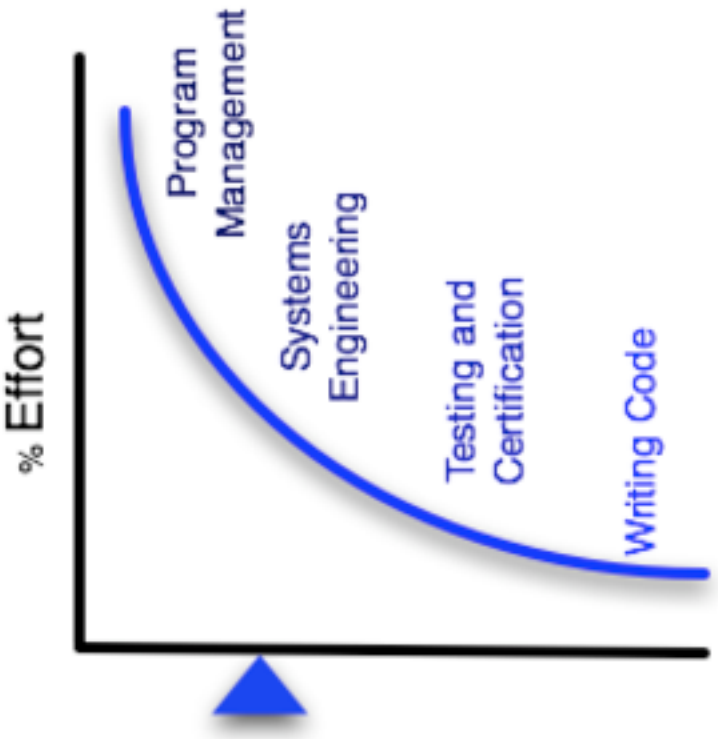
Intentional Emergence

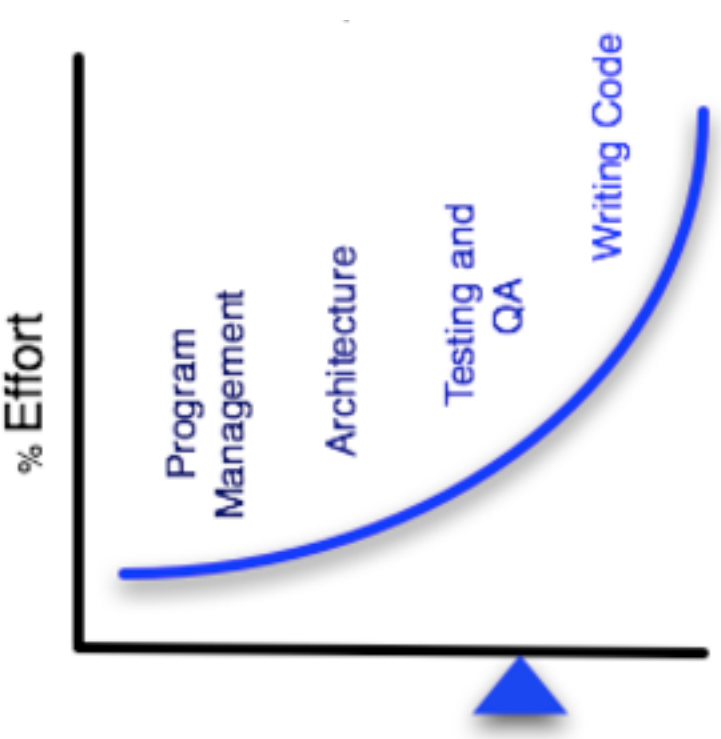
Innovation at the Edge

Jim Stogdill

Shape of Effort



Corporate



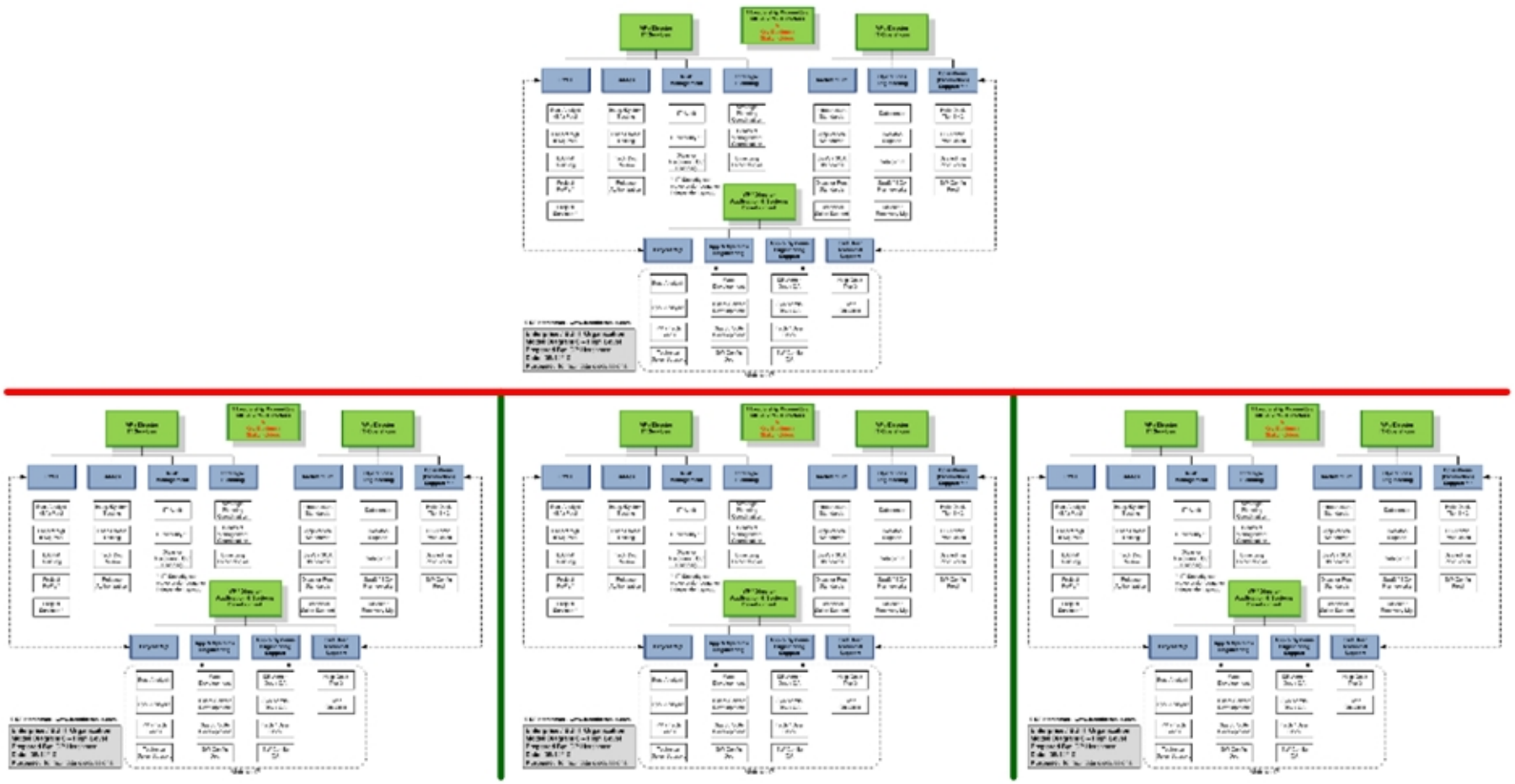
Web

Q: Why do even little corporate projects feel like pushing rope over a wall?

