



**PROFILING RESILIENCE:**

Understanding How Different Societies Recover from Crises as a Risk Management Tool.

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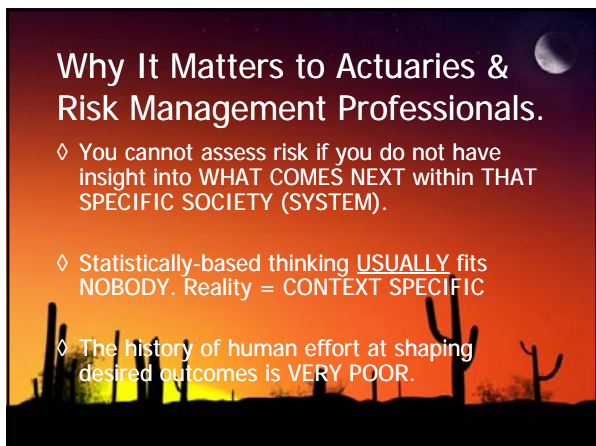
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**Why It Matters to Actuaries & Risk Management Professionals.**

- ◇ You cannot assess risk if you do not have insight into **WHAT COMES NEXT** within **THAT SPECIFIC SOCIETY (SYSTEM)**.
- ◇ Statistically-based thinking **USUALLY** fits **NOBODY**. Reality = **CONTEXT SPECIFIC**
- ◇ The history of human effort at shaping desired outcomes is **VERY POOR**.

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### Insights on How to Improve.

- ◇ See there is no PURELY arithmetic solution.
- ◇ Best practice is: "Knowledge of the board."
- ◇ How DIFFERENT Societies (human systems) are embedded, entangled, & their particular ideas, values, goals, ways and limits matter.

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### PRESENTATION GOALS:

- ◇ Introduce profiling their 'CHANGE PROCESS' as an intelligence foresight-forecasting tool.
- ◇ Place SOCIETAL RESILIENCE style as an UN-FREE & BIASED aspect shaping overall SOCIETAL CHANGE = Resilience is part of how overall change happens in THAT system.
- ◇ Introduce RESILIENCE CHANGE PROFILING as a POST-CRISIS foresight-forecasting tool.

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### What is "Resilience" & Resilience "Change Profiling"?

- ◇ "...the act or power of springing back to a former shape or position; elasticity." But it RARELY returns to status quo ante.
- ◇ "The collection and synthesis of an individual's, group's or society's responses and coping mechanisms can be conceptualized as a "resilience profile."

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### Why 'Profile' Change Process Rather than Model, etc?

- ◇ Models, standard methods, (and most experts) FAIL at LSLIRE's (crisis).
- ◇ Qualitative aspects are critical at LSLIRE
- ◇ Aristotle, Montesquieu, etc. = "For the most part true" thinking as the SIGN OF A TRAINED MIND.

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### Some Core Talk References:

- ◇ Resilience: Its Conceptual Links to Creating Society-specific Forecasts about Emerging Change. In Journal of Armed Forces & Society.
- ◇ Early Version Online at: <http://afs.sagepub.com/content/early/2013/06/05/0095327X13489973>

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### Core References Continued:

- ◇ *Recognizing When Black Swans Aren't: Holistically Training Management to Better Recognize, Assess and Respond to Emerging Extreme Events.* (2013). A Society of Actuaries Publication.
- ◇ Werther, Guntram. *When Black Swans Aren't: On Better Recognition, Assessment, and Forecasting of Large Scale, Large Impact and Rare Event Change.* *Risk Management and Insurance Review.* 2013: Vol. 16, No. 1, 1-23.

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## Are 'Revolutions' and Other Crisis Events Truly 'Different'?

- ◇ Resilience is a 'change' concept: It has multiple functions for HUMAN systems.
- ◇ Synthesis (Syndromes) & Syncretism (Change of Form) aspects of normal and crisis change.
- ◇ If societies and cultures are systems of bias (defined by values, norms, traditions, ways), then resilience is their BIASED "bounce-back" aspect. THEIR particular WAY of recovery.

