Non-Cooperative Games: A Unified Theory* (APPENDIX II).

But anecdotal evidence suggests this 3-page game-theoretical development requires further explanation.

Consider, for example, the following two replies regarding this solution:

Subject: Truly Noncooperative Games

Date: Mon, 17 Aug 2009 15:59:31 +0300

From: Prof. Aumann's Office
To: Matt Funk, FLS

Dear Dr. Funk,

Prof. Aumann has looked over your paper. He is very gratified that you cited his Nobel lecture. The idea looks interesting, but Prof. Aumann does not feel sufficiently confident in the areas that it touches on to warrant a closer reading that would justify communicating it to the NAS.

He wishes you the best of success in identifying another member of the Academy who would be willing to do so.

Sincerely,

Talya Bar-Ilan
Assistant to Prof. Aumann
Center for Rationality
The Hebrew University
Givat Ram
Jerusalem 91904

Subject: Truly Noncooperative Games Date: Mon, 06 Jul 2009 17:56:29 -0400

From: HaroldW Kuhn

To: Matt Funk

Dear Matt:

I suggest you contact Dr. John Nash at:

kjfnj(a)math.princeton.edu

He is alive (barely) and should be more interested in your ideas than I am.

All the best,

^{\$} Einstein's genius reminds us that a society's competitive advantage comes not from teaching the multiplication or periodic tables but from nurturing rebels.... And, as recent research into Einstein's personal papers shows, there's no better glimpse into his offbeat creativity than the way he puzzled out the special theory of relativity.... Einstein alienated so many professors that he was unable to earn a doctorate, much less land an academic job. At the age of 26, he was working as a third-class examiner at the Swiss patent office in Bern.... Other scientists had come close to his insight, but they were too confined by the dogmas of the day. Einstein alone was impertinent enough to discard the notion of absolute time, one of the sacred tenets of classical physics since Newton. 'Imagination is more important than knowledge,' Einstein later said. Indeed, if we are ever going to... come up with a unified theory... we should carve that proclamation above all of our blackboards (2, p. 4).

Harold Kuhn

PS: I have googled you and found your extensive references to my student Clive Granger. If you have further contact, give him my best regards. I am in retirement in New York City.

I shall begin by highlighting, a comprehensive 121-page overview (3) and a 1,344 page supplement (4) of my economic insights and discoveries to date, which were recently published as a Lifeboat Foundation Scientific Advisory Committee Report: *The Principles of Economics & Evolution: A Survival Guide for the Inhabitants of Small Islands, Including the Inhabitants of the Small Island of Earth* (3-4); this treatise is also, essentially, a prequel to a forthcoming dissertation:

Date: Fri, 14 May 2010 23:59:07 -0300 To: Joseph Falzon

Dear Joe,

Sorry it has taken me so long to write to say thank you for all of your hospitality, genuine interest my endeavours, and, moreover, for generously accommodating my PhD dissertation, and bringing me under you wing. I am extremely excited! And, to this point, I have been very busy preparing my PhD summary, and to this very point, not only have I completed my summary, I have completed one-third of my dissertation.

Per our fruitful conversations, I have developed a focused plan-of-attack on the two complimentary components we had discussed: *i*) Systemic risks and *ii*), a comparative domicile study.

If you should find the following outline prudent and agreeable, my plan is to deliver these two components in three concise, potentially high-impact papers.

The first two papers (the first of which is **APPENDIX II**) will address the problem of systemic risks. The reason I've split this component into two separate papers is because, I submit, systemic risks cannot be fruitfully addressed without an economic theory of value (5). This is, arguably, the most fundamental, open problem in economics — my solution is a distillation and synthesis of the fruits of three years of research in a three elegant, highly concentrated pages. Although I have no doubt this paper may face considerable resistance, if I am able to effectively advance this theory and bring it into the light of day, it may indeed deliver impact.

In any case, with this theory of value in hand, I will be positioned to move on to the second paper relating to systemic risks: On The Principles of Economics & Evolution II: In Search of Evolutionarily Stable Finance, Banking & Alternative Investment Strategy. This paper picks up where my recent Lifeboat Foundation Scientific Advisory Committee report [3-4] left off. But I believe that it may prove useful to deliver it as a stand-alone paper; my hope is that it may yield practical value for your department, Faculty of Economics, and the Maltese finance community at large.

And of course I have the same hopes regarding the third component, my comparative domicile study, which preliminary research indicates, will show-case Malta as an ideal finance centre-of-choice.

Otherwise, generally speaking, several friends and colleagues have remarked that the recent volcanic activity in Iceland have helped to highlight the importance and relevance of my researches — I believe historical timing may indeed by on my side.

There's certainly no rush, Joe, but I'd love to hear your thoughts whenever you have some time to spare. My wife and I thoroughly enjoyed our precious time in Malta, and we are looking forward visiting again, soon.

Very best wishes,

Matt

Needless to say, as detailed within my *CurriculumVitae* (**APPENDIX VI**), my researches are completely aligned with the overall scope and duties related to this position, so it seems perhaps I should maintain focus and emphasis upon the relevance and gravity of my 3-page dissertation (**APPENDIX II**, which, I trust you may have gathered, actually represents the first of three instalments of my PhD dissertation) — if you would like to review the remaining 2/3rd's, I will gladly forward these chapters upon request.

Why is this letter more important than Einstein's letter of 1939?

U.S. Secretary of Defense Robert Gates remarked, "Every senior leader, when you're asked what keeps you awake at night, it's the thought of a terrorist ending up with a weapon of mass destruction, especially nuclear" (6, p 43). This insight doesn't offer me much comfort; in fact, it makes me nervous and keeps me up late at night, because, as noted later in this comprehensive report, "if analysts and collectors working against a common target do not have access to all relevant information about the target, the mission will be less likely to succeed" (6, p 99), and thus, alas, as I've argued at length (3-4), it appears we — Canadians, Americans, and the human race at large — may indeed be unlikely to succeed, as Gates and perhaps "every senior leader" do not have access to the most relevant information — because terrorism is far from the most relevant existential threat insofar as national security and global threat mitigation are concerned. Indeed, the greatest threat, I submit, is the failure to recognize the most significant existential, financial, and economic risks (3–4, 7–13).

Which is exactly why I will emphasize a forthcoming publication which distills this problem in 13 pages: *On the Origin of Mass Extinctions: Darwin's Nontrivial Error* (10). This paper also offers the opportunity for me to bring demonstrate the relevance and value of two decidedly different, but utterly essential, rare, and thus valuable assets I have to offer: I trust the relevance of my researches under Prof. Joseph Falzon, Chair of the department of Banking & Finance, faculty of economics, at The University of Malta may speak for themselves. However, the relevance of my Fellowship at

The Financial Stability Department conducts analysis and research on questions relating to overall financial stability in Canada, including the assessment of the financial system's vulnerability to potentially stressful scenarios, and overseeing clearing and settlement systems that could pose systemic risk. The department also conducts regular monitoring of the financial sector in Canada and abroad. Departmental economists and analysts examine and analyze issues such as: the monitoring of risks to overall financial stability; payment, clearing, and settlement systems; and the development of federal financial sector policy.

The senior officer will lead the department's work on infrastructure policy issues. As a Director in the Financial Stability Department, you provide strategic direction and leadership for a variety of financial stability issues, including oversight of designated payment, clearing, and settlement systems and the department's input on financial sector infrastructure policy issues. As a member of the department's Senior Leadership Team, you are a key contributor to the definition and development of the department's strategic direction, objectives, and priorities. You also oversee the work of the Infrastructure Policy Division, and contribute to policy advice included in the Bank's publications such as the Bank of Canada Review and the Financial System Review (1).

the Linnean Society of London, the world's oldest biological society, may not be as immediately clear. Fellows are interested in evolutionary theory in it's broadest sense, and this is indeed crucial, since, in reality, all true theories must be 'evolutionary' in order to be thinkable or true:

Is evolution a theory, a system, or a hypothesis? It is much more, it is a general postulate to which all theories, all hypothesis, all systems must henceforward bow and which they must satisfy in order to be thinkable and true. Evolution is a light which illuminates all facts, a trajectory which all lines of thought must follow, this is what evolution is (14, p 129).

Of course not everyone has figured this out, but it does seem that several are beginning to see the light:

Structurally, the market turbulence of 2007 and 2008 has profoundly shaken confidence in traditional physics based approaches to modeling financial structures. Rather than merely tweak existing physics models, Andrew Haldane of the Bank of England, Professor Lord Robert May, Baron of Oxford and Fellow of Oxford University and Professor George Sugihara of UC San Diego will argue that a more radical shift may be required: a full scale migration to biology based financial models (15).

And that's exactly what I've done – developed a unified theory of value based upon biology and cosmology (e.g., unifying planetary, stellar, and galactic evolution, too). And, to this very point, neither Haldane, May, Sigihara, or, as far as I'm aware, any others have, to date, identified or recognized a nontrivial error in evolutionary theory (10), and thus begun to explore the politico-economic implications which follow from it. Although this theory seems to require one long argument (i.e., 3-4), I will contextualize with two brief remarks regarding recent testimony from George Soros:

The salient feature of the current financial crisis is that it was not caused by some external shock like OPEC raising the price of oil or a particular country or financial institution defaulting. The crisis was generated by the financial system itself. This fact that the defect was inherent in the system-contradicts the prevailing theory, which holds that financial markets tend toward equilibrium and that deviations from the equilibrium either occur in a random manner or are caused by some sudden external event to which markets have difficulty adjusting. The severity and amplitude of the crisis provides convincing evidence that there is something fundamentally wrong with this prevailing theory and with the approach to market regulation that has gone with it. To understand what has happened, and what should be done to avoid such a catastrophic crisis in the future, will require a new way of thinking about how markets work (16).

Soros did indeed highlight the need for a new way of thinking about about how markets work, which I have already begun to do (3–4, 7–13). Furthermore, my researches also take into consideration "external shocks" (cosmic inputs, volcanic eruptions, *etc.*) which, it appears, most contemporary economists would rather not consider.

Soros and countless others invariably miss another important, dimly seen, and misunderstood truth:

The financial crisis has showed signs of abating. But guaranteeing that the banks at the center of the global financial system will not fail has precipitated a new crisis that caught the authorities unawares: countries at the periphery, whether in Eastern Europe, Asia, or Latin America, could not offer similarly credible guarantees, and financial capital started fleeing from the periphery to the center. All currencies fell against the dollar and the yen,

some of them precipitously. Commodity prices dropped like a stone and interest rates in emerging markets soared. So did premiums on insurance against credit default. Hedge funds and other leveraged investors suffered enormous losses, precipitating margin calls and forced selling that have also spread to markets at the center (16).

Why did this phenomena catch "the authorities unawares"? Why do Soros, Stiglitz, Bernacke, Geither, Krug, and countless other nonrealists find the reality of this situation so puzzling? Simply because they are unable to grasp the simple fact that economic power^{\$} is a derivative function of military power.[£]

But this is no mystery to me (cf 12).

In his 2001 Sveriges Riksbank Prize lecture, Joseph Stiglitz recollected that

when I began the study of economics some forty one years ago, I was struck by the incongruity between the models that I was taught and the world that I had seen growing up, in Gary, Indiana, a city whose rise and fall paralleled the rise and fall of the industrial economy. Founded in 1906 by U.S. Steel, and named after its Chairman of the Board, by the end of the century it had declined to but a shadow of its former self. But even in its heyday, it was marred by poverty, periodic unemployment, and massive racial discrimination. Yet the theories that we were taught paid little attention to poverty, said that all markets cleared—including the labour market, so unemployment must be nothing more than a phantasm, and that the profit motive ensured that there could not be economic discrimination. If the central theorems that argued that the economy was Pareto efficient—that, in some sense, we were living in the best of all possible worlds—were true, it seemed to me that we should be striving to create a different world (19, p 473).

