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the global future forum

***Wild Cards* - What Makes Them Important?**

**Future Scene 2004 “Seize the Future”,
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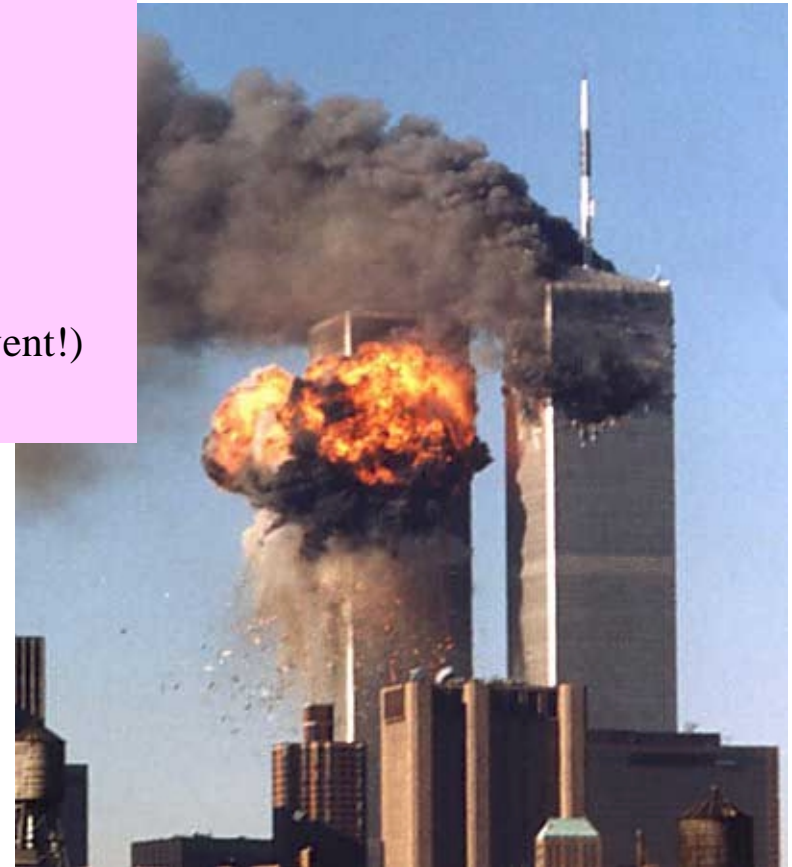
Future Shocks ...

Events that changed the future

1929	Black Friday
1957	Sputnik shock
1963	Assassination of Kennedy
1973	Oil price shock
1986	Tschernobyl
1990	Implosion of the Soviet block
(2000	Y2K Problem, sorry, “missed” event!)
2001	9/11

Crystal ball questions:

- Will the trends continue?
(to be favorable for our business?)
- What is “the next big thing”?
- And when will it happen?
- Can we prepare?



The *future* lies beyond the discontinuity...



Wild Cards – Unexpected Discontinuities

Sudden events with:

- Low probability
(less than 0.1)
- High impact
- Surprising character



“A wild card is a future development or event with a relatively low probability of occurrence but a likely high impact on the conduct of business”