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## 'Old water flowing in new banks...' - Alexis de Tocqueville

- ◇ Lessons for the *future* of Egypt's 'Arab Spring' from two acclaimed transforming revolutions.
- ◇ The French Revolution "...was less radical than normally assumed." de Tocqueville.
- ◇ The U. S. Revolution...."I regret that I am now to die in the belief, that the useless sacrifices of themselves by the generation of 1776, is to be thrown away..." T. Jefferson.

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## FRANCE - "a rather abstract concept."

Robb - The Discovery of France

- ◇ "...revolution had not even interrupted, much less derailed, the dynastic objectives of the *ancien regime*...problems that have mitigated right into modern times." - Rhein - 1812: Napoleon's Russia Campaign
- ◇ Hardly anyone in 'France' even spoke French far into the 19th century.
- ◇ The results of Napoleon's modernization attempts were - A Restoration of Monarchy.

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Post-Revolution France: Superficial as opposed to 'real' change.

- ◇ Same people in charge of society's institutions, superficially renamed institutions and shuffled bureaucracies, persisting linguistic, cultural, social, political, economic patterns amid unchanged localisms and regionalisms.
- ◇ "King of France" to "King of the French"

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"The [French] Revolution was history, and the people..."

- ◇ "...as in the old days, had once again become the objects rather than the partners of government. The only change was that they now got at least some lip service." Rhein
- ◇ At the level of sub-systems, all the ruling powers mostly used the same local institutions and procedures as before.

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In the post-revolutionary United States...

- ◇ Americans quickly mimicked aristocracy, called for dictatorship, assembled an empire (Indian removal & Manifest Destiny), passed Alien and Sedition Acts, and maintained aristocratic behaviors (ie. enfeoffment - the defining institution of feudalism).

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### “After 1783, U.S. domestic dependence...”

- ◇ “...on British markets and finance was reestablished - “Britain had suffered no injury from the disservice of the United States.”  
Kennedy, Mr. Jefferson's Lost Cause.
- ◇ GOAL: “instill in Americans...useful facts from Grecian, Roman, European and American history and not some new, rationally-derived knowledge formulated for the ‘New World.’” -  
Peterson on Jefferson

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### More generally post-revolution...?

- ◇ Most facts are the same, but the post-revolution interprets them differently. Kuhn, *The Structure of Scientific Revolutions*.
- ◇ The status quo changes slowly. “Economics changes one funeral at a time.” Anonymous
- ◇ The Semmelweis experience - On advising hand-washing by doctors to save lives.

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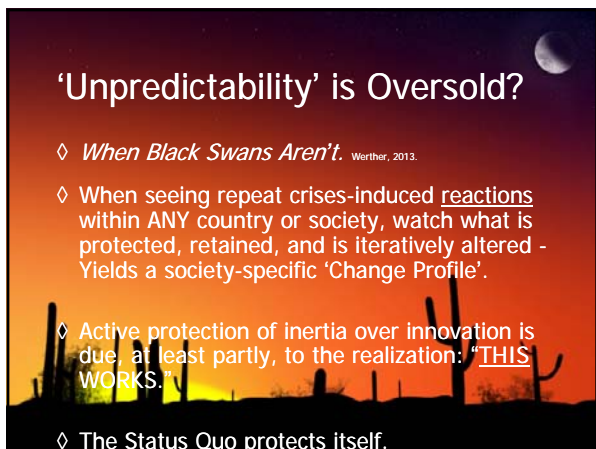
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### ‘Unpredictability’ is Oversold?

- ◇ *When Black Swans Aren't.* Werther, 2013.
- ◇ When seeing repeat crises-induced reactions within ANY country or society, watch what is protected, retained, and is iteratively altered - Yields a society-specific ‘Change Profile’.
- ◇ Active protection of inertia over innovation is due, at least partly, to the realization: “THIS WORKS.”
- ◇ The Status Quo protects itself.