In his autobiography, he added that

growing up in Gary Indiana gave me, I think, a distinct advantage over many of my classmates who had grown up in affluent suburbs. They could read articles that argued that in competitive equilibrium, there could not be discrimination, so long as there are some non-discriminatory individuals or firms, since it would pay any such firm to hire the lower wage discriminated-against individuals, and take them seriously. I *knew* that discrimination existed, even though there were many individuals who were not prejudiced. To me, the *theorem* simply proved that one or more of the assumptions that went into the theory was wrong; my task, as a theorist, was to figure out which assumptions were the critical ones (20).

Although my home-town of Kentland, Indiana, is 41 miles due south of Gary on U.S. Highway 41, I did not find Indiana as instructional as the Indiana of Stiglitz's youth. But I have discovered that "islands" may offer far more

The main metrics of world power... are gross domestic product (GDP), population, defense spending, and a less precise factor that includes innovation in technology. Power is summed as a percentage of total global power: Fourteen nations hold at least a 1 percent share. The United States holds about 20 percent of global power; the European Union (considered as a unified actor) and China, about 14 percent each. India holds about 9 percent. Brazil, South Korea, and Russia hold about 2 percent each. In moving toward 2015, the US will first gain power, then decline somewhat, ending up at about where it is now. The EU, however, will lose power, as will all non-US members of the G-8. The gainers will be China and India. The assessment identifies possible alliances that could match the power of the United States acting alone or with its traditional allies. It also examines the most likely locations for future conflict. Asia is by far the most dangerous region, with six of the eight conflict-prone bilateral balances involving China (17).

[£] The battlefield is symbolic of the field of life, where every creature lives on the death of another. A realization of the inevitable guilt of life may so sicken the heart that, like Hamlet or like Arjuna, one may refuse to go on with it. On the other hand, like most of the rest of us, one may invent a false, finally unjustified, image of oneself as an exceptional phenomenon in the world, not guilty as others are, but justified in one's inevitable sinning because one represents the good. Such self-righteousness leads to a misunderstanding, not only of oneself, but of the nature of both man and the cosmos (18, p 238).

educational advantages, and far more illuminating bio-geo-politico-economic insights (3–4; 9) than those offered in Gary, Indiana.

Furthermore, I have concluded that growing up in Indiana may have been a distinct *disadvantage* for Stiglitz, afterall. In fact, I have concluded that the assumptions he "figured out" were all wrong.

To this salient point, I should take this opportunity to anticipate a question which may arise for those who may choose to review *The Principles of Economics & Evolution: A Survival Guide for the Inhabitants of Small Islands, Including the Inhabitants of the Small Island of Earth* (3—4), and, furthermore, highlight just how rare and valuable my theoretical discoveries have turned out to be, and, thus, the ultimate value proposition I have to offer the Bank of Canada. For example, I recently communicated my discontent for the fact that Professor Stiglitz has been slated to deliver the Adam Smith lecture at the upcoming European Economic Association's (EEA) 25th annual Congress, to which London School of Economics economist, Tim Besley, President of the EEA, kindly and graciously replied:

Subject: Mistakes Were Made (but not by me) Date: Fri, 28 May 2010 18:11:44 +0100

Dear Matt,

Thanks for the your candid e-mail. You are the only person I have yet encountered who seems to have a problem with having Joe presenting this major EEA lecture. Indeed, many people have expressed their great enthusiasm for having him do so and regard his lecture as one of the highlights of the Congress. But I respect your right to dissent and will be sorry to lose you as a member of EEA . Best regards, Tim Besley

And although I did offer a detailed explanation for my discontent in my reply to Besley (see 3, pp 60-66), I did not dig into the relevant specifics regarding Stiglitz's Error, which I shall deliver here.

First, we must consider "the rules of the game", so to speak, as clearly distilled by one of Lord Keynes' finest students, Joan Robinson:

With all these economic doctrines, decaying and reviving, jostling each other, half understood, in the public mind, what basic ideas are acceptable, and what rules of policy are derived from them?

In the midst of all the confusion, there is one solid unchanging [principle] that we take so much for granted that it is rarely noticed... The very nature of economics is rooted in nationalism.... It would never have been developed except in the hope of throwing light upon questions of policy. But policy means nothing unless there is an authority to carry it out, and authorities are national (21, p 124).

Although many may presume that any Nobel-prize-winning economist would be wise to this elementary truth, it appears this would be presuming far too much.

Lord Keynes was ridiculed for promoting the Bancor as the reserve currency-of-choice at the famous Bretton

Woods conference of 1944 – and unsurprisingly, the U.S. rejected this promotion.

Why?

Because is rooted in *nationalism*.

It was perfectly logical that Keynes – and Englishman – endeavoured to promote England's interests by pushing reserve currency away from the USD; and it was equally logical why the United States would fight to maintain the USD as the reserve currency-of-choice.

And thus, perhaps now it may be clear why it Stiglitz is either *A*) stupid, or *B*) a traitor, because, as I suspect you all may be well-aware, Stiglitz – an American economist (and fellow Hoosier, I loathe to admit) – backs China's push to resign the USD as the reserve currency hegemon and create an IMF reserve currency (which, of course is pure folly – the IMF has about as much economic power as Iceland, and, in the end, this fundamentally flawed strategy poses to wreak as much damage here in Canada as in the U.S.

Which brings us to an important point: As a strategist, naturally I must carefully consider the most significant reservations you may have insofar as my candidacy for this position is concerned. I have identified two such points which I will briefly address.

The first relates to my limited job experience — although I may not have the on-the-job experience you seek, I trust that you may recognized that my researches have taken me so far above and beyond contemporary economics, that I may be without peer — and the these heights would not have been remotely possible without a decade of dedicated, fiercely independent study. And this, I submit, is of a much greater value to you and the people of Canada.

Second, speaking to my point regarding Stiglitz, despite the fact that I am indeed a landed immigrant here in Canada (and eligible for Citizenship, by the way), it may concern the Bank of Canada that I am not *Canadian*.

First, as I have noted in a very important paper (10), my researches highlight the crucial importance of international cooperation, and to be certain, I am fully aware of the inter-dependent, international nature of the financial markets. And, furthermore, I do indeed recognize that my interests are fully aligned with the interests of the nation in which I live as a proud immigrant. And, despite the fact that this has been well understood for a very long time, it is, curiously, relatively unknown today:

Even a strong [nation], in its prime, and given the task at the right moment, usually fails to perform it; for at the

moment the immense importance of the opportunity is hardly ever understood, while the selfish interests of the individual and the generation are opposed to the interest of the [nation] as a whole. Only the most far-seeing and high-minded statesmen can grasp the real weight, from the [national]-standpoint, of the possibilities which to the men of their day seem so trivial. The conquest and settlement rarely take place save under seldom-occurring conditions which happen to bring about identity of interest between the individual and the [nation]. Dutch seamen knew the coasts of Australia and New Zealand generations before they were settled by the English, and had the people of Holland willed to take possession of them, the Dutch would now be one of the leading [nations] of mankind; but they preferred the immediate gains to be derived from the ownership of the trade with the Spice Islands; and so for the unimportant over-lordship of a few patches of tropical soil, they bartered the chance of building a giant Dutch Republic in the South Seas. Had the Swedish successors of Gustavus Adolphus devoted their energies to colonization in America, instead of squabbling with Slavs and Germans for one or two wretched Baltic provinces, they could undoubtedly have built up in the new world a Sweden tenfold greater than that in the old. If France had sent to her possessions in America as many colonists as she sent soldiers to war for petty townships in Germany and Italy, the French would now be masters of half the territory north of the Rio Grande. England alone, because of a combination of causes, was able to use aright the chances given her for the conquest and settlement of the world's waste spaces; and in consequence the English-speaking peoples now have before them a future more important than that of all the continental European peoples combined....

It is natural that most nations should be thus blind to the possibilities of the future. Few indeed are the men who can look a score of years into the future, and fewer still those who will make great sacrifices for the real, not the fancied, good of their children's children; but in questions of [national] supremacy the look-ahead should be for centuries rather than decades, and the self-sacrifice of the individual must be for the good not of the next generation but perchance of the fourth or fifth in line of descent....

This indifference on the part of individuals to the growth of the [nation] is often nearly as marked in new as in old communities, although the very existence of these new communities depends upon that growth. It is strange to see now the new settlers in the new land tend to turn their faces, not towards the world before them, but towards the world they have left behind. Many of them, perhaps most, wish rather to take parts in the struggles of the old civilized powers, than to do their share in laying the obscure but gigantic foundations of the empires of the future. The New Englander who was not personally interested in the lands beyond the Alleghanies often felt indifferent or hostile to the growth of the trans-montane America; and in their turn these over-mountain men, these Kentuckians and Tennesseans, were concerned to obtain a port at the mouth of the Mississippi rather than the right to move westward to the Pacific. There were more men in the new communities than in the old who saw, however imperfectly, the grandeur of the opportunity and of the [national]-destiny: but there were always very many who did their share in working out their destiny grudgingly and under protest.

The [nation] Grows because its Interests Happen to be Identical with those of the Individual.

The [nation] as a whole, in its old homes and its new, learns the lesson with such difficulty that it can scarcely be said to be learnt at all until success or interests failure has done away with the need of learning it (22).

And, with this crucial reflexion in mind, since my interests as a Canadian immigrant happen to be very much aligned with yours and our fellow Canadians, I'm obliged to bring a nontrivial error to your attention. Although Canada's prudent, conservative, fiscal and monetary policies appear exemplary to me in almost all regards, I recently stumbled upon one troubling report:

There's one mention of the word gold in the Bank of Canada's latest annual report. There are no mentions of bullion.

Canadians once owned 30 million ounces. Now we own none, preferring to back our currency with rock-solid things such as U.S. dollars and other pieces of paper worth something only as long as we all agree they're worth

something (Taylor).\$

Finally, I will bring this long letter of application to a close with one final, optimistic note.

Although it may be true that, like Malthus, "the view which [I have] given of human life has a melancholy hue, ... [I feel] conscious that [I have] drawn these dark tints from a conviction that they are really in the picture, and not from a jaundiced eye or an inherent spleen of disposition" (23), but I do, however, uphold my duty to endeavour remain optimistic — and I would certainly bring this spirit to the Bank of Canada.

APPENDIX II highlights the importance of what one of the greatest and most revolutionary technological advances to date: the internet.

And thus, as economists and strategists, perhaps we may wish to briefly consider the miracle by which a Canadian-American naturalist-economist on Prince Edward Island discovered this important opportunity at the Bank of Canada.

How do we search for valuable signals and find relevant information?

How do we recognize them?

How do we send or repeat such signals once we've discovered, produced, or received them ourselves?

Consider, for example, a strong and timely signal I repeated in September of 2008...

Subject: On Optimism[£]

Date: Tue, 02 Sep 2008 01:34:48 -0300

From: Matt Funk

To: Don Funk, Godfrey Baldacchino, Palanisamy Nagarajan, Barry Bartmann, Ben Funk, & Bruno Frey

Indeed, there is much uncertainty, turmoil, and inefficiency to lament today, but I'd like to showcase one major bright spot: the lightning-quick information dissemination mechanism we have today known as the internet. Case in point: Attached herewith find one of the most insightful, logical, and honest papers to come out of the Federal Reserve in quite some time, a paper [25] delivered just hours ago in Buenos Aires, Argentina, by Thomas M. Hoenig, President & CEO of the Kansas City Federal Reserve Bank.