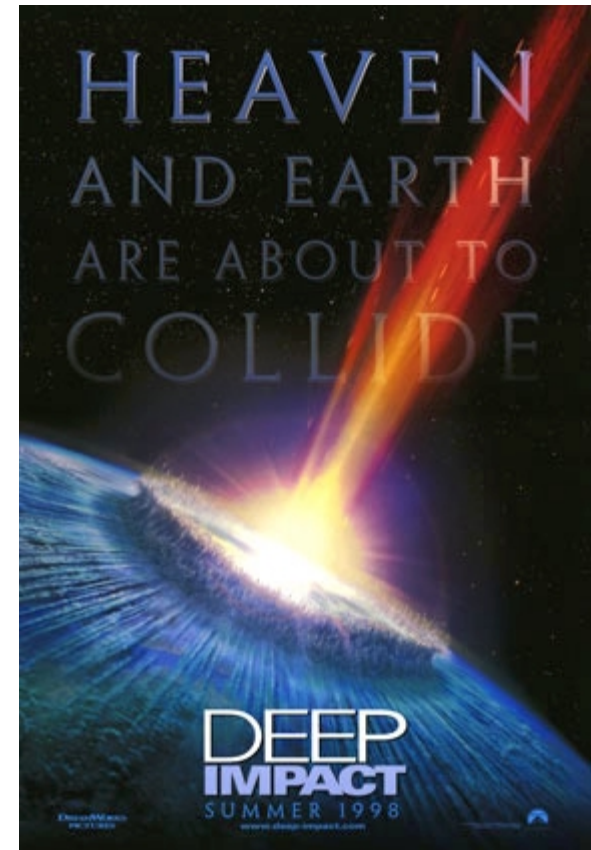
(BIPE Conseil, Insitute for the Future, Copenhagen Institute for Futures Studies 1992, p. v)



WC: Asteriod Impact

Probability	Impact	Focus
● ○ ○ ○ ○ ○ ○ ○	● ● ● ● ● ● ● ●	???

- Origin:
 - Purely natural (independent of man)
- Impacts:
 - Depending on mass and impact point
 - “Nuclear” winter
 - Extinction
- Winners:
 - Evolutionary successors of man
- Losers:
 - We all ...

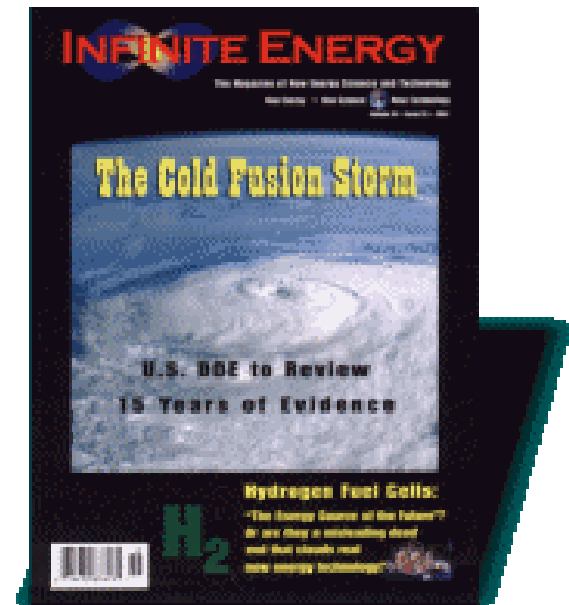




WC: Cold Fusion Energy

Probability	Impact	Focus
● ● ● ● ○ ○ ○	● ● ● ● ● ● ○	Infinite energy at no cost

- Origin:
 - Scientific Breakthrough
- Impacts:
 - Independence from oil
 - New space age?
 - New conflicts, new arms race?
- Winners:
 - All energy consumers
 - Environment
- Losers:
 - Saudis
 - Inflexible power providers



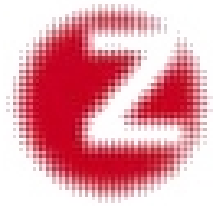


WC: Life Expectancy Drops

Probability	Impact	Focus
● ● ● ● ● ● ○	● ● ● ● ● ● ○	Health, but pervasive impacts

- Origin:
 - New epidemics and/or civilization diseases (obesity!)
 - Combined with decline of public health system
- Impacts:
 - Life expectancy divide
 - Economic decline
 - Revolutions?
- Winners:
 - Some insurers???
 - (to be identified)
- Losers:
 - The short-lived ...
 - Democracy?