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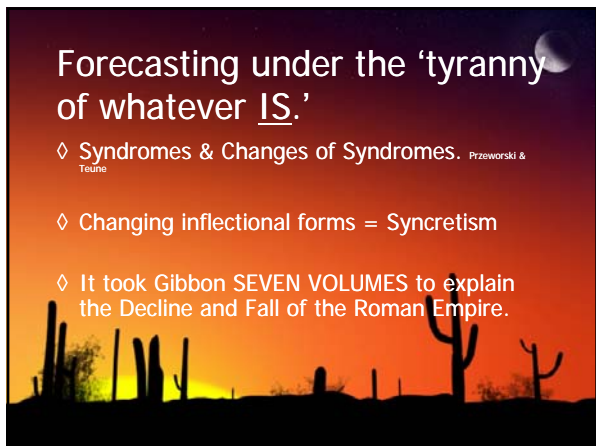


## Forecasting under the 'tyranny of whatever IS.'

◇ Syndromes & Changes of Syndromes. Przeworski & Taine

◇ Changing inflectional forms = Syncretism

◇ It took Gibbon SEVEN VOLUMES to explain the Decline and Fall of the Roman Empire.



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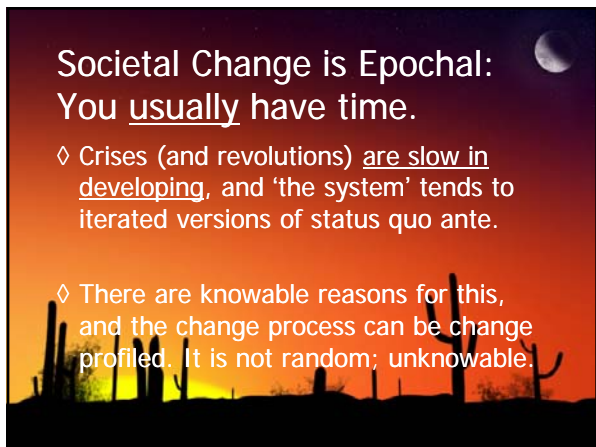
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## Societal Change is Epochal: You usually have time.

◇ Crises (and revolutions) are slow in developing, and 'the system' tends to iterated versions of status quo ante.

◇ There are knowable reasons for this, and the change process can be change profiled. It is not random; unknowable.



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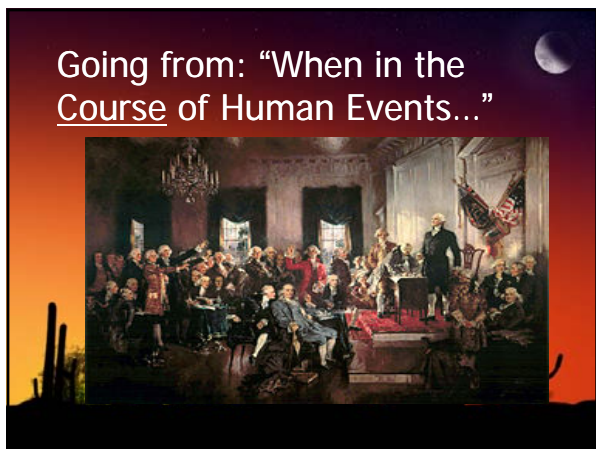
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## Going from: "When in the Course of Human Events..."



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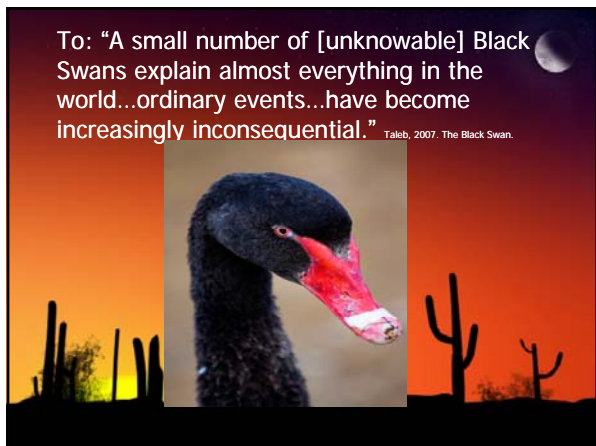
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To: "A small number of [unknowable] Black Swans explain almost everything in the world...ordinary events...have become increasingly inconsequential." Taleb, 2007. The Black Swan.