^{\$} During 2009 central banks and official institutions as a whole became net buyers, rather than sellers, of gold. Net annual sales for the year as a whole, at 44 tonnes, were a small fraction of those of previous years. Since 27 September 2009, the start of the third Central Bank Gold Agreement, the only significant seller to date (April 2010) has been the International Monetary Fund (IMF), although the Fund's sales of 212 tonnes of gold in 2009 were completed in off-market transactions with central banks, and therefore did not constitute net selling to the private sector. IMF statistics for February 2010 show a decline in the Fund's gold holdings of 6 tonnes, marking the beginning of on-market sales within the ceiling set by CBGA3. Among signatories to CBGA3, Germany has sold a small amount for coin minting. In contrast a number of purchasers have emerged on the buy side in addition to countries such as Russia and Belarus who have been adding to their gold reserves for some years. India, Sri Lanka and Mauritius together bought over half of the gold the IMF had available for sale. China announced in April 2009 that it had added 454 tonnes to its gold reserves since 2003, a 76% increase. The Philippines, whose gold reserves fluctuate as it buys up domestic production and later sells on the market, was a net purchaser in both 2008 and 2009, as it was in most years before 2003, in contrast to being a net seller in the years 2003 to 2007.

[£] Spiegel Verlag: Herr Popper, you are nearly ninety years of age and have always described yourself as an optimist through and through. But this interview has struck some very pessimistic notes. Has new knowledge come in the evening of life?

*Popper: Optimism is a duty. One must focus on the things that need to be done and for which one is responsible. What I have said... is meant to make you and others vigilant. We must live so that our grandchildren have a better life than ours—and not just in an economic sense (24).

First, in order to place this transmission within a relevant historical context, note the DJIA closed later that day at 11,532.88, and, moreover, that I had been attempting to transmit strong "sell" recommendations for over a year at this juncture (see 4, pp 454–464).

Though this historical fact may merit a thorough exploration of it's own, the most relevant points are not only that *A*) was I able to access a US Federal Reserve President's strong support for my sell recommendations (again, delivered mere hours earlier in Argentina) from my humble home on the north shore of Prince Edward Island, but *B*) I was also able to send this timely communiqué to three UPEI colleagues, my father in Chicago, my cousin in London, and an economist in Zurich in a matter of seconds.

Now that's something to be optimistic about!

Yours very truly,

Matt Funk, FLS

- 1. BAC (2010) Director: FSD-SO-001-10 RL. (Bank of Canada, Ottawa).
- Isaacson W (2007) The World Needs More Rebels Like Einstein. Wired 15:4.
- 3. Funk M (2010) The Principles of Economics & Evolution: A Survival Guide for the Inhabitants of Small Islands, including the Inhabitants of the Small Island of Earth. Lifeboat Foundation Scientific Advisory Report http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution.pdf (Lifeboat Foundation, Minden).
- 4. Funk M (2010) "Digital Supplement" to *The Principles of Economics* & *Evolution* (3). Lifeboat Foundation Scientific Advisory Report http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution.digital.supplement.php (Lifeboat Foundation, Minden).
- Stigler G (1982) The Process and Progress of Economics. Sveriges Riksbank Prize lecture (Royal Academy, Stockholm).
- 6. Graham B, et al (2008) World at Risk (Random House, New York).
- 7. Funk M (2009) On the Truly Noncooperative Game of Life on Earth: Darwin, Hardin, & Ostrom's Nontrivial Errors. *MPRA* 19442:1-5, http://mpra.ub.uni-muenchen.de/19442/
- 8. Funk M (2008) On the Truly Noncooperative Game of Life on Earth: In Search of the Unity of Nature & Evolutionary Stable Strategy.

 MPRA 17280:1-21, http://mpra.ub.uni-muenchen.de/17280/
- Funk M (2009) On the Truly Noncooperative Game of Island Life: Introducing a Unified Theory of Value & Evolutionary Stable 'Island' Economic Development Strategy. MPRA 19049:1-113, http://mpra.ub.uni-muenchen.de/19049/
- Funk M (2009) On the Origin of Mass Extinctions: Darwin's Nontrivial Error. MPRA 20193:1-13, http://mpra.ub.uni-muenchen.de/20193/
- 11. Funk M (2010) On the Problem of the Island of Earth: Introducing a Universal Theory of Value in an Open Letter to The President of the United States. MPRA 14489, http://mpra.ub.uni-muenchen.de/14489/

- 12. Funk M (2009) On the Problem of Economic Power: Lessons from the Natural History of the Hawaiian Archipelago. *MPRA* 19371:1-19, http://mpra.ub.uni-muenchen.de/19371/
- 13. Funk M (2009) On the Travesty of the Tragedy of the Commons: Hardin's Nontrivial Error. MPRA 19203:1-1, http://mpra.ub.uni-muenchen.de/19203/
- 14. Dobzhansky T (1973) Nothing in biology makes sense except in light of evolution. *Amer Biol Teacher* 35:125-129.
- 15. ARC (2009) 7th Annual Global ARC brochure (ARC, Boston).
- 16. Soros G (2008) Statements of George Soros before the U.S. House of Representatives Committee on Oversight and Government Reform. 13 November 2008 (Hose of Representatives, Washington).
- 17. Treverton G, Jones S (2005) Measuring national power (RAND, Santa Monica).
- 18. Campbell J (1949) *The Hero with a Thousand Faces* (Bollingen Foundation, Princeton).
- 19. Stiglitz J (2001) Information and the Change in the Paradigm in Economics. Sveriges Riksbank Prize lecture (Royal Academy, Stockholm).
- 20. Stiglitz, J (2001) *Autobiography*. Sveriges Riksbank Prize (Royal Academy, Stockholm).
- 21. Robinson J (1962) What are the rules of the game? Chapter in "Economic philosophy". 1983 ed (Penguin, Singapore).
- 22. Roosevelt T (1894) The Winning of the West. Vol IV
- 23. Malthus T (1798) An Essay on the Principle of Population (Johnson, London).
- 24. Popper K (1992) In Search of a BetterWorld [Auf der Suche nach einer besserenWelt] (Routledge, London).
- 25. Hoenig T (2008) Central banks: changing markets changing mandates. Speech by T Hoenig, at the Central Bank of Argentina, Buenos Aires, 1 September 2008.

APPENDIX II

TRULY NON-COOPERATIVE GAMES: A UNIFIED THEORY



Fig. 1. -A Conversation with Willard Boyle (1)

A DISSERTATION

Presented to the Faculty of The University of Malta, in Candidacy for the Degree of Doctor of Philosophy. [£]

Matt Funk, FLS Copyright © Funk 2010 – Revised 31 May 2010 matt@funkisland.org

For my son, William.

^{\$ [}A] Canadian... won a Nobel Prize Tuesday. But physicist Willard Boyle had to move to the U.S. to do his cutting-edge work.

Dr Boyle... warned that managers need to give scientists leeway to come up with the kinds of transformative inventions that are too often stifled by paperwork and red tape.

What scientists face today is 'almost disgraceful. Do you think... George Smith and I ever wrote a business plan [or "ethics review board" requests, or wasted time slaving over academic journal formalisms]?... You don't have time to do that kind of baloney.'

Early in his career, Dr Boyle got a job at Bell Laboratories, a private research lab in New Jersey where he was given free rein to pursue his interests. He and Dr Smith, who is American, came up with their invention while sketching possibilities on a blackboard in October, 1969.

^{&#}x27;There was something about that institution,' Dr Boyle told The Chronicle-Herald in Halifax...

^{&#}x27;I guess it was the management and the style and the general environment of the place....' [read: freedom].

Dr Boyle... said policy-makers should look at the practices of think tanks that produce Nobel Prize-winners..., instead of 'pouring money randomly into [things], expecting the same results.'

^{&#}x27;Usually... management people or... politicians haven't got the foggiest idea of what science is all about.' What is needed is 'an appreciation for the free will, free spirit of scientists. Give them a chance to do the things they want to do' (2; cf 3; §3).

[£] The writer's object in putting forward his views in the present imperfect manner is to submit them to the test of other minds, and to be made aware of all the facts supposed to be inconsistent with them. As his hypothesis is one which claims acceptance solely as explaining and connecting facts which exist in nature, he expects facts alone to be brought to disprove it; not à-priori arguments against its probability (4).

ABSTRACT

This brief communique offers an introduction and broad overview of Truly Non-cooperative Games, axioms and complimentary negotiation models developed to analyse the human "Struggle for Life" (cf 5-10), which yield *The Principle of Relative Insularity*, a unified theory of value which unites economics, astrophysics, and biology. In brief, we discover that value is a derivative function of relative insularity.§

§1. INTRODUCTION[£]

It appears Aristotle may have been amongst the first to search for a theory of value (13), and this quest has kept problemsolvers awake at night ever since:

In economics the most fundamental of these central problems is the theory of value. The theory of value must explain how the comparative values of different goods and services are established. Until that problem is solved, it is not possible to analyse for scientific purposes what will be produced and in what quantities, how the resources will be employed in producing the menu of outputs, and how the resources will be valued (14).

And thus it remains impossible to analyse a myriad of related mission-critical issues, including the problem of sustainable economic development, global warming, warfighting, asteroids, supervolcanoes, reserve currencies, monetary policy, and value at risk (VaR). Indeed, "insufficient consideration of [these] circumstances lie at the root of [our present] difficulties" (15).

§2. HYPOTHESIS

Nash developed fruitful equilibrium points (16; cf 17) and non-cooperative games (18), emphasizing the existence of

situations in economics or international politics in which, effectively, a group of interests are involved in a non-cooperative game without being aware of it; the non-awareness [making] the situation truly non-cooperative (18).

Our theory (19-23), in contradistinction, highlights the truly non-cooperative nature of *every situation in the universe*. Thus our realistic, asymmetric games (24) share attributes with games against nature (25; *cf* 26),

^{\$} Value is the essence of things in economics. Its laws are to political economy what the law of gravity is to mechanics. Every great system of political economy up till now has formulated its own peculiar view on value as the ultimate foundation in theory of its applications to practical life, and no new effort at reform can have laid an adequate foundation for these applications if it cannot support them on a new and more perfect theory of value (11).

[£] When we propose a theory... we also propose, or try to understand, its logical implications; that is, all those statements which follow from it. But this... is a hopeless task: there is an infinity of unforeseeable nontrivial statements belonging to the informative content of any theory, and an exactly corresponding infinity of statements belonging to its logical content. We can therefore never know or understand all the implications of any theory, or its full significance.

^{...}Understanding a theory is always an infinite task, and... theories can in principle be understood better and better. ...If we wish to understand a theory better, what we have to do first is to discover its logical relation to those existing problems and existing theories which constitute what we may call the 'problem situation'.

Admittedly, we also try to look ahead: we try to discover new problems raised by our theory. But the task is infinite, and can never be completed (12).

but as the exposition of the entire group of considerations would be rather difficult to follow, only a few quite elementary reflexions will be given..., from which the reader will readily be able to inform himself [i.e., 19-23] as to the suppositions of the theory and its line of thought (27).

Axioms (19-20) offer an indirect proof, reductio ad absurdum, (20) for our unified theory of value, and, in short, we find that The Struggle for Life (5-10) is, in essence, an endless drive toward insularity; and thus, that economic and evolutionary Value (V) is a derivative function (f') of relative insularity (I_R): $\Rightarrow V = f'(I_R)$. We refer to this as The Principle of Relative Insularity, a postulate which informs evolutionarily stable strategy (cf 28) for all politico-economic players in the game of life of earth.

In brief, rational game-play (20) reveals that long-term human survival requires splitting resources and efforts between two inherently conflicting objectives (ecological preservation and economic development), and thus the great difficulty lies within the fact that we can not nor will ever be sufficiently informed to understand how much or how many inherently 'ecologically degrading' economic activities are required in our never-ending quest for human survival (cf 19-23), but, perhaps to our surprise, our theory does indeed inform evolutionarily stable strategy. Alas, however, "nothing seems less wanted than a simple solution to an age-old... problem" (29); thus we shall emphasize and contextualize: Ulam once challenged Samuelson to name a social theory which was nontrivial and true; Samuelson countered with Ricardo's theory of comparative advantage:

That it is logically true need not be argued before a mathematician; that it is not trivial is attested by the thousands of ... men who have never been able to grasp the doctrine for themselves or to believe it after it was explained to them (30).