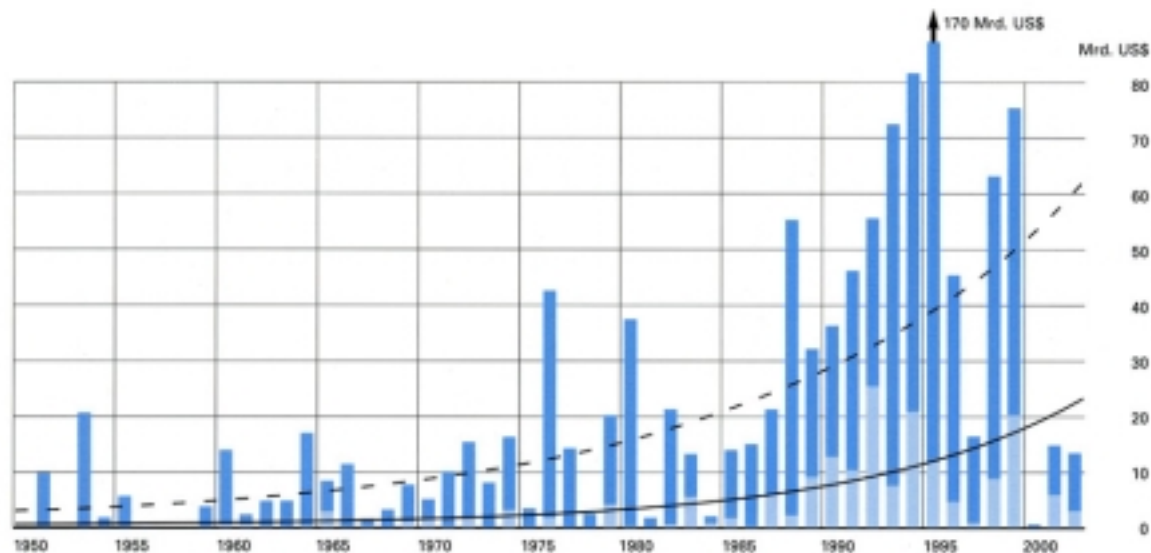




WC: Risks Without Insurance

Probability	Impact	Focus
● ● ● ● ● ○ ○	● ● ● ● ● ○ ○	Most big risks

- Origin:
 - Increase in “bad risks” like large catastrophies & litigations
- Impacts:
 - Risk avoidance
 - Innovation curbed
- Winners:
 - Churches?
- Losers:
 - Risky businesses



Natural catastrophies: Total and insured damage



Summing It Up

Origin:

- Nature
- Innovation
- Politics

Impacts:

- Whole string
- “Domino effect”
- Counter-intuitive
- Described by scenario
“in a nutshell”

Different kinds of **plausibility**:

- Low probability
- Very low probability
- Implausible
- Impossible
(according to present state of knowledge)

Wild Cards – What IF ...

Not Extrapolation – But Speculation?

Not Numbers – But Narratives?



Futurequakes

Wild cards

- are not sufficiently known risks / opportunities
- undermine current trends
- create new futures
- influence our thinking about the future
- influence our thinking about the past
- give rise to new concepts and new perceptions



Wild cards are earthquakes of the mental landscape!