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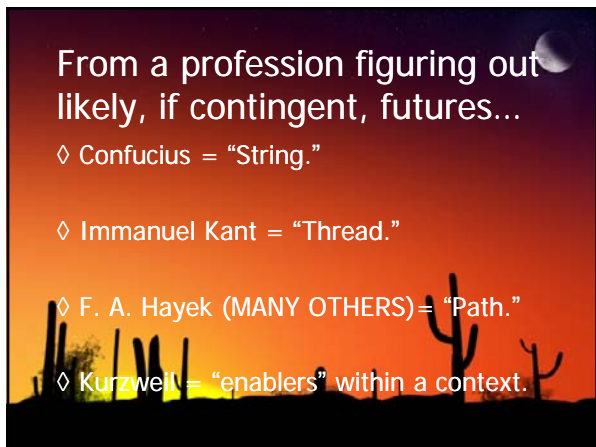
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From a profession figuring out likely, if contingent, futures...

- ◇ Confucius = "String."
- ◇ Immanuel Kant = "Thread."
- ◇ F. A. Hayek (MANY OTHERS) = "Path."
- ◇ Kurzweil = "enablers" within a context.



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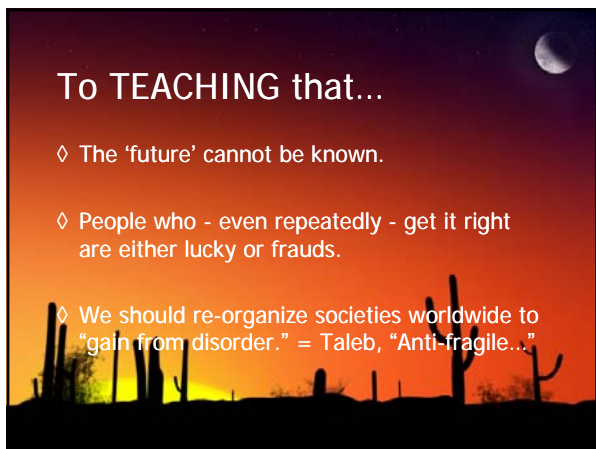
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To TEACHING that...

- ◇ The 'future' cannot be known.
- ◇ People who - even repeatedly - get it right are either lucky or frauds.
- ◇ We should re-organize societies worldwide to "gain from disorder." = Taleb, "Anti-fragile..."



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### Lets look at the systemic functions of societal resilience.

- ◇ System maintenance (oppose change).
- ◇ Foster a speedy return to 'normalcy' (usually iterations thereof).
- ◇ Adapt to forced 'change' without losing core features (BIASES) of the system.

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### Why Profile the Resilience of BIASED POST-CRISIS Change Processes?

- ◇ Models and Experts are configured for 'normal' change forecasting.
- ◇ MOST systemically fail when crises arise
- ◇ Changes in "interpretation" (the 'NEW' meaning of each serial inflectional change) are EXACTLY what 'Big Data' and other arithmetic methods are especially bad at. Penland 2013.

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### One Method of "seeing minute community responses":

- ◇ Study specific 'normalcy' variables and their changing metrics before, during, & after a crisis event (real-time). Reuven Gal 2013.
- ◇ Repeat over many crises, large and small, historic and modern, to highlight different aspects (variables) of that society's resilience style. Werther 2013.

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## A Second 'Holistic' Approach

- ◇ Open system, iterative folding-in & "layering the onion" process of pattern synthesizing.
- ◇ This approach has NO pre-judging of which variables are important. Study whatever arises.
- ◇ Analogous to an 'archeology' or social science 'calculus' of error reduction = syncretism.

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## Using the 'Different Views.'

- ◇ The Gal approach gives details & knowledge of specific "notes" and better measurement of particulars before, during, after crisis events.
- ◇ The Werther approach is more qualitatively focused - tone, texture, theme, nuance, and harmonies - and can be used to forecast.
- ◇ USE BOTH iteratively to gain broad and deep "Knowledge of the Board." See Kahneman.