A:

Photo Jan Banning http://www.mymodernmet.com/profiles/blogs/bureaucracies-around-the-world

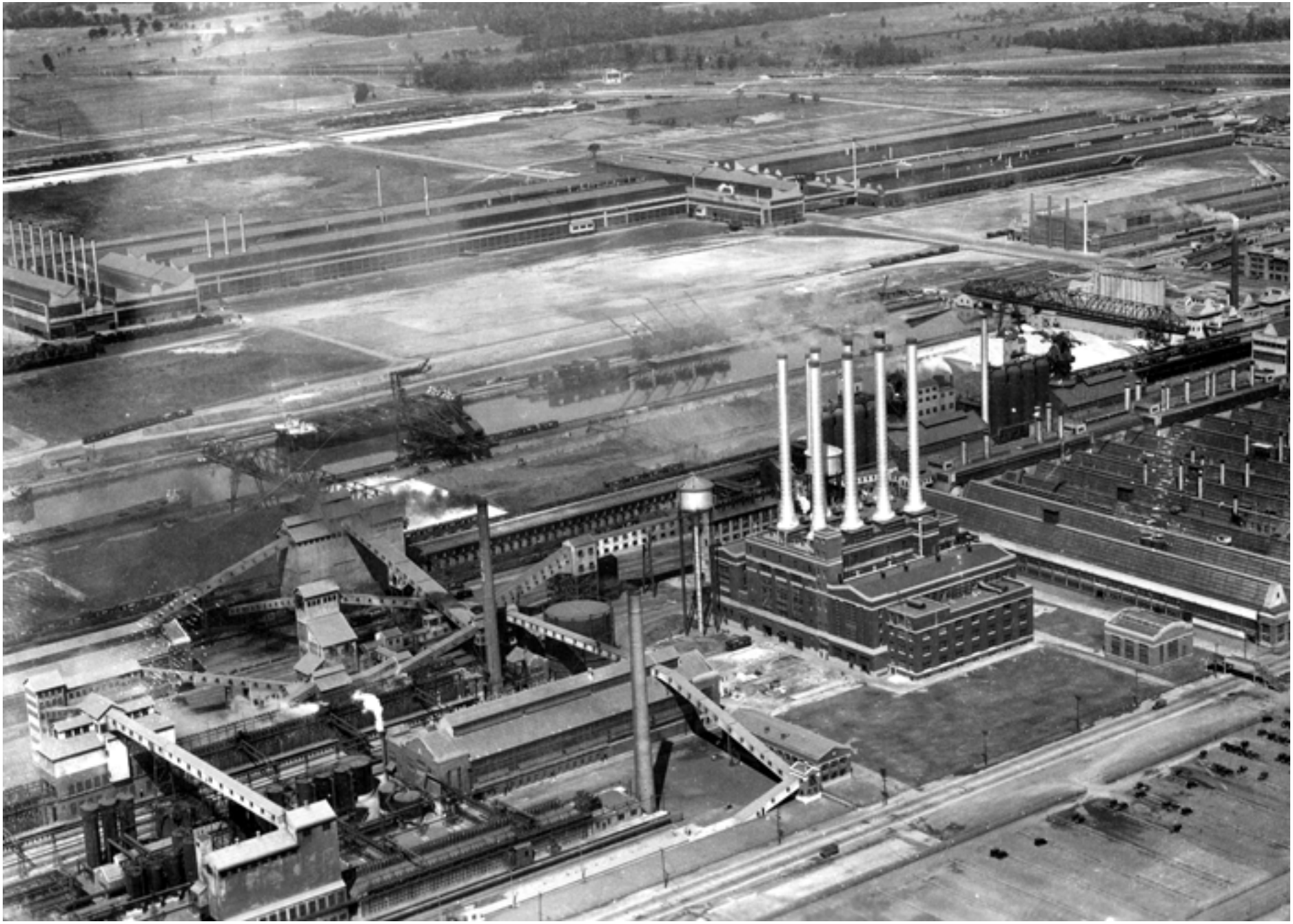
bu·reau·cra·cy: organization characterized by specialization of functions, adherence to fixed rules, and a hierarchy of authority.


