

Science, Technology and our Globalized Culture

Nathaniel J. C. Libatique, Ph.D.

Lecture 2

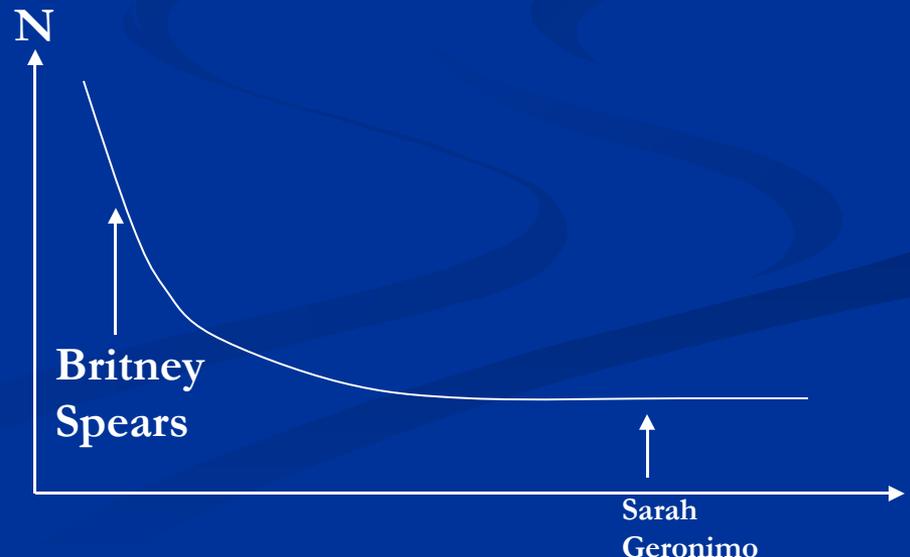
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The Scientific Culture

- Body of knowledge
 - Internally consistent
 - Logical interrelationship, coherent whole
 - Predictive power, verifiable results, empirical observation
- Questions have more value than the answers
- Community of researchers, peer review, system of journals and publication
- Key assumption: nature has an inherent order, a logical structure often akin to mathematics

Future Shock

- **First Wave: Agriculture**
 - Nomads settled
 - Surplus produce, stability
- **Second Wave: Industrial Revolution**
 - Newtonian physics, mechanistic world view
 - Internal combustion engine, mass production, communications
- **Third Wave: Knowledge Driven Technology**
 - DNA
 - Quantum engineering, nanotech
 - Information technology
 - Service driven economy
 - Long Tail Phenomenon



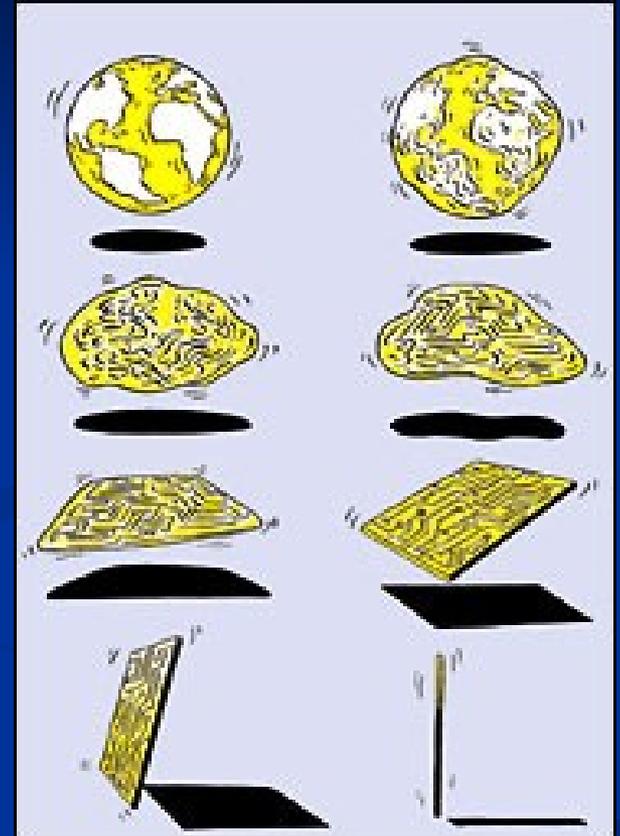
Globalization

It's a Flat World, After All

By THOMAS L. FRIEDMAN

April 3, 2005, New York Times

In 1492 Christopher Columbus set sail for India, going west. He had the Nina, the Pinta and the Santa Maria. He never did find India, but he called the people he met "Indians" and came home and reported to his king and queen: "The world is round." I set off for India 512 years later. I knew just which direction I was going. I went east. I had Lufthansa business class, and I came home and reported only to my wife and only in a whisper: "The world is flat."

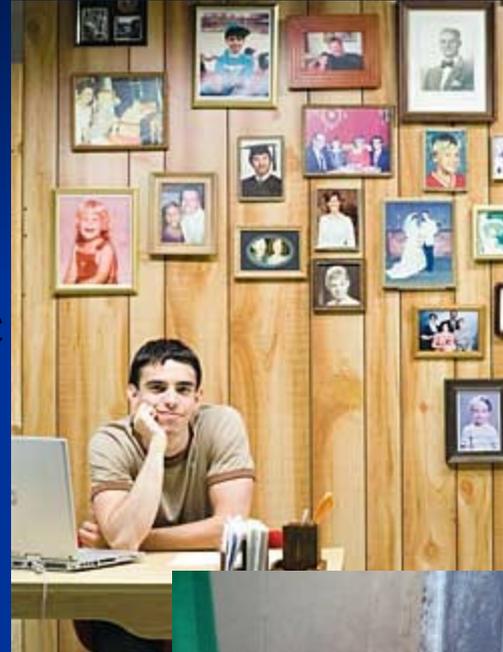


Ten Flatteners

- 1. destruction of the berlin wall and the creation of microsoft windows (universal OS platform)
- 2. creation of Netscape -- universal communications platform - which triggered massive investment by companies like Global Crossing in fiber optics -- think railroads -- but railroads to india
- 3. workflow to make use of the these fiber optic railroads
- 4. outsourcing
- 5. offshoring
- 6. open-sourcing -- think perl, linux, etc
- 7. insourcing -- letting UPS handle your internal logistics
- 8. supply-chaining -- think walmart's chain from china to here
- 9. informing -- Google
- 10. steroids -- taking everything before and improving it - thinks VOIP, WIRELESS, etc

Tell me it isn't flat...

- Firefox, Blake Ross
- Linux, Linus Torvalds
- Google, S. Brin, L Page
- SMART
- Jollibee
- Rags to Riches
- Lord of The Rings
- Larry Qua, Ionics EMS



Tell me it isn't flat...