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## Repeatedly "Ping" the system (if ethical/legal) to see crisis response.

- ◇ The "cat survival" study problem.
- ◇ Probably you will need to use naturally occurring crisis (stressor) instances PER SYSTEM.
- ◇ Look at different stressors (crises) to build up 'Knowledge of the Board.'

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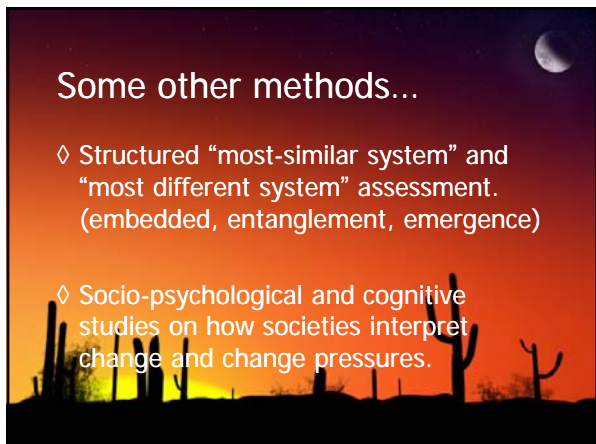
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### Some other methods...

- ◇ Structured “most-similar system” and “most different system” assessment. (embedded, entanglement, emergence)
- ◇ Socio-psychological and cognitive studies on how societies interpret change and change pressures.

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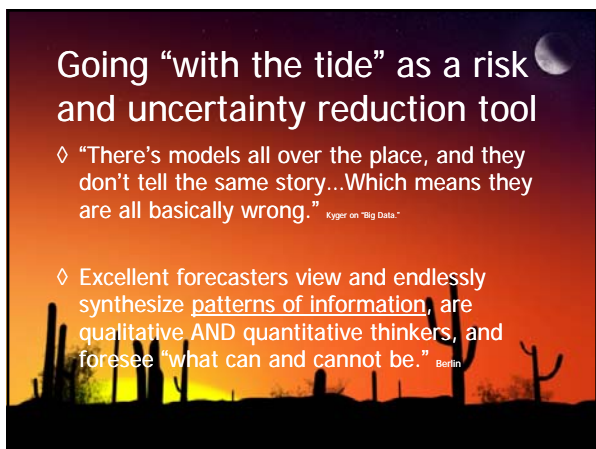
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### Going “with the tide” as a risk and uncertainty reduction tool

- ◇ “There’s models all over the place, and they don’t tell the same story...Which means they are all basically wrong.” Kyger on “Big Data.”
- ◇ Excellent forecasters view and endlessly synthesize patterns of information, are qualitative AND quantitative thinkers, and foresee “what can and cannot be.” Berlin

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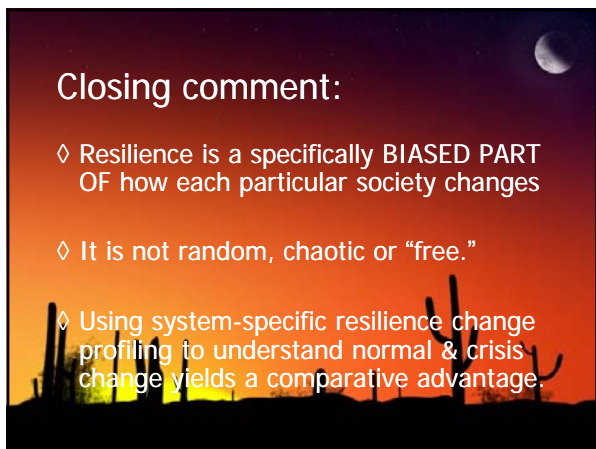
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### Closing comment:

- ◇ Resilience is a specifically **BIASED PART OF** how each particular society changes
- ◇ It is not random, chaotic or “free.”
- ◇ Using system-specific resilience change profiling to understand normal & crisis change yields a comparative advantage.

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