Enterprise
Business Unit

Meta Context Part I

The Industrial Age

From: http://theformofmoney.blogharbor.com/blog/_archives/2009/3/24/4131366.html



http://www.autolife.umd.umich.edu/Race/R_Overview/Rouge_Plant.htm

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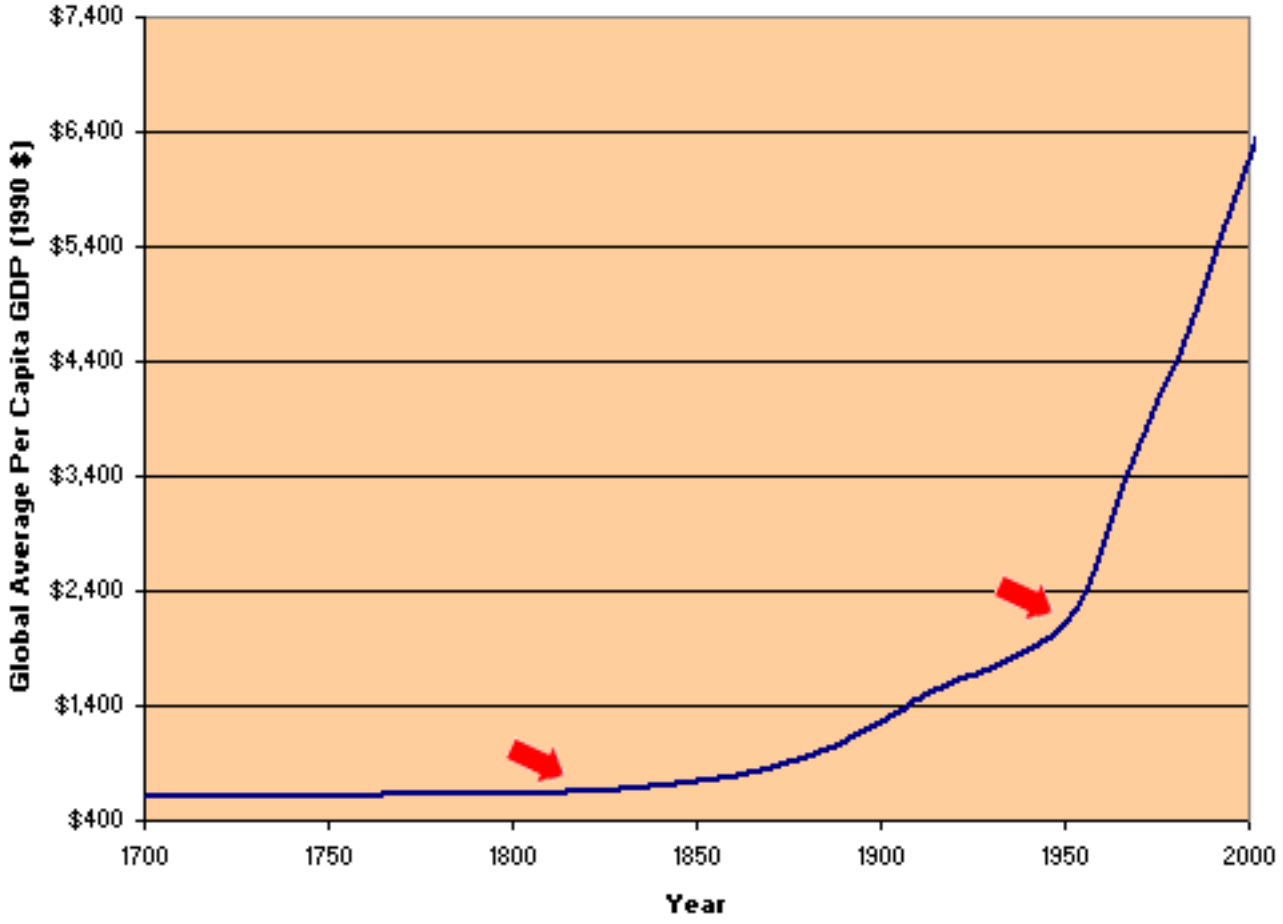
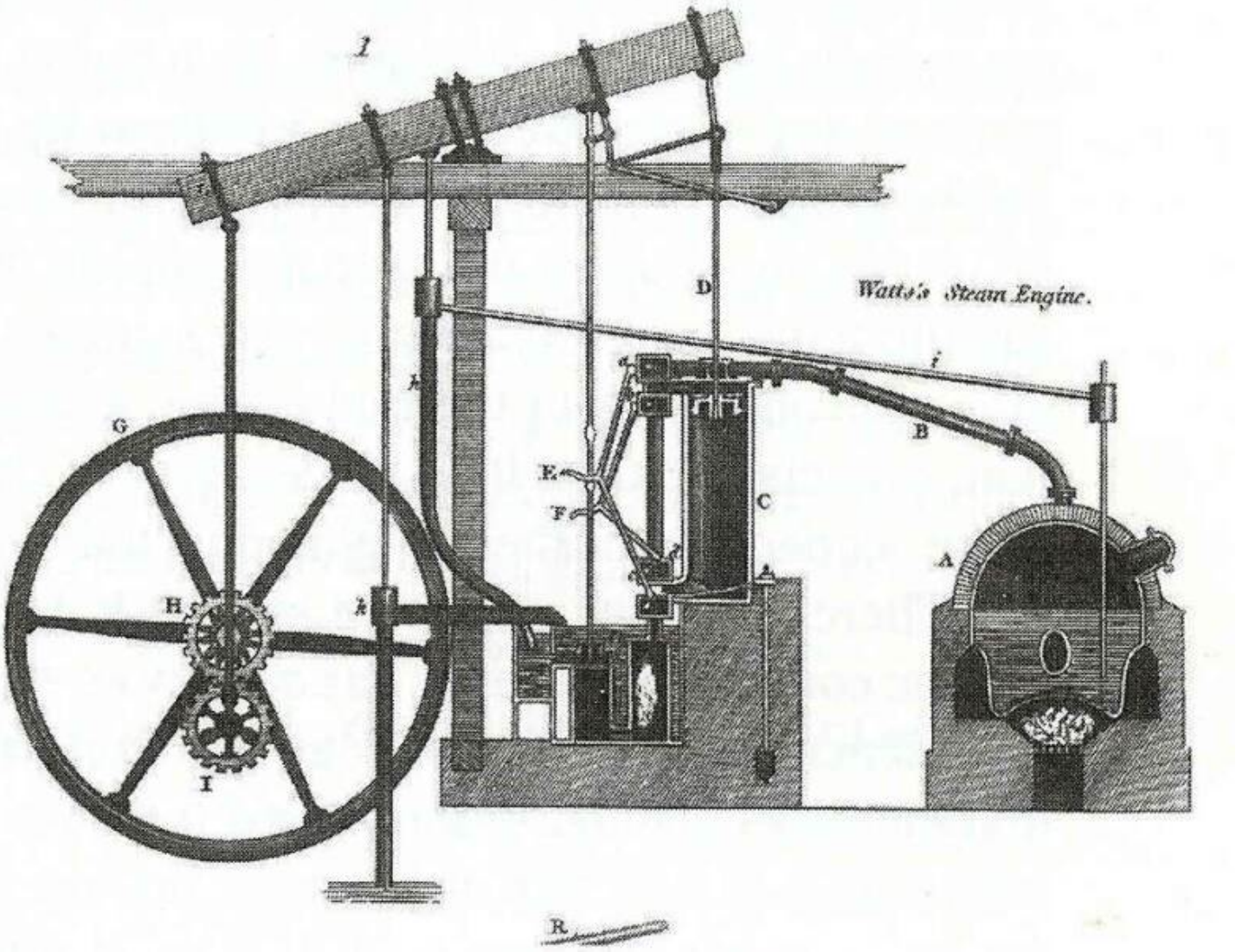