Indeed, this may be true, as innumerable intelligent islanders around the world appear unable to grasp this doctrine (21), but a stronger rebuttal to Ulam's challenge presently requires our immediate and undivided attention: *On the Origin of Mass Extinctions: Darwin's nontrivial error* (22).

Furthermore, the denaturalization of economics (31), logic of war (32), derivative nature economic power (33), Hardin's error (34), and Popper's solution to *The Problem of Induction* (35) require careful consideration as well. Indeed, investing in these arguments (31-35) may help clearly explain why in-communicative (36) and thus truly uncooperative "prisoners" (*cf* 37) – *the unknown and unknowable future* (20) – beg us to reconsider many fashionable theories, plead for international cooperation (*cf* 22), and even implore us to consider a revolutionary approach to science.§

^{\$} One can argue that all environments are hostile, and that death and extinction are probable events, while survival is improbable.... In my opinion, this problem may well be used as the framework on which to build the teaching of [science] (38).

§3. A NOTE ON METHOD

Gutenberg's invention was a piece of technology that made printing... simple and inexpensive. His first [book] was a bible. Venture capitalists, if there were such a thing in fifteenth-century Germany, might have looked at Gutenberg's... invention and seen a way to make cheaper bibles. "Let's pour some money into Gutenberg's printing press and in a few years we can take over the whole Bible business," they might... have concluded. If they had done so, however, they would have missed the entire point... The printing press was not about cheaper bibles, it was a technological revolution that made it possible for anyone with an idea to publish anything. [It] changed our world. It led to an explosion of knowledge, of learning, of ideas. It brought down Medieval Europe..., crushed the Power of Kings, and gave rise to the middle class, manufacturing, and trade. It set off the Enlightenment and created... the world we inhabit today. We are, in effect, the direct descendents of the Gutenberg Revolution. The US Constitution is a written, printed document. It enumerates our rights and how our country is supposed to work. Yet the very first Amendment..., the very core of the Bill of Rights does not say "You have the right to vote" or "You have the right to be free." Instead, it says, "Congress Shall Make No Law Abridging a Free Press", ...because... the primary bulwark of a free society is a free press (39).

The internet represents a technological advance of equal wonder. It has spawned revolutions of equal significance. Indeed, this world-wide-web has linked and liberated true problem-solvers, thereby helping to deliver (*i.e.*, 19-23; 33-34; 50) this revolutionary theory of value to you.

Fellow sailor George Smith was recently commended for his 3-page PhD thesis (42); this compliment intrigued me; but profound truths (2) uttered by another sailor intrigued me even more; in fact, they inspired me enough to chart a course for Halifax, because scientific method (43-45; *cf* 2, 9, 12, 20-23, 29, 35, 41) is another affair I actively explore. And, although we did indeed discuss this profound truth at length (1), I'll merely pass along a single bit of wisdom:

It's always a bad sign when people come into meetings with stacks under their arms and start handing you piles to read. I hired Smith because he was able to communicate something very complex and very important in just three pages (1).

With these sage words in mind, we'll bring this 3-page dissertation to a close with a parting reflexion: Since economics was created to promote national interests (46), it should come of no surprise that most *real* problems (*e.g.*, 2-29; 31-47) remain largely outside this non-existent realm, and thus economics (and the social sciences at large) remain unable to inform strategy regarding mission-critical global threats. And that is problematic, because cosmic inputs (19-20; 22) are the most nontrivial "economic" inputs, and, the strategies and "subtle differences between... species that [die] and those that [survive is] crucial (47). And that's exactly why we're not really playing games here, afterall."

^{\$} Internet publishing reduces the stifling impact of the refereeing process on the papers accepted and submitted to journals. ...Scholars are less bound to devote a large part of their time and effort on formalisms. They have more leeway to concentrate on matters of content (40; cf 41).

[£] Almost invariably, a scientist is motivated by values not strictly part of the science itself. The lust for fame, for material rewards—even the pure love of truth—these goals may possibly be fulfilled by scientific success, but are themselves not... worthwhile goals. What drove Mises, what accounted for his passionate dedication, his ability to calmly ignore the sneers of, and the isolation imposed by academic contemporaries, was his conviction that the survival of mankind depends on the development and dissemination of... economics....

Economics is not simply a matter of intellectual problem solving, like a challenging crossword puzzle, but literally a matter of the life or death of the human race (45).

"This sketch is most imperfect; but in so short a space cannot make it better. Your imagination must fill up very wide blanks" (48). But for those interested in exploring this hypothesis in exhaustive detail, a 1,354 page treatise is readily and freely available to all, thanks to our friends at The Lifeboat Foundation (cf 49).

- Boyle W (2010) Conversation with Dr Willard Boyle. 2 February 2010, 12:00PM-1:30PM (The Halifax Club, Halifax).
- 2. Boyle W, et. al. (2009) Canadian Winner Bemoans Bureaucracy. 6 October 2009. Globe and Mail.
- 3. House of Representatives (2010) H. Res. 1069: Congratulating Willard S. Boyle and George E. Smith (House of Representatives, Washington).
- 4. Wallace A (1855) On the Law Which has Regulated the Introduction of New Species. *Ann of Nat History* 16:184-195.
- Copernicus, N (1543) On the Revolutions of the Heavenly Spheres (Abbot, London).
- Smith A (1776) Inquiry into the Nature and Causes of the Wealth of Nations (Strahan & Cadell, London).
- 7. Malthus T (1798) Essay on the Principle of Population (Johnson, London).
- 8. Darwin C, Wallace A (1858) The Darwin-Wallace Paper. *Proc Linn Soc* 3:45-62.
- 9. Gould S (2002) Structure of Evolutionary Theory (Harvard Univ Press, Cambridge).
- 10. Hawking S (2008) Asking Big Questions about the Universe (TED, New York).
- 11. Wieser F (1893) Natural Value (Macmillan & Co., London).
- 12. Popper K (1974) Unended Quest (Routledge, London).
- 13. Menger C (1871) Principles of Economics (Mises, New York).
- 14. Stigler G (1982) Process and Progress of Economics. *J of Pol Econ* 91:529-545.
- Einstein A (1905) On the Electrodynamics of Moving Bodies. Ann Phys 17:891–921
- 16. Nash J (1950) Equilibrium points in n-person games. *Proc Natl Acad Sci USA* 36:48–49.
- 17. Holt C, Roth A (2004) Nash equilibrium: A perspective. *Proc Natl Acad Sci* USA 101:3999-4000.
- 18. Nash J (1950) Non-Cooperative Games (Princeton Univ, Princeton).
- 19. Funk M (2009) On the Truly Noncooperative Game of Life on Earth: Darwin, Hardin, & Ostrom's Nontrivial Errors. *MPRA* 19442:1-5, http://mpra.ub.uni-muenchen.de/19442/
- Funk M (2008) On the Truly Noncooperative Game of Life on Earth: In Search of the Unity of Nature & Evolutionary Stable Strategy. MPRA 17280:1-21, http://mpra.ub.uni-muenchen.de/17280/
- 21. Funk M (2009) On the Truly Noncooperative Game of Island Life: Introducing a Unified Theory of Value & Evolutionary Stable 'Island' Economic Development Strategy. MPRA 19049:1-113, http://mpra.ub.uni-muenchen.de/19049/
- 22. Funk M (2009) On the Origin of Mass Extinctions: Darwin's Nontrivial Error. *MPRA* 20193:1-13, http://mpra.ub.unimuenchen.de/20193/
- 23. Funk M (2010) On the Problem of the Island of Earth: Introducing a Universal Theory of Value in an Open Letter to The President of the United States. MPRA 14489, http://mpra.ub.uni-muenchen.de/14489/
- 24. Selten R (1980) Note on Evolutionarily Stable Strategies in

- Asymmetric Animal Conflicts. J Theor Biol 84:93-101.
- 25. Milnor J (1951). Games Against Nature (RAND, Santa Monica).
- 26. Harsanyi J (1967-68) Games with Incomplete Information. *Management Science* 14:159-182, 320-334, 486-502.
- 27. Einstein A (1911) On the Influence of Gravitation on the Propagation of Light. *Ann Phys* 35:898–908.
- 28. Maynard Smith J (1982) *Evolution and the Theory of Games* (Cambridge Univ Press, New York).
- 29. Popper K (1962) Conjectures and Refutations (Routledge, London).
- 30. Samuelson P (1969) The Way of an Economist. *Proceedings of the Third Congress of the International Economic Association*:1-11.
- Schabas M (2005) Natural Origins of Economics (Univ of Chicago, Chicago).
- Aumann R (2006) War and Peace. Proc Natl Acad Sci USA 103:17075–17078.
- 33. Funk M (2009) On the Problem of Economic Power: Lessons from the Natural History of the Hawaiian Archipelago. *MPRA* 19371:1-19, http://mpra.ub.uni-muenchen.de/19371/
- 34. Funk M (2009) On the Travesty of the Tragedy of the Commons: Hardin's Nontrivial Error. *MPRA* 19203:1-1, http://mpra.ub.unimuenchen.de/19203/
- 35. Popper K (1959) Logic of Scientific Discovery (Routledge, London).
- 36. Nash J (1953) Two-Person Cooperative Games. *Econometrica* 21:128-140.
- 37. Tucker A (1950) Two Person Dilemma (Stanford Univ, Stanford).
- 38. Dobzhansky T (1964) Biology, Molecular and Organismic. *Amer Zool* 4:443-452.
- 39. McCabe K (2003) Final Cut Express (Charles River Media, Herndon).
- 40. Frey B (2000) Why Economists Disregard Economic Methodology (Universität Zürich, Zürich).
- 41. Frey B (2003) Publishing as Prostitution: Choosing Between One's Own Ideas and Academic Success. *Public Choice* 116:205-223.
- 42. Smith G, Smith, A (2009) *Telephone interview with George E. Smith.* 6 October 2009 (Nobel Committee, Stockholm).
- 43. Popper K (1956) On the Non-Existence of Scientific Method (Center for Advanced Study in the Behavioural Sciences, Stanford).
- 44. Rowbottom D, Aiston S (2006) Myth of 'Scientific Method' in Contemporary Educational Research. *J of Phil of Ed* 40:137-156.
- 45. Kirzner I (2006) *Lifetime Achievement Award Acceptance Speech* (Society for the Development of Austrian Economics, Dallas).
- 46. Robinson, J (1962) Economic Philosophy (Penguin, Singapore).
- 47. Lane N (2007) Mass extinctions. Nature 448:122-125.
- 48. Darwin C (1858) Letter to Asa Gray of Boston, mailed from Down, September 5th, 1857. *Proc Linn Soc* 3:45-62.
- 49. Funk M (2010) Principles of Economics & Evolution: A Survival Guide for the Inhabitants of Small Islands, including the Inhabitants of the Small Island of Earth —
- http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution.pdf (Lifeboat Foundation, Minden).

APPENDIX III

IN DEFENSE OF PRIVATE CLUBS

Subject: Objects of Association

Date: Wed, 04 Feb 2009 13:29:32

From: Matt Funk
To: Marsha Pender

The condition of membership shall be absolute and unqualified loyalty to the Government of the United States of America.

The primary objects of this association shall be:

- 1st. To encourage and promote, by moral, social, and political influence, unconditioned loyalty to the federal government, and to defend and protect the integrity and perpetuity of this nation.
- 2nd. To inculcate a higher appreciation of the value of sacred obligations of American citizenship: to maintain the civil and political equality of all citizens in every section of our common country, and to aid in the enforcement of all laws enacted to preserve the purity of the ballot box.

—Articles of Association, The Union League Club of Chicago, 19 December 1879^s

Greetings Marsha,

I just made a new reservation to bring my wife and my son, William, to the club to celebrate his 6th birthday this weekend, discovered President Owen's letter (2) to the former Governor on your home-page, and decided to write you a quick note.

You may recall that I'm a reciprocal member from The Halifax Club.