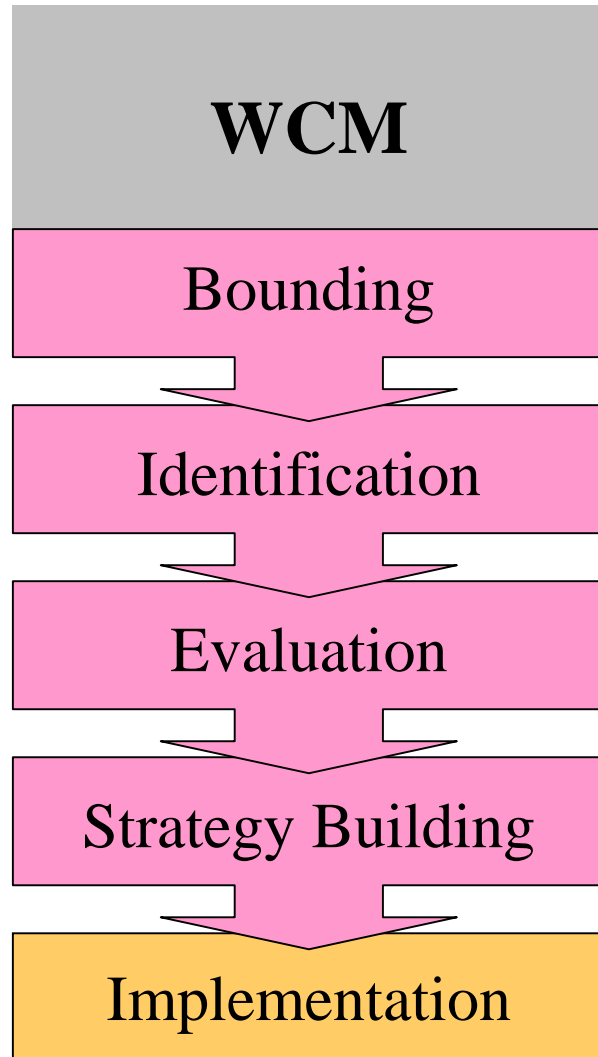
Life Cycle of a Wild Card

Latency	Eruption	Normalisation
<ul style="list-style-type: none">• Converging causal chains• “Weak signals“, mostly undetected• Sometimes a hint in: the arts, some scientific discipline, science fiction	<ul style="list-style-type: none">• The “event“: sudden manifestation (wild card, in narrow sense)• “Very strong“ signals• Overreactions: panics, hype• Controversial interpretations	<ul style="list-style-type: none">• Spreading of impacts (effects of second and higher order)• Normalisation: getting used to it• Standard interpretation (mostly with paradigm change)