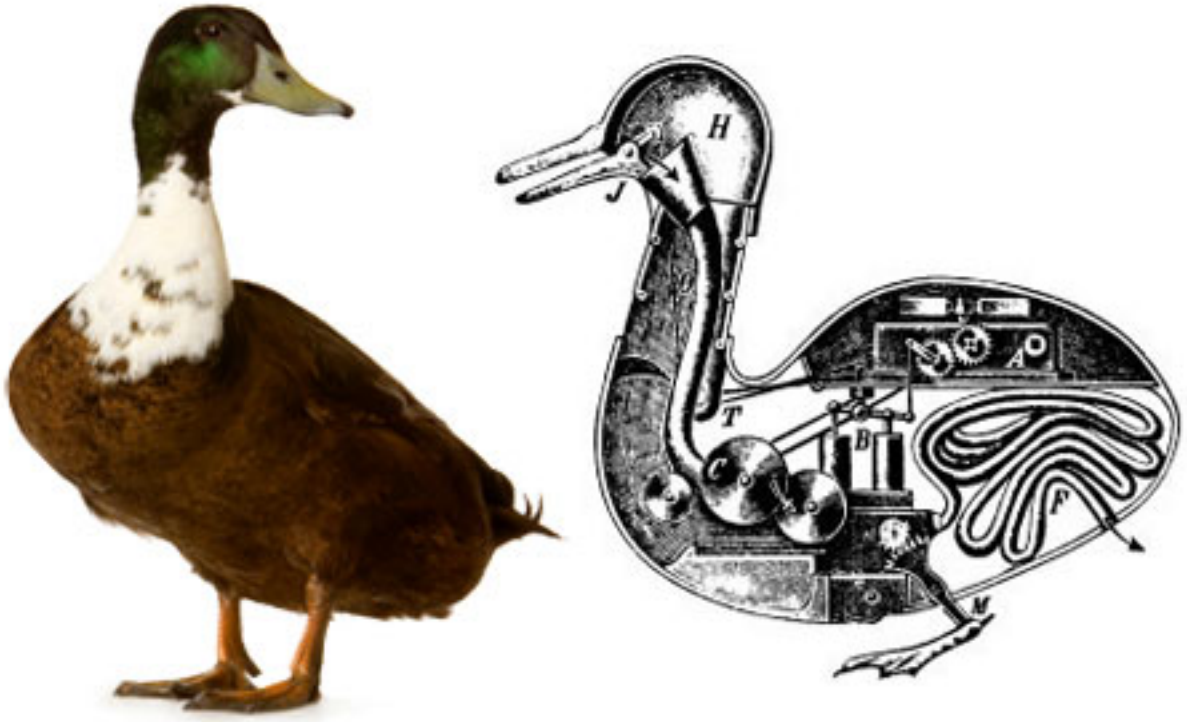
From: http://www.mkbergman.com/date/2006/07/



From http://www.humanthermodynamics