William and I love everything about the club – the beautiful rooms, genuine service, inspiring artwork, impressive and useful library, and your superb athletic facilities. Of course we enjoy eating in the dining rooms, the pub, and room service, too. William especially loves the pool. But your fine facilities, fabulous location, and fantastic service is not what I value the most. And, although William is still a little too young to understand, what I value most are your *Articles of Association*.

Yes, the past is secure, but that is all (*cf 3*). Bidding you Godspeed,

Matt Funk

1. Kersh R (2001) Dreams of a More Perfect Union (Cornell Univ Press, Ithaca).

- 2. Owen, N (2008). Resolution and Call for Resignation of Illinois Governor Rod Blagojevich (Union League Club, Chicago).
- 3. Story J (1840) A Familiar Exposition of the Constitution of the United States. 1997 Ed (Regency Gateway, Lake Bluff).

^{\$} Union College, the Union League Club. These and thousands of other familiar US landmarks, along with more than six hundred towns and cities bearing the name, testify to a once vital theme in American popular discourse. Few of those who today pass through, disembark at, or otherwise inhabit these places are likely to recognize the Union appellation as meaningful, much less as stating a profound aspiration to political unity. But from the late colonial period to the early Gilded Age, American leaders and ordinary citizens constantly expressed—in everyday talk and grand administrative planning, as well as in place names and architecture—their dreams of a 'more perfect' national union.

Beginning in the mid-1880's Americans' references to union declined sharply. So did the public testaments they left behind: of the eight states admitted since 1890, and the four lands that remain US territories today, just two included a (single) Union town or county, each established well before statehood. In succeeding years the practice was in fact reversed, as former Union cities, streets, and so forth were renamed or dismantled (1:ix).

APPENDIX IV

TOP-10 BUY RECOMMENDATIONS FOR 2009

Subject: SEC Seeks Comment on Alternative Short-sale Rule

Date: Tue, 18 Aug 2009 04:37:08

From: Matt Funk, FLS

To: chairmanoffice@sec.gov

Dear Mr Chairman,

I am writing to inform you that you have made a great mistake.

In light of the fact that your office has "asked for comments" regarding your short-selling proposal, it seems that it may be my duty to share a few comments I emailed to family and friends, and posted at forbes.com (below) moments ago. I have spent the past several years investigating the underlying, evolutionary stability of the financial markets, and although I will certainly not impose with a long discourse, in short, I will humbly suggest that the sound and logical economic and evolutionary theories which argue "capitalism on the way up, socialism on the way down" will not work, also apply to your new proposal: "free markets on the way up, impeded markets on the way down" is inherently unstable for many of the same reasons.

If you find that there are members of your staff who are unfamiliar with the theories which inform these strong conclusions, I will humbly suggest that you refer them to FA von Hayek's The Constitution of Liberty, Adam Smith's timeless essay of 1776, or *On the Origin a Species by Means of Natural Selection, or the Preservation of the Favoured Races in the Struggle for Life* (1859), by Charles Darwin, Esq., FLS.

I realize that these are relatively difficult times (relative, that is, to the past 100 years, in terms of evolutionary time, we 'ain't seen nothin' yet), and I do appreciate your great service to our nation; if you would like to hear a more detailed argument, or if I may be of service in any way, please do not hesitate to ask.\$

Comment: Posted by mattfunk | 08/18/09 03:03 AM EDT | forbes.com

Yet another inherently destabilizing, bad idea. Needless to say, when we discover that the SEC is trying to figure-out how to bar the emergency exits shut while the markets are smouldering and full of highly combustible derivatives, run for the doors while you can.

Top-10 buy recommendations for 2009:

- 1) XAU and/or 2009 Ultra High Relief Double Eagles
- 2) US Treasuries
- 3) USD
- 4) RMB
- 5) WMT
- 6) Montana rangeland
- South Dakota "East River" farmland/wildlife production systems (East of the Missouri River).
- 8) 2010 Ford F-450 Super Duty, XL, turbodiesel, 4x4, crew cab, six speed manual.
- 9) 2009 Winchester Model 70, .30-06, MOA trigger system, Swavorski Z6, 1-6x24 EE scope.
- 10) 2006-2008 Hallberg-Rassy 62 (fishing gear, hollow-keel full of Double Eagles & ammo).

Date: Thu, 27 Aug 2009 16:52:03 -0400 (EDT)

From: Brenda Stanfield
To: Matt Funk
Dear Mr. Funk:

Thank you for your email and taking the time to provide us with your comments.

We welcome your comments because they help us to regulate and enforce the laws that assure fair and orderly securities markets.

I have passed your views on to the people at the SEC who specialize in the issues you've raised. If they have any questions or wish to respond directly to your comments, they will contact you.

Once again, thank you for taking the time to inform us of your views.

Sincerely, Brenda E. Stanfield

Office of Investor Education and Advocacy

U.S. Securities and Exchange Commission

^{\$} Subject: SEC Response - File HO1343856

APPENDIX V

UNIVERSITY OF MALTA PHD

Subject: University of Malta - Ph.D.

Date: Fri, 19 Mar 2010 13:20:01 +0100

From: Joseph Falzon
To: 'Matt Funk, FLS'

Dear Matt,

Thank you for your very long email and for all your genuine interest in Malta and its history. I will be glad to meet you on Monday 5 April to go and see Fr Peter.

Yes I agree that probably you have too much material for one PhD. You need to focus a little on the important aspects that you would like to research about. We will discuss when we meet, especially if you would like to do the Ph.D. in Banking & Finance.

Looking forward to meet you soon.

Joe.

Prof Joseph Falzon, Chair Department of Banking & Finance University of Malta Mob: +356-7946-1735 Off: +356-2340-2738

Subject: University of Malta - Ph.D. Sent: 19 March 2010 09:37

From: Matt Funk To: Joseph Falzon

Dear Joe,

Thank you very much making an appointment with Fr Peter and your generous offer to pick me up on the morning of the 5^{th} – I look forward to meeting you both on Easter Monday.

I apologize for the time that has passed since your last reply, but I had nearly completed my exhaustive review of seven thousand years of Maltese history (the past five hundred years of military and politico-economic development strategy in particular) and the clear plan-of-action that slowly evolved in the course of my researches only came to full fruition today, as I walked along the shores of Prince Edward Island. I also had a long and illuminating conversation with Ben last week which helped me bring it all together as well.

In short, I am thoroughly inspired, know the type of PhD dissertation I would like to pursue, know the manner in which I believe the University of Malta may be of most value to me, and know the manner in which I believe I may be of the greatest value to the University of Malta, your department, the finance community in Malta, the finance and banking communities at large, and perhaps even the independent people of Malta in general.

Although it may be both a blessing and curse, I am so thoroughly immersed in comparative island study that I am simply unable to visit an island without knowing as much as I'm able to know about the natural history, military history, and politico-economic development strategies which have shaped and continue to shape these islands and the peoples who inhabit them. And I suppose that I commit these considerable time and energy resources to these intensive island researches because I happen to believe they are of extraordinary value — this is, afterall, in essence, the manner in which both Darwin and Wallace pieced together their respective theories of evolution and, moreover, it is the manner by which I have come to discover the most meaningful truths about the world and universe in which we live. And as Goethe once remarked,

The desire of knowledge is first stimulated in us when remarkable phenomenon attract our attention. In order that this attention be continued, it is necessary that we should feel some interest in exercising it, and thus by degrees we become better acquainted with the object of our curiosity. During this process of observation we remark at first only a vast variety which presses indiscriminately on our view; we are forced to separate, to distinguish, and again to combine; by which means at last a certain order arises which admits of being surveyed

with more or less satisfaction. To accomplish this, only in a certain degree, in any department, requires an unremitting and close application; and we find, for this reason, that men prefer substituting a general theoretical view, or some system of explanation, for the facts themselves, instead of taking the trouble to make themselves first acquainted with cases in detail and then constructing a whole.

My curse is that it seems that I may not be like many others in this regard, as I dwell in and upon detail after detail, to the point which would exasperate most — and, despite the fact that I had promised myself I would spend no more than a month devouring my Maltese reading list, I was barely able to satisfy my initial curiosity with four months — which is what it has taken. As you know, Maltese history is as long and complicated as it is interesting and compelling. Furthermore, I did not realize when I set-off on this expedition that a meaningful overview of Maltese history would also require a review of the naval history of the entire Mediterranean, and, as I discovered in time, a review of Sicily's history and natural resources, too.

And although I did not begin my review of Maltese history with any particular objective in mind, as a strategist and game-theorist, I'm unable to breeze over the pages of history. I read slowly, carefully, stopping often to reflect upon military and politico-economic development strategy. And, as I paused at various junctures and turned to supplementary sources, I began to recognize how I might go about delivering the most remarkable, extraordinary, and valuable PhD dissertation I am capable of delivering.

Although I do remain very excited (and equally honoured) to meet with Fr Peter, I am positive that I would like nothing more than to develop a dissertation under your supervision in the Department of Banking and Finance. In brief, at the core, this dissertation would consist of somewhere between three and six inter-related – yet stand-alone – papers. These papers would be, generally speaking, directed towards three different audiences: 1) the hedge fund community in Malta (including firms such as Liongate, naturally, but at least one such paper would be developed with the express purpose of illuminating the strengths of a Maltese base, and thus attempt to attract new firms), 2) the hedge fund community at large, and 3) the finance and central banking communities (potentially including, for example, the Central Bank of Malta, the U.S. Federal Reserve, the Bank for International Settlements, your Ministry of Finance, etc).

In fact, the speech your Finance Minister (whom happens to remind me of a central banking super-hero, Kansas City's Thomas M. Hoenig) offered at the introduction to Malta's 2010 annual budget may have been the final bit of inspiration which helped direct the focus of my proposed PhD dissertation:

Mr Speaker,

Today we are commemorating the 20th anniversary of the fall of the Berlin Wall. This was an event which transformed the European continent as well as the rest of

the world.

On that day, the political structure was shaken to its roots. That was the birth of a new Europe.

This year the global financial and economic system has been shaken.

Faced with this reality, in this House we must carefully weigh our reaction. We could choose the easy way, by looking away and saying "No. There is nothing going on. We don't need to do anything." Otherwise we can, prudently, responsibly and courageously, look towards the horizon and say "Yes, the world is changing, but our people are capable of facing these challenges. Together we can overcome them."

Mr Speaker,

This evening, this Government will once more choose the second option.

This Government acts responsibly towards its people. This Government works prudently and does not shy away. This Government does not believe that challenges are won by saying that they do not exist. Because we want the best for our people, we are ready to face these challenges, the international economic situation, climate change, the problem of energy security, demographic developments and immigration.

Mr Speaker,

In a world which has been turned upside down, there are also things which for this Government never change. These are the foundations of our policies and include total respect of human dignity, our duty as a society to support each other, the value of the family, and the promotion of the common good.

This spirit – which appears to woven throughout the fabric of Maltese culture – inspires me.

And this prudence and unwavering commitment to fiscal responsibility appears to offer one of Malta's greatest strengths. And, as I reflected upon this admirable Maltese trait, an illuminating and relevant comparative study began to develop in my mind: On one hand we have the sovereign island nation of Iceland (to which I dedicated an entire year of

researches, including two research expeditions) — extraordinary natural resources, including the largest cod fishery remaining on Earth, enough geothermal resources to heat homes, pipe in hot domestic hot water, and construct steel plants at a whim, low population density, and arguably the greatest and highest-quality fresh water supplies on Earth. On the other hand we have the sovereign island nation of Malta — with one of the highest population densities on Earth, limestone and salt for natural resources, and almost no fresh water.

But which economy blew up? Whose people are going hungry?

On the other hand, which nation has assembled one of the most vibrant finance communities in the EU? Which small island state has amassed the eight largest maritime flag registry in the world (another very special interest of mine, which could yield a paper either within our outside the scope of my dissertation)? Portugal, Ireland, Greece, and Spain (PIGS) — all nations clearly far more blessed with natural resources — threaten the very existence of the European Union (of which, more to follow), but Malta has, to date, performed extraordinarily well, given the global economic circumstances.