Wild Card Management

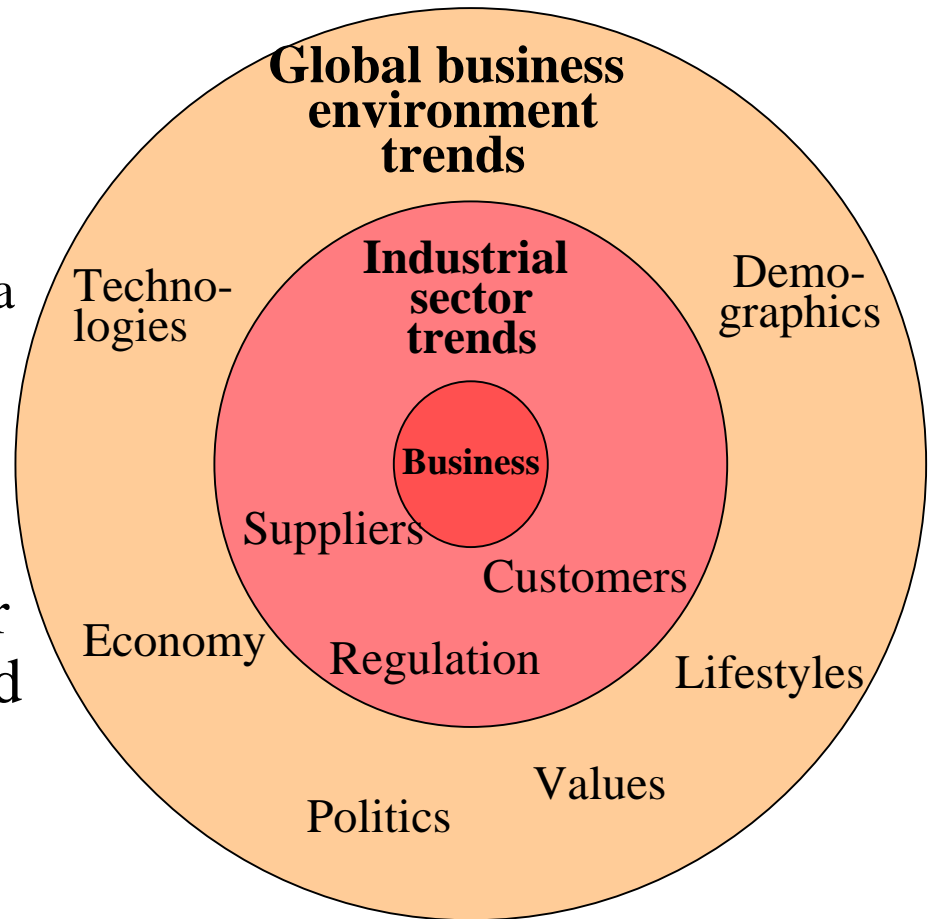


- **Bounding:**
Define task, search strategy etc.
- **Identification:**
Establish portfolio of wild cards
- **Evaluation:**
Analyse premises and impacts of wild cards
- **Strategy Building:**
Find strategies to minimise risks and to seize opportunities
- **Implementation:**
Communicate strategy, implement measures



Establishing the WC Portfolio

- Where to look?
 - How to overstep a perhaps too narrow horizon?
 - What are appropriate filters for a monitoring?
 - All systematic approaches may exclude the most interesting emerging things!
- Does it make sense to look for implausible or impossible wild cards?
 - And how could I communicate them to the board?



To every trend, there are wild cards!



Wild Cards – More Examples

• Financial sector

- Global e-cash supplants national currencies
- Complementary (local barter) currencies take over
- Introduction of the Tobin Tax
- New oil price shock

• Ecology / Environment

- A new Tschernobyl
- Decline of the sperm count
- World food crisis
- Gentech disaster
- Sustainability backed by the US

• Political sphere

- End of the nation state
- Local nuclear war
- Dissolution of the UNO
- Islamic enlightenment
- Populists take over EU
- The USA goes protectionist

• Technology

- Airship cargo successful
- Fetal sex selection possible
- Revolution of nano-materials
- Mobile electrosmog panic
- Personal fabrication



Evaluation According to Petersen

- Criteria:
 - Rate of Change
 - Reach
 - Vulnerability
 - Outcome (Unsecurity)
 - Time lags
 - Political opposition
 - Power factor (individual impact)

→ “Impact Factor”

$$\Delta C + R + V + O + T + Op + P = I_{AI}$$

Source: John L. Petersen, 1997 / 2003





Strategies From Wild Cards?

- Ameliorate the flexibility / scope of reactions of the company
 - learning organisation
- Establish “Early Warning System”
 - Scan for weak signals
 - Networking
- Test strategies against wild card portfolio!
- Develop robust overall strategies
 - e.g. precaution by means of insurance, contract items ...
 - e. g. adapting the product portfolio

“Thinking in advance”!



Experiences With Wild Cards

Z_punkt projects for:

- Telekom
- Bayer
- Gerling Insurance

- Use of wild cards is very stimulating:

- As eye-opener
- To counteract certain pitfalls
 - lack of imagination
 - wishful thinking / hyper-worst-case thinking

- Easy to find, to invent wild cards
- But difficult to implement results of WCM independently

→ Complement “traditional” strategy building (e.g. SWAT) with WCM

- Elements of WCM are helpful in “traditional” strategy building
 - show weak points of strategies
 - open new perspectives



Conclusion I

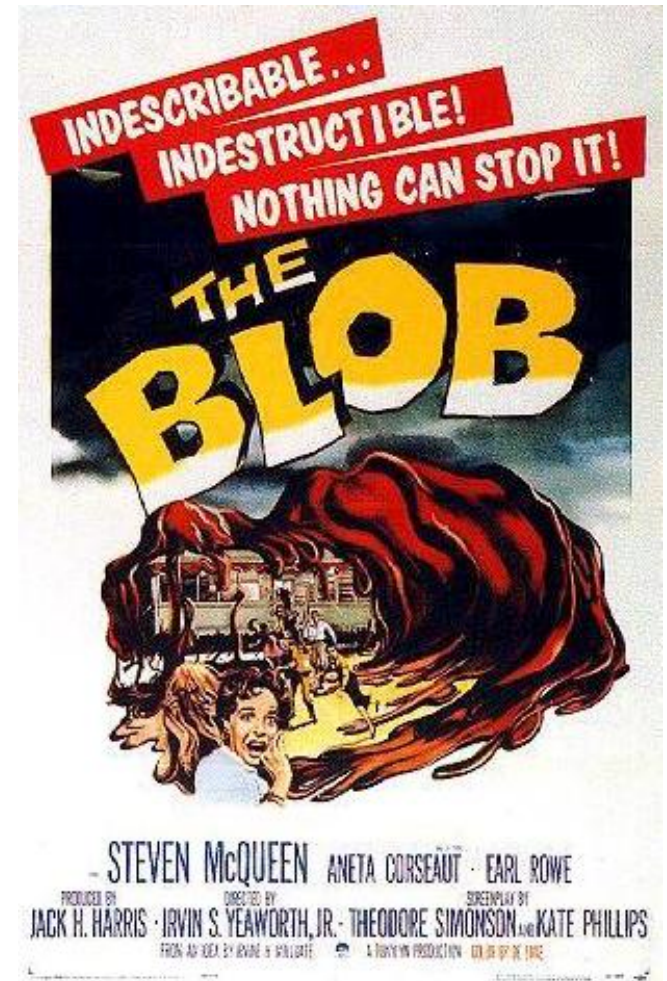
Wild cards:

- Low individual probability
- Large number – increasing with time

Even for $p_i \ll 1$ holds for sufficiently large n ($n \rightarrow \infty$):

$$\prod_i^n (1 - p_i) \rightarrow 0$$

The probability of realization of the standard scenario approaches zero.



In the long run, wild cards will shape the future.



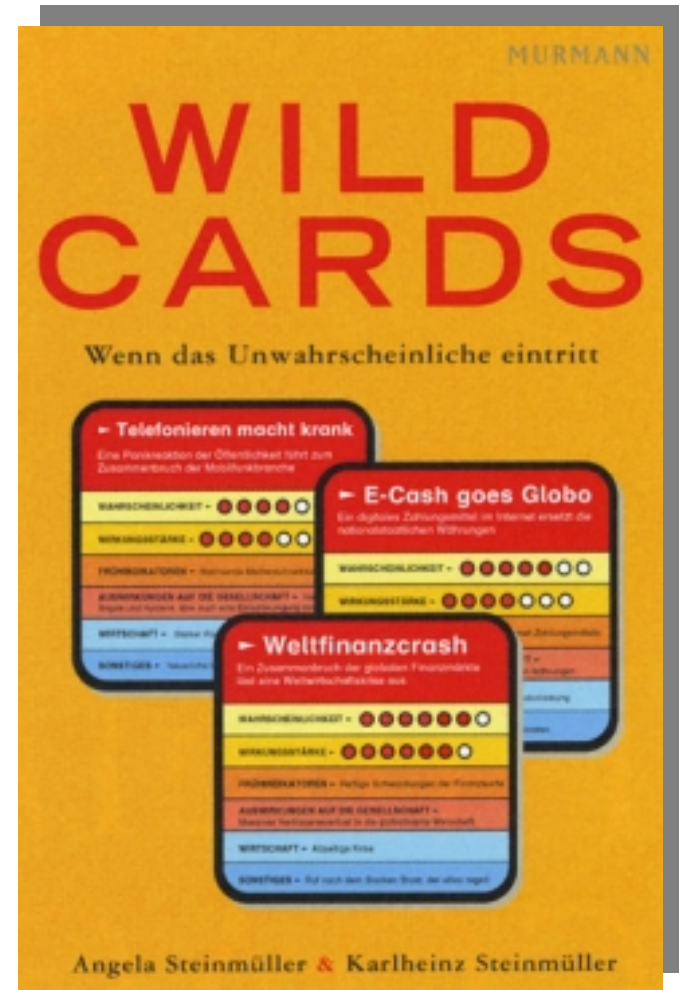
Conclusion II

Mark Twain:

“Forecasting is very difficult, especially about the future.”

Steinmueller’s Rule:

“The easier forecasting is, the lower is the intellectual and commercial benefit.”



Action, Not Prediction Matters!



Thank you for your attention!

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