.com/watt-engine.jpg

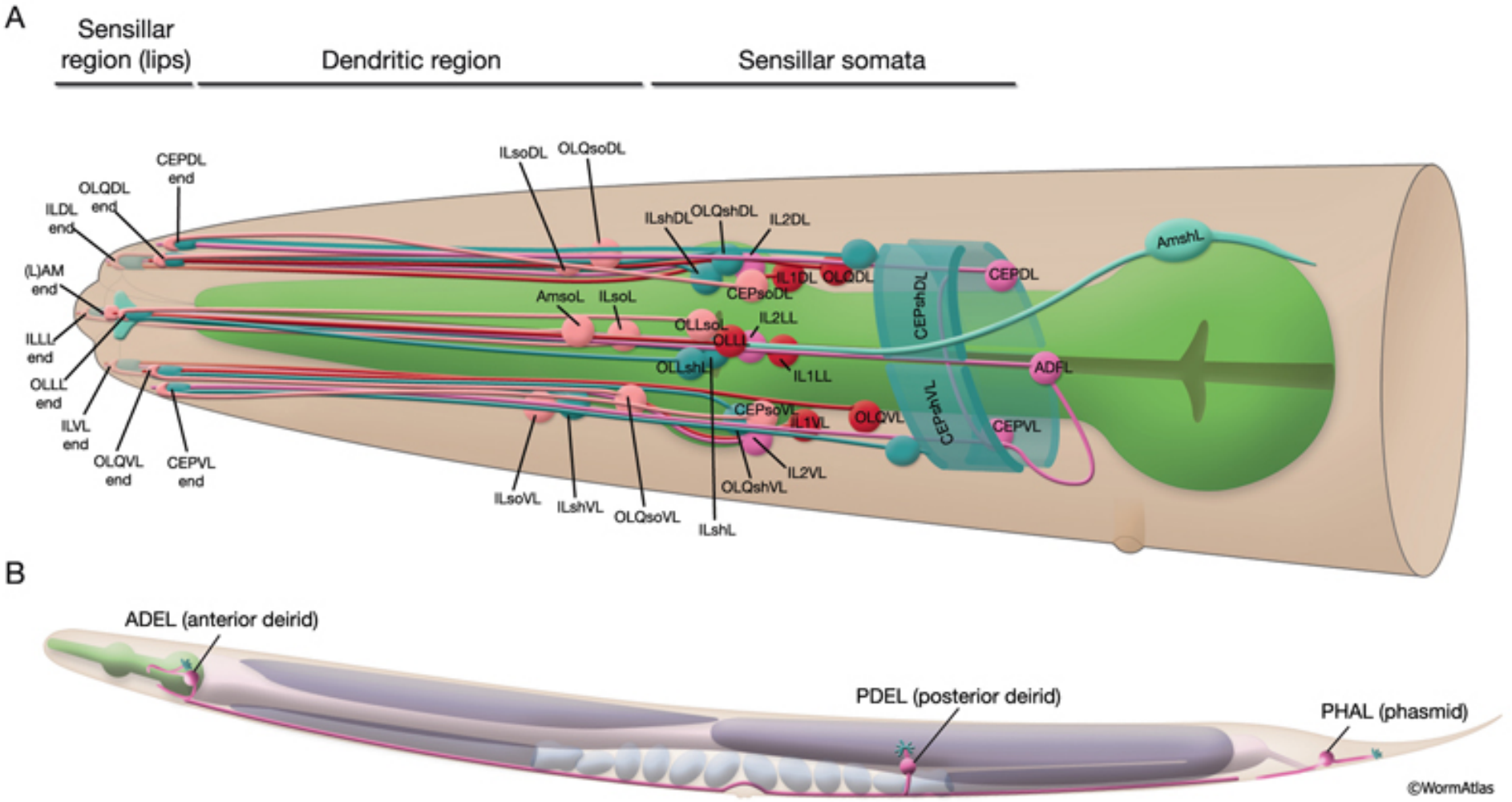
From: http://www.nyc-architecture.com/LM/Ellis_island(1).jpg