Your Prime Minister's Eco-Gozo is another finance/economic development-related undertaking of which I have particular interest and even a bit of expertise; in fact, my comparative study of the Mustique Development Plan of 1968 and the Prince Edward Island Development Plan of the same year (*On the Truly Noncooperative Game of Island Life: Introducing a Unified Theory of Value & Evolutionarily Stable Island Economic Development Strategy* — http://mpra.ub.uni-muenchen.de/19049/) speaks directly to (and, moreover, may offer sound strategy for) this exciting undertaking — if I may be of any assistance in this regard, and/or, once again, if it fits within the scope of my proposed banking and finance dissertation at the local level, naturally I would be eager to include these developments and offer my assistance.

But returning to a few specifics regarding my proposal – as noted, at the core I propose a half-dozen or so stand-alone papers. Yet all of these papers will be informed by an original economic theoretical development – a unified theory of value.

Thus, in the end, I imagine a PhD dissertation assembled with the following sections: I). An introduction (approximately 100 pages) to strategy and game-theory as they relate to and inform finance and banking (especially central banking) issues. II). A highly advanced theoretical development (approximately 100 pages) — my unified economic theory of value — the capstone, essentially, to the past decade of my theoretical explorations and researches. Although I have not written this paper, I have been thinking about it for over three years, have it all worked out in my mind, and, moreover, it builds upon my past three years of collected publications and working papers (several of which you have already read). I have already collected these foundational works into a single 1024 page document, which would serve as a (highly optional) Appendix — an appendix which I believe stands as a remarkable scholarly achievement in it's own right. But in any case, after the general introduction to strategy (I) and developing a unified theory of economic value (II), the third (III) section — the core of the dissertation — puts this strategy and theory to use within the finance and banking arenas — and this sections contains the half-dozen papers previously noted.

Although I have already pressed forward and developed outlines for these individual papers, presently I'll spare you the details. But I will merely sketch a few topics which may interest you the most: As Ben and I were discussing the global hedge fund communities, he noted that, today, Gulf and Mexican investors "won't touch" Cayman Island funds, but they are comfortable investing in funds domiciled in Malta? Why? This distinction begs for thorough exploration — as it is critical for Malta to thoroughly understand as much as can be known about this revealed preference and to endeavour to preserve and build upon theses strengths. On a separate occasion Ben made another comment upon which I have dwelled for sometime: He said that it's remarkable that the EU hasn't proposed shutting down Malta as a tax-haven — although you and others may shudder at even considering breaking ways with the EU and the Euro so early in the game, it may prove fruitful to consider various scenarios and strategies in advance; furthermore, many have rumbled for quite some time that the Euro may crumble anyway, thus is only seems prudent to consider possible banking and finance strategies in the wake of such an event.

As a strategist focused upon risk mitigation, I often find myself drawing attention to things most would rather not consider, much less discuss, but collapse of the EU/Euro is a distinct possibility which, of course, cannot be ignored.

I have studied Bermuda (as a finance centre) and Aland (where I delivered a paper at the Aland International Institute for Comparative Island Study) in great details, and, briefly, both islands may have much to offer insofar as informing Maltese Banking and finance strategy.

And one last note regarding my banking and finance proposal: Perhaps the most significant feature of my unified theory of economic value is a complete recognition and integration of David Hume's problem of induction. Did you read Lowenstein's When Genius Failed: The Collapse of Long Term Capital Management? If not, let me know and I'll bring a long a

copy for you — it's an interesting and illuminating read, and, moreover, I'd like to explore some related topics in my proposed PhD dissertation, one of which is a fatal flaw in the Black-Scholes model, which, as far as I'm aware, has not been commented upon anywhere: One fundamental assumption in this model is that default risk for U.S. Treasuries is zero. Of course the risk is indeed very, very, low, but it is certainly not zero, and, I submit, this has far-reaching implications, which, in conjunction with a wide-array of other inductive modeling tools (such as VaR), systematically over-value financial derivatives and under-value tangible assets and commodities — edibles, fresh water supplies, wildlife production systems, and gold (especially bullion and coins, as opposed to underground reserves).

I'll cut myself shot before opening Pandora's box any further – but I imagine by now you may have a strong sense and recognize many inherent strengths associated with this proposal.

I realize that, once again, I've taken up far too much of your time – but I hope you may see how excited I am by this prospect and I hope you may be a bit excited, too. Also, it occurred to me that if we were able to hone in on a specific dissertation (and within a specific department) prior to my arrival, then perhaps we might be able to have some time to discuss particulars, details, and, of course, get the ball rolling sooner than later. Also, I remain quite open to considering specific research needs – from your department, the Central Bank, the Ministry of Finance, Eco-Gozo, *etc.* – and would be willing to incorporate these researches in the individual paper section of my proposed PhD dissertation. The 2010 budget proposal notes several relevant arenas in which "outside" research must be procured – perhaps I could be of assistance in this regard. And of course if I knew this was the direction I was heading, perhaps I may have to opportunity to meet explore the present research needs of those noted above.

Of course I've also considered the fact that you've already reviewed my core theoretical developments, conversed with me at great length, and have a general sense of my motivations, intentions, and abilities, and thus, if you were willing and able to supervise my dissertation, we have indeed already made considerable forward progress.

As for my book — my previous proposal — it will be written anyway (and, in fact, I have already assembled the book proposal and three sample chapters for my literary agent), and of course if it should become a best-seller, it seems the University of Malta may stand to benefit from my affiliation anyway. But of course, despite the fact that I have a great agent in New York, this remains a long-shot at best, perhaps. But it seems that the proposal I've outlined above enables me to create something of value for the University (and myself) no matter what — and that seems to make a lot of sense to me.

But either way, although I thank you for making the initial inquiry at the de Bono Institute, I'm interested in exploring that option any further. Ben noted that, despite the Institute's great reputation, many of those with whom I hope to engage, interact, and cooperate with in the future may find that credential as "fuzzy". After giving it some thought, I agree.

So, Joe, what do you think? Are you up for this? I'm positive this is exactly what I'd like to do and I'm ready to go. I know you would have much guidance to offer, but I would certainly not need any more help than you are able to offer. Of course Ben and Randall could be great resources for me as well — and, naturally, I hope that, in the end, I may have developments which may prove of some value for them as well.

As George G. Stigler remarked in his 1982 Prize Lecture, The Process and Progress of Economics:

Those economists who seek to engage in research on the new ideas of the science — to refute or confirm or develop or displace them — are in a sense both buyers and sellers of new ideas. They seek to develop new ideas and persuade the science to accept them, but they also are following clues and promises and explorations in the current or preceding ideas of the science. It is very costly to enter this market: it takes a good deal of time and thought to explore a new idea far enough to discover its promise or its lack of promise.

It does indeed take a good deal of time and thought to explore and develop new ideas, and, after spending the past decade doing just that, I'm excited to put them to use and anxious to apply them and make them readily available to others to use. Much of the heavy lifting done — what remains is simply to bring it all together.

I hope your trip to Liechtenstein goes incredibly well, I hope to hear from you soon, and I look forward to seeing you next month!

Bon Voyage, Matt

On 06/03/2010 1:36 PM, Joseph Falzon wrote:

Dear Matt,

I have succeeded to make an appointment with Fr Peter, our previous Rector, on Monday 5th April at 10.00am at his residence. I will pick you up around 9.30am and then we will go to his residence. I have forwarded all the material that you sent me.

Unfortunately, nobody from the Debono Institute will be available on that day. The Director is on sabbatical and assistant director will be abroad.

I have also spoken to the Head of the Philosophy Department. He encouraged me to speak to Fr Peter first. He will cooperate fully if Fr Peter recommends that you do you your PhD with the Philosophy Department. So we are all set.

Have a good Holiday in Malta. We will meet on Easter Monday. I will be in Liechtenstein with students until Saturday 3^{rd} April.

Kind regards, Joe.

Subject: Re: University of Malta - Ph.D.

Sent: 26 February 2010 09:49

From: Matt Funk To: Joseph Falzon

Dear Joe,

Thank you for your note – and thanks for setting time aside to get together with me on Monday the 5th, that sounds great!

And yes, I remain very interested in pursuing a PhD at the University of Malta; in fact, by Sunday I hope to complete a detailed, 100-page PhD/book proposal for both you and my literary agent.

But in the meantime, I am able to offer a summary with reference to two short papers (both of which you have kindly reviewed; if others may have interest in meeting with me as well, these works may offer a good introduction to my researches, motivations, and intentions). I apologize for the extent of these details, but is does seem that this may assist you and others determine the prospects for "a synergistic relationship," as Ben noted in his 26 October communique....

Stanislaw Ulam once challenged Paul Samuelson to name one theory in all of the social sciences which was both true and nontrivial. As you may know, Samuelson countered with Ricardo's theory of comparative advantage, remarking, "That it is logically true need not be argued before a mathematician; that is not trivial is attested by the thousands of important and intelligent men who have never been able to grasp the doctrine for themselves or to believe it after it was explained to them."

In short, I have drawn the same conclusion regarding another nontrivial theory tabled as an even stronger rebuttal to Ulam's challenge: On the Origin of Mass Extinctions: Darwin's Nontrivial Error — http://mpra.ub.uni-muenchen.de/20193/— and, to this point, my proposed PhD endeavour will, as previously noted, culminate in an accessible, curiously entertaining, work of philosophical nonfiction, clearly illuminating this nontrivial matter for a very general and very wide book-buying audience because, as Bertrand Russell observed,

The ordinary citizen is struck dumb with awe when he is told about gold reserves, note issues, inflation, deflation, reflation, and all the rest of the jargon. He feels that anyone who can converse glibly about such matters must be very wise, and he does not dare to question what he is told....He feels vaguely that his country is likely to be safer if it contains a great deal of gold, so that he is glad when the gold reserve increases and sorry when it diminishes....Finance, like war, suffers from the fact that almost all those who have technical competence also have a bias which is contrary to the interests of the community....It will be necessary, if this state of affairs is to be remedied, to...find ways of simplifying the principles...so that they can be widely understood.

My treatise will indeed be an ambitious attempt to remedy this state of affairs. But as you may have gleamed from Darwin's Nontrivial Error, my aim is higher yet – to simplify the principles of economics, evolution, and cosmology in one fell swoop [1], to reveal the unity of nature in one very long argument. And this is the juncture at which my foundational, game-theoretical development shines much-needed light (On the Truly Noncooperative Game of Life on Earth: In Search of the Unity of Nature & Evolutionary Stable Strategy – http://mpra.ub.uni-muenchen.de/17280/ –....

I should also say a few words about a key development I haven't mentioned, that is, the nontrivial discovery my dissertation ultimately yields: A solution to the most fundamental, open problem in economics: A tenable theory of

value. As George J. Stigler remarked in his 1982 prize lecture:

In economics the most fundamental... central problem is the theory of value. The theory of value must explain how the comparative values of different goods and services are established. Until that problem is solved, it is not possible to analyse for scientific purposes what will be produced and in what quantities, how the resources will be employed in producing the menu of outputs, and how the resources will be valued. Without a theory of value the economist can have no theory of international trade nor possibly a theory of money.

My solution to this long-standing problem is a unified – politico-economic, evolutionary, and astrophysical – theory of value based upon relative insularity. Although it is unnecessary for you or others to review the long, 113 page-letter which garnered my nomination and election to Fellowship to the Linnean Society last year – *On the Truly Noncooperative Game of Island Life: Introducing a Unified Theory of Value & Evolutionarily Stable Island Economic Development Strategy* – http://mpra.ub.uni-muenchen.de/19049/ –, I will merely mention that my unified theory evolved from my rather original utilization of islands as bio-geo-politico-economic models. But in any case, first I will deliver this key finding in an exhaustive academic discourse (200 pages, I have completed a rough first draft), but most importantly, I will broadcast this discovery in a manner (a big book) which will communicate this critical finding well beyond academic audiences.

In a nutshell, Joe, that's it!

But before closing, I should mention one last thing that's been on my mind: As inferred in *On the Truly Noncooperative Game of Life on Earth*, I happen to share Sir Karl Popper's belief that subject matters do not exist, but of course I realize that many do not see it this way, and, thus, I've spent a fair amount of time considering the course of my research/teaching/work trajectory during and beyond my PhD exploration. As you know, I'm very excited about the prospect of contributing to your budding Hedge Fund Research Centre, and, in general, I'm also excited about the prospect of engaging, interacting with, and assisting your growing finance community there in Malta; my interests in AI (and central banking) strategies are considerable. Thus I've been wondering if it may be possible for me to conduct a PhD under the umbrella of the Department of Banking and Finance, the department of economics, or, perhaps, the Department of Banking and Finance in conjunction with the de Bono Institute? Again, personally, I don't believe that departmental considerations are that critical – but I realize that many (including those whom I hope to engage with down the line) believe otherwise.

Please find my CV (APPENDIX VI) attached herewith.

Thank you for your all of your time, consideration, and assistance – I look forward to meeting you soon!

Yours very truly,

Matt

[1] http://www.phrases.org.uk/meanings/at-one-fell-swoop.html

On 21/02/2010 2:38 PM, Joseph Falzon wrote:

Dear Matt,

I will be back from Liechtenstein on Saturday 3 April. Sunday is Easter. On Monday 5th April we can meet in the morning and I will try to make meetings at university and with Fr Peter.

Can you please send me your CV and the material that you want to discuss with the DeBono Institute and with Fr Peter? Are you still interested to do your Ph.D. here?

Joe.

Subject: Re: University of Malta - Ph.D.

From: Matt Funk, FLS

Sent: 19 February 2010 23:44

To: Joseph Falzon

Please find my Malta itinerary attached herewith.

Yes, it seems that I'm arriving at a rather inconvenient time - we arrive late the 30th of March and depart in the

afternoon on April 6.

If you have time to meet after your return on the 3rd, I'll still have another 2 and a half days on Malta.

If others are available to meet as well, that wold be great, too, but I don't want to interrupt anybody's vacation time.

Thanks for your reply.

Best, Matt

On 19/02/2010 5:50 PM, Joseph Falzon wrote:

Dear Matt,

When exactly are you coming to Malta? I will be in Liechtenstein with students for an Erasmus programme between 21 March and 3 April. So I cannot meet you between these dates.

Here in Malta the university will have Easter Holidays between 28 March and 11 April. So it will be difficult to find people during this time.

However, when you tell me the dates, I will try to make appointments with the DeBono Institute and with Fr Peter, even if I am not here, and even if you are here during the Easter Holidays.

So welcome.

Joe.

Subject: University of Malta - Ph.D. Sent: 19 February 2010 16:43

From: Matt Funk, FLS [mailto:matt@funkisland.org]

To: Joseph Falzon

Greetings again, Joe,

Just following up from yesterday...

- 1). First and foremost, if you have time to get together while I'm on Malta, I'm looking forward to it. If you have time for lunch on Thursday (1 April), perhaps that would be ideal, but I'd be happy to meet Friday or any other day and time as well. I'd love to know what kinds of research you're pursing these days, and, if you have any materials that I may review, please send them along.
- 2). If someone at the De Bono Institute has interest in meeting with me, I remain quite interested in exploring this possibility as well.
- 3). And yes, I would be honoured to have the opportunity to meet with Prof Rev Peter Serracino Inglott as well. Given our common interests in Wittingstein, Russell, and the Vienna Circle, I imagine we would have no problem finding many interesting things to discuss! (I also hope to find and review his dissertation on *Tractatus Logico-Philosophicus* while I'm there).
 - 4). I'm also open to any other ideas or suggestions you may have.

Thank you so much for all of your assistance, Joe, I look forward to meeting you soon.

Best,

Matt

Subject: University of Malta - Ph.D.

Date: Tue, 27 Oct 2009 11:25:57 +0100

From: Joseph Falzon
To: Sandra Dingli
CC: Matt Funk

Dear Sandra,

I am forwarding the CV [APPENDIX VI] of Mr Matt Funk who is interested to do a PhD with the De Bono Institute of the University of Malta. He has a masters in film and another masters in islands studies. He is a very interesting candidate with significant original interests. I think that his Ph.D. would be a contribution to the University of Malta as well.

I think the emails below clarify the issue.

Subject: University of Malta - Ph.D.

Date: Mon, 26 Oct 2009 20:47:41 -0300

From: Matt Funk
To: Joseph Falzon

Dear Joe,

Thank you so much for your time, thoughtful consideration, and extraordinarily generous offers. I am so grateful on all fronts. When Ben had first mentioned the University of Malta, one of the first thoughts that crossed my mind was, *I wonder if there's any chance Edward de Bono might be there?*

I had mentioned that I spent many years exploring the philosophical foundations of economics, thus you might imagine that I have devoted quite a bit of time to Karl Popper and Thomas Kuhn.

During the course of this exploration, I was introduced to the works of Professor de Bono through Peter Doherty's Nobel Prize lecture. And, in fact, interestingly enough, a correspondence which I began with Dr Doherty two years ago, recently came full circle, when I sent him the very same paper I sent to you earlier today (noted with page numbers in my reply to Doherty, below). Anyway, I thought you might appreciate this anecdote - perhaps Professor de Bono may appreciate it as well?

Subject: Thomas Kuhn & Karl Popper Sent: Sun Oct 28 20:44:21 2007

From: Matt Funk
To: Peter Doherty

Greetings Dr Doherty,

I am researching a theory that the rejection of Karl Popper's logic and methods and general acceptance (in a popular sense) of Thomas Kuhn's logic and methods have been detrimental to science, especially social sciences such as economics.§

Nearly a dozen Nobel Laureates have thanked Popper and acknowledged his great influence upon their work: most notably, perhaps, was FA von Hayek's Nobel Lecture and, perhaps the most notable example in your field may be discovered in Eccles' Nobel biography.

I have only been able to discover one Laureate who acknowledged Kuhn's influence and, curiously, this noble individual (whom of course is you!) acknowledged both Popper and Kuhn: "I was influenced early on by reading Arthur Koestler and Edward de Bono, and more recently by the writings of Karl Popper and Thomas Kuhn."

So, naturally, I'm very curious to know if, after nearly a decade, the balance of this influence or your opinions regarding Kuhn and Popper has changed?

I thank you very much for your time and consideration regarding this matter, as I am beginning to believe the prospects for long-term human survival on earth may hang in the balance to the ultimate answer to this lively debate.

Any words of wisdom you are able to offer on this topic would be greatly appreciated.

Sincerely,

Matt Funk.

§ I uphold the ancient theory of truth... according to which truth is the agreement with the facts of what is being asserted. Kuhn's views on this fundamental question seem to me affected by relativism; more specifically, by some for of subjectivism and of elitism, as proposed for example by Polanyi. Kuhn seems to me also affected by Polanyi's fideism: the theory that a scientist must have faith in the theory he proposes (while I think that scientists—like Einstein in 1916 or Bohr in 1913—often realize that they are proposing conjectures that will, sooner or later, be superseded). There are many other such points of difference, of which perhaps the most important is my emphasis on objective rational criticism: I regard as characteristic of ancient and modern science the critical approach towards theories, from the point of view of whether they are true or false. Another important point seems to me that Kuhn does not seem to see the great importance of the many purely scientific revolutions that are not connected with ideological revolutions (Popper 1983, pp xxxi-xxxxii).

Subject: Thomas Kuhn & Karl Popper

Date: Sun, 28 Oct 2007 21:39:04 -0500

From: Peter Doherty
To: Matt Funk

Dear Matt,

A long time since I've read either. Popper's views re falsification of a null hypothesis seem correct to me. Much of the world's worst science is done by people who are determined to prove a point.

Peter C. Doherty St Jude Children's Research Hospital 332 North Lauderdale Memphis TN 38105

Subject: Thomas Kuhn & Karl Popper

Date: Mon, 05 Oct 2009 21:15:22 -0300

From: Matt Funk
To: Peter Doherty
Greetings Dr Doherty,

Nearly two years ago you were kind enough to reply to my inquiry, and, in brief, I have come to grasp the profound significance of your point: Yes indeed, much of the world's worst science is done by people who are determined to prove a point.

And, alas, much to my horror, I discovered that I was one of those people!

But thanks in part to you, Sir Karl Popper, F.A. von Hayek, Sir John Eccles, and Edward de Bono [26], I was able to recognize the nature of this problem, correct my error, and solve a long-standing, open problem in economics in the process! (for a short synopsis of this struggle, see bottom right column of page 9 through 13 of the paper attached herewith). Thank you!

Otherwise, Joe, no matter where or in what direction my PhD studies may go, I would love the opportunity to collaborate with you on AI strategies, island finance center research, and would be happy and honoured to contribute to your Hedge Fund Research Centre.

I will schedule a trip to Malta as soon as I return, and I look forward to meeting you then.

Thanks again, Joe, I hope to hear from you soon!

Subject: University of Malta - Ph.D.

Date: Mon, 26 Oct 2009 22:40:32 +0100

From: Joseph Falzon
To: Matt Funk

CC: Ben Funk, Joseph Portelli

Dear Matt,

Thank you for your long reply.

Yes Professor Edward De Bono would be the ideal candidate to be your supervisor given your rich background and great potential. I will contact the De Bono Institute at the University tomorrow and will forward your correspondence. Prof Rev Peter Serracino Inglott would also be a good choice. He is a former Rector of the University and has a lot of international experience. I will try to meet him as well on your behalf.

On the second topic, I would be delighted to collaborate with you on alternative investment strategies and offshore financial centers. We are trying to start a Hedge Fund Research Centre as well at the University. I enclosed a copy of our proposal. You are welcome to contribute to this Center as well.

Please let me know when you would be coming to Malta. I will set up meetings for you with the De Bono Institute and with Prof Serracino Inglott, who would be delighted to help you.

Please call me whenever I can be of any assistance.

From: Matt Funk, FLS

Sent: 26 October 2009 20:11

To: Joseph Falzon

Re: University of Malta - Ph.D.

Thank you very much for your reply, Joseph,

It seems there are many exciting things happening in your growing hedge fund community and at University of Malta the prospect of conducting my PhD research there is very appealing.

Although I am interested in your Small Islands and Small States programme - - and I would be very willing and able to assist in that department if my assistance is wanted - - my theories are inconsistent with Professor Briguglio's theories, thus this may not be the best match.