From: http://history.cultural-china.com/en/34History7223.html



From: http://www.goldenswamp.com/2009/08/22/educations-reductionist-flaw-is-like-the-digesting-duck/

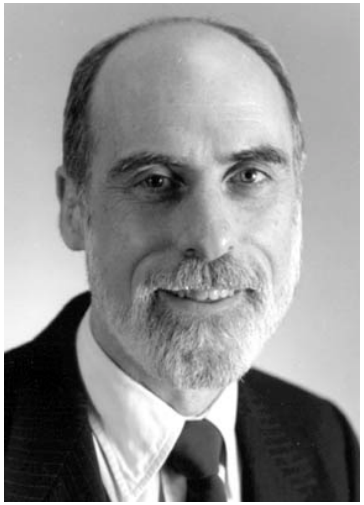
Wiring the worm

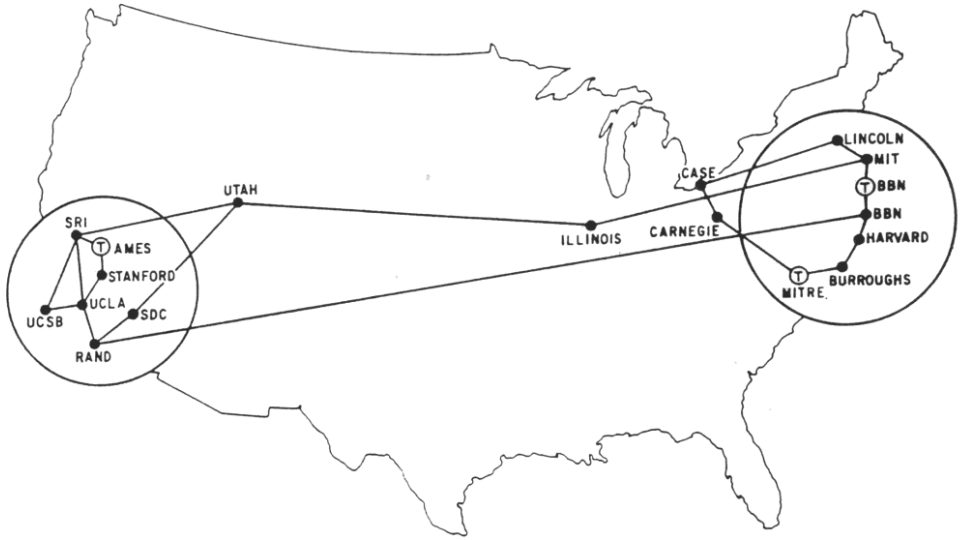


http://www.wormatlas.org/hermaphrodite/neuronalsupport/mainframe.htm

Meta Context Part II

The Information Age





MAP 4 September 1971

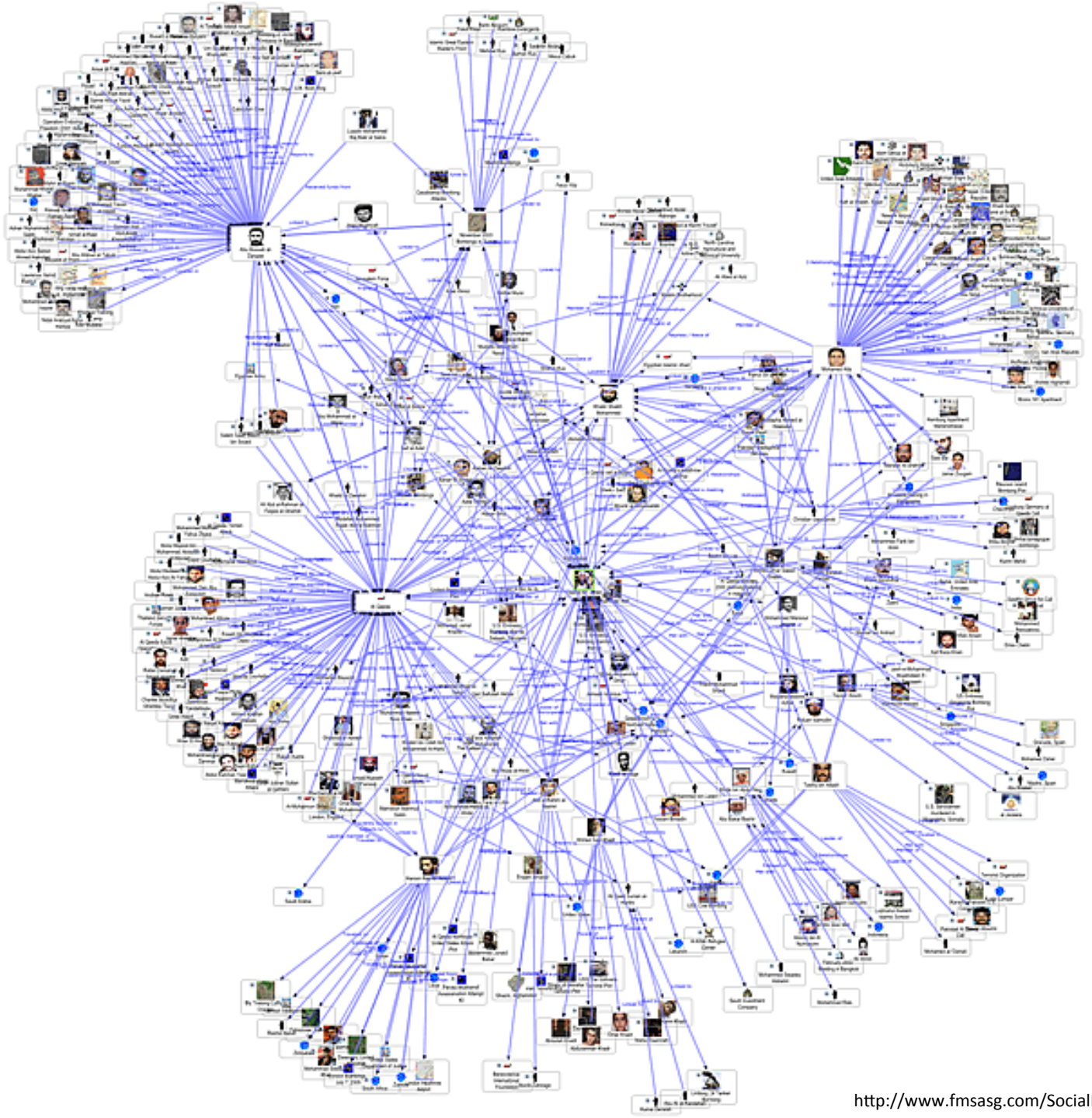
http://www.lamag.com/featuredarticle.aspx?id=13526&page=2

http://www.velocityguide.com/internet-history/lawrence-roberts.html

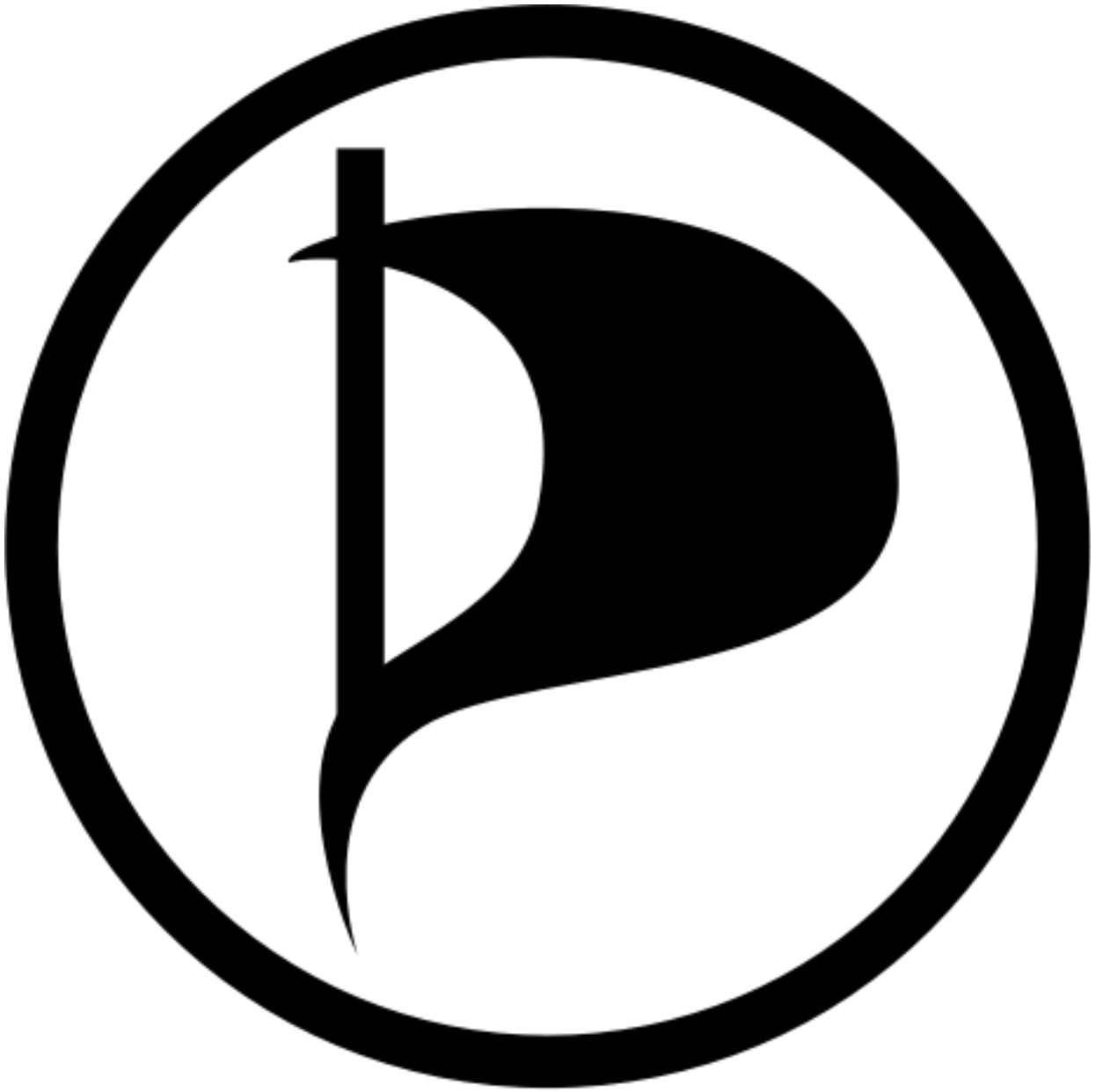
http://www.let.leidenuniv.nl/history/ivh/chap2.htm

http://www.computerhistory.org/internet_history/internet_history_70s.html

http://www.livinginternet.com/i/ii_kahn.htm



http://www.fmsasg.com/SocialNetworkAnalysis/



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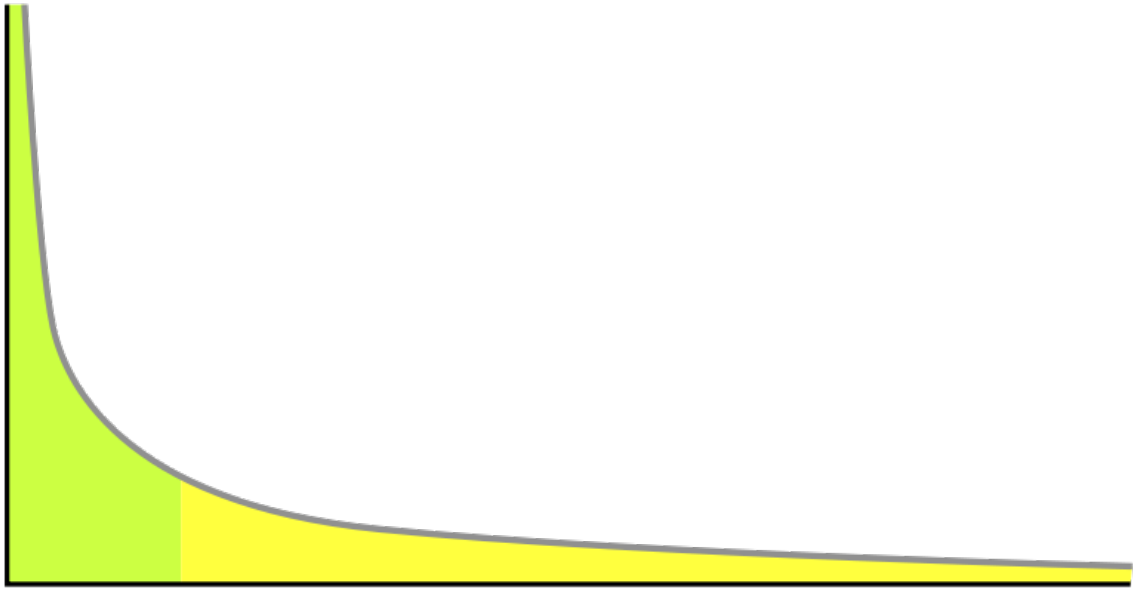

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