But two alternative approaches look very appealing to me:

- 1). As Ben noted, I am very passionate about island studies, and that illusive state known as "sustainable economic development", but you may have noted that I had previously completed another Masters degree in Film at The University of Southern California, and devoted much time developing creative writing skills and studying the process of creative thinking and problem-solving at large. And, to this point, my current efforts are directed towards delivering a very creative, potentially commercially lucrative discourse on the complex theoretical development which Ben had kindly forwarded to you. I have attached a slightly expanded version of this strategic, game-theoretical framework which offers an outline of this creative journey, and, moreover outlines the major work of literary nonfiction which I am presently working on. I believe this has the potential to yield a highly original and imaginative PhD thesis, as well as a very commercial book - and it seems to me, that Edward de Bono could serve as an ideal thesis adviser. I am very well-versed in his major works, and I believe he may find both my creative approach to problem-solving, and the creative project I'm working on especially appealing. As Ben noted, I'm a motivated self-starter, and would never require more supervision than my adviser was able to offer. In any case, although this is indeed an unusual proposal, I believe the book it may yield has the potential to bear many fruits for both the University of Malta and the Edward de Bono Institute both in terms of media exposure and research funding. I have a detailed outline of this proposal and three completed chapters which I am able to forward for review.
- 2). I would also be very interested in pursuing a PhD focused on Alternative Investment (AI) Strategies and off-shore finance centers. I'm very excited to hear about your proposed Hedge Fund Research Centre, and, if it launches (which of course I hope it does), I'd like to contribute to it and help it grow. I've spend nearly a decade exploring the philosophical foundations of economics, devoting several of those years to probability theory and The Problem of Induction, and I'm especially keen to develop strategies and AI vehicles which endeavour to mitigate the risk factors associated with it. One strategy which may serve as an interesting PhD thesis is the development of an AI vehicle which capitalizes on The Principle of Relative Insularity, a concept I developed in detail in an exhaustive analysis of The Mustique Co. Development Plan of 1970 (linked to reference #5 in the paper attached herewith). This development plan would serve, in essence, as the guiding investment strategy. I might add that my comparative analysis of this plan highlights difference between my theoretical findings and those of Professor Briguglio. It seems to me that either you, Professor Fenech, or Professor Bowe would make excellent advisers for a thesis along these lines. Again, I would only require minimal guidance, and, depending upon how either thesis proposal were structured, it may not even be necessary for me to be on Malta full-time - - unless, that is, I was wanted in a teaching and/or research capacity. But in either case, thank you for your invitation to come over for a visit to have a look around. My wife and I are heading down to visit Ben and his family on Mustique next week, but when I return (November 12) I would like to schedule a trip to Malta - I'll discuss this with Ben, if he has a trip planned anytime soon, perhaps we'll head over together.

In any case, Joseph, these are two proposals which appeal to me the most at this juncture, but I'm open to any thoughts, ideas, or proposals you may have.

If you think Professor de Bono may have interest in my curious proposal, please feel free to forward this email and the attachment thesis outline/proposal. If you'd rather I take the initiative, please let me know if there's someone I should contact at the Edward de Bono Institute.

And of course I'm equally interested to hear if you find my second proposal appealing and/or if you would like to hear more about what I have in mind.

Thanks again for your reply, Joseph. I hope to hear from you soon!

Date: Mon, 26 Oct 2009 17:16:32 +0100

From: Joseph Falzon
To: Matt Funk

CC: Ben Funk, Joseph Portelli Subject: RE: University of Malta - Ph.D.

Dear Matt,

Your cousin Ben has referred this request to my friend Joseph Portelli of Liongate Malta.

The University of Malta has a programme in Small Islands and Small States and a Ph.D. is also possible in this area. If you are interested I can get you in contact with the Director. This Small Islands programme is very closely linked with the Economics Department. Maybe it would be a good idea to come to Malta to see exactly the resources that we have and requirements that are needed to do the Ph.D. here.

Please let me know if I can be of any further help. Please call me if you need to discuss further.

Subject: RE: University of Malta - Ph.D.

Sent: 26 October 2009 13:09

From: Joseph Portelli To: Ben Funk

Hi Ben,

Let me liaise with Professor Falzon, who is the head of the Banking and Finance Department at the University. He was very appreciative of the warm welcome Liongate gave him and the students in London. Also, he and I are working on developing a Hedge Fund Research Centre at the University which will also include starting a hedge fund association to represent hedge funds here in Malta.

Prof. Falzon already met with Hobbs, and Randall was supportive of the idea. I think Prof. Falzon, would be keen, to help. He has a good relationship with the Rector, so I'm sure he can navigate Matt through the proper channels at the University.

I will have Prof. Falzon contact Matt directly. Thanks. Joe.

From: Ben Funk

Sent: 26 October 2009 11:34

To: Joseph Portelli

Subject: University of Malta

Hi Joe,

I am pleased that the scope and scale of our presence in Malta is growing; as Liongate grows as a firm, this relationship should march forward lockstep. I believe this will foster an even closer relationship between Liongate and the University of Malta, for both the sharing of knowledge and recruitment of graduates out of the university into our company. I hope the participating students and faculty enjoyed their recent trip to our headquarters in London.

I have a cousin, Matt Funk, who is passionate about Island Studies, and in particular Sustainable Economic Development. He currently is a Fellow of the Linnean Society of London and is a lecturer of the University of Prince Edward Island, where he holds a Masters degree in Island Studies. Matt intends to pursue a PhD to increase his expertise in this arena, and I have proposed that he does such work at the University of Malta.

Matt would excel in a self-directed, but supervised, PhD programme. I believe he would be a very energetic and able aid to faculty and exceptionally popular lecturer to students. Moreover, behind his interests he seems to have significant research funding in place, which could clearly advance the research interests of University of Malta more generally. Attached are electronic copies of his academic CV [APPENDIX VI], global abstract and a letter of recommendation [see APPENDIX VI] to shed further light on Matt and his interests and character. I would be grateful if you could help put Matt in communication with the appropriate people to discuss whether there may be a synergetic relationship. Yours, Ben.

APPENDIX VI

MATT FUNK, FLS: CURRICULUM VITAE

PhD Candidate, The University of Malta, Department of Banking & Finance

SUMMARY

My researches are focused upon all aspects of long-term human survival, especially insofar as evolutionary theory, cosmology, and economic development & investment strategy are concerned. Thus, a significant obstacle which hinders all prospects of long-term survival is fixed squarely within my sights; as George Stigler noted in his 1982 Sveriges Riksbank prize lecture, *The Process and Progress of Economics*:

In economics the most fundamental... central problem is the theory of value. The theory of value must explain how the comparative values of different goods and services are established. Until that problem is solved, it is not possible to analyse for scientific purposes what will be produced and in what quantities, how the resources will be employed in producing the menu of outputs, and how the resources will be valued. Without a theory of value the economist can have no theory of international trade nor possibly a theory of money.

To this salient point, my search for a solution to this fundamental problem has yielded a unified theory of economic & evolutionary value which, in turn, informs economic development and investment strategies and, furthermore, promotes resource holding power, global threat mitigation, national security, international cooperation, and thus long-term human survival.

EDUCATION

The University of Malta

PhD Candidate, Department of Banking & Finance, Faculty of Economics

2010 – 2012 (expected)

Thesis: The Principles of Economics & Evolution II:

In Search of Evolutionarily Stable Finance, Banking & Alternative Investment Strategy

The University of Prince Edward Island

MA, Island Studies 2007 - 2010

Thesis: The Principles of Economics & Evolution:

A Survival Guide for the Inhabitants of Small Islands, Including the Inhabitants of the Small Island of Earth

http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution.pdf

Purdue University - Krannert School of Management

Economics Coursework 2002 – 2003

The University of Southern California

MFA, The Peter Stark Television & Motion Picture Producing Program 1993 – 1995

Thesis: Bermuda Getaway: A Proposal for the Production & Marketing of a Theatrical Motion Picture

BSc, Marshall School of Business Entrepreneur Program 1987 – 1992

VOCATION

The Linnean Society of London

March 2009 - Present

Linnean Society Fellows uniquely embrace the entire sweep of natural history; we are concerned with the process of evolution in the broadest sense, and promote the study of all aspects of the biological sciences, with particular emphasis on evolution, biodiversity and sustainability. For details, see: http://mpra.ub.uni-muenchen.de/19049/

The Lifeboat Foundation

December 2009 – May 2010

The Principles of Economics & Evolution:

A Survival Guide for the Inhabitants of Small Islands, Including the Inhabitants of the Small Island of Earth

A Scientific Advisory Committee Report. Published online 5 May 2010.

http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution.pdf

The Linnean Society of London

On the Origin of Mass Extinctions: Darwin's Nontrivial Error

December 2009

Accepted for publication on 9 December 2009 - http://mpra.ub.uni-muenchen.de/20193/

The University of Prince Edward Island

September 2008 – December 2009

Global Issues is a foundational undergraduate course which provides an interdisciplinary approach to contemporary communication skills through the lens of current global issues. Students develop skills to write effectively, think critically and communicate clearly in a variety of contexts. Mentors work closely with students; through individual meetings and small group sessions, mentors provide students with the guidance necessary to hone their analytical, writing, and critical thinking skills as they explore global problems and search for their solutions.

The University of Prince Edward Island

July 2009

Comparative Island Studies Methodology.

Lecture to Political Studies 309, Comparative US/Canadian Legislation & Policy. 20 July, Main 220, 6:00 PM.

The University of Prince Edward Island

February 2009

On the Extinction of Species by Means of Insularity Lost

International Development Week presentation, 2 February, AVC Lecture Theatre A, 1:30 PM.

The University of Prince Edward Island

November 2008

On The Law Which Regulates the Struggle for Life

Seminar presented to the Department of Biology, 26 November, 3:00 PM.

The University of Prince Edward Island

November 2008

Problem Solving on Islands: Valuable & Timeless Lessons from Alfred Russell Wallace & Charles Darwin

Two lectures delivered to Global Issues 151 students on Wednesday, 26 November, at 3:00 PM and 5:00 PM.

The Prince Edward Island Provincial Government

February 2008 – August 2008

A Search for a Measure of the Quality of Life on Prince Edward Island: an Inter-Provincial 'Cost of Living' Inquiry

Commissioned by Dr Michael Mayne, Deputy Minister, Department of Innovation & Advanced Learning. Delivered 18 August. ISBN: 978-0-919013-58-2.

The Aland International Institute of Comparative Island Studies

June 2008

On the Problem of Connectivity: Branding Insularity.

Seminar delivered 11 June at 1:00 PM, the Åland International Institute of Comparative Island Studies' Conference, Islands of Competence: Branding Identities in a Globalized World, Parliamentary Building, Mariehamn, Åland.

The Aland International Institute of Comparative Island Studies

April 2008 – June 2008

On the Problem of Sustainable Economic Development: A Tenable Solution to this Prisoner's Dilemma

-Paper delivered 8 June, Parliamentary Building, Mariehamn, Åland. – http://mpra.ub.uni-muenchen.de/19025

The University of Prince Edward Island

April 2008

On the Problem of Relative Insularity

Seminar delivered Thursday, April 24th. Epidemiology Classroom - 220 South. 2:00 - 3:30 PM. The program noted, "Topic: Which 'eco'? Comparing and Contrasting the 'development' of Barbados and Mustique."

The University of Prince Edward Island

March 2008

On the Problem of Islandness: The Value of Relative Insularity on Mustique

Seminar presented to the Faculty of Arts, Tuesday, 11 March, 11:00 AM. The event program noted: "A 'theory of value' based upon relative insularity is introduced by outlining its various aspects as they affect Mustique. The island's positive features, which have altered its isolation and peripherality into economic assets, will be discussed."

The University of Prince Edward Island

December 2007 – January 2008

On the Problem of Breathing, Eating, & Drinking Poison: An introduction to problem solving, nobility of purpose under adverse circumstances, and the search for truth with Sir Karl Popper on Prince Edward Island. Paper and guest lecture delivered to the Island Studies Programme, 7 January – http://mpra.ub.uni-muenchen.de/14483/

HONOURS & AWARDS

Fellow, The Linnean Society of London Scientific Advisory Board Member, The Lifeboat Foundation The University of Prince Edward Island Entrance Scholarship Award

2009 – present

2010 – present

2007

INTERESTS

My wife (Marcy) & son (William), parents, brothers, sister, aunts and uncles, cousins, & many great friends. Human Survival, International Cooperation, Global Threat Mitigation, National Security, Central Banking, Reserve Currency Strategy, FX, Commodities, Alternative Investments, Ranch Economics, Wildlife Production Systems, Hunting, Fishing, Cooking, Sailing, and making my abilities known to those who can benefit from them!⁸

REFERENCES & RECOMMENDATIONS

http://files.me.com/mattfunk/532u5h

However able a man may be in a particular filed, the value of his services is necessarily low in a free society unless he also possesses the capacity of making his ability known to those who can derive the greatest benefit from it.

[—]F.A. von Hayek, The Constitution of Liberty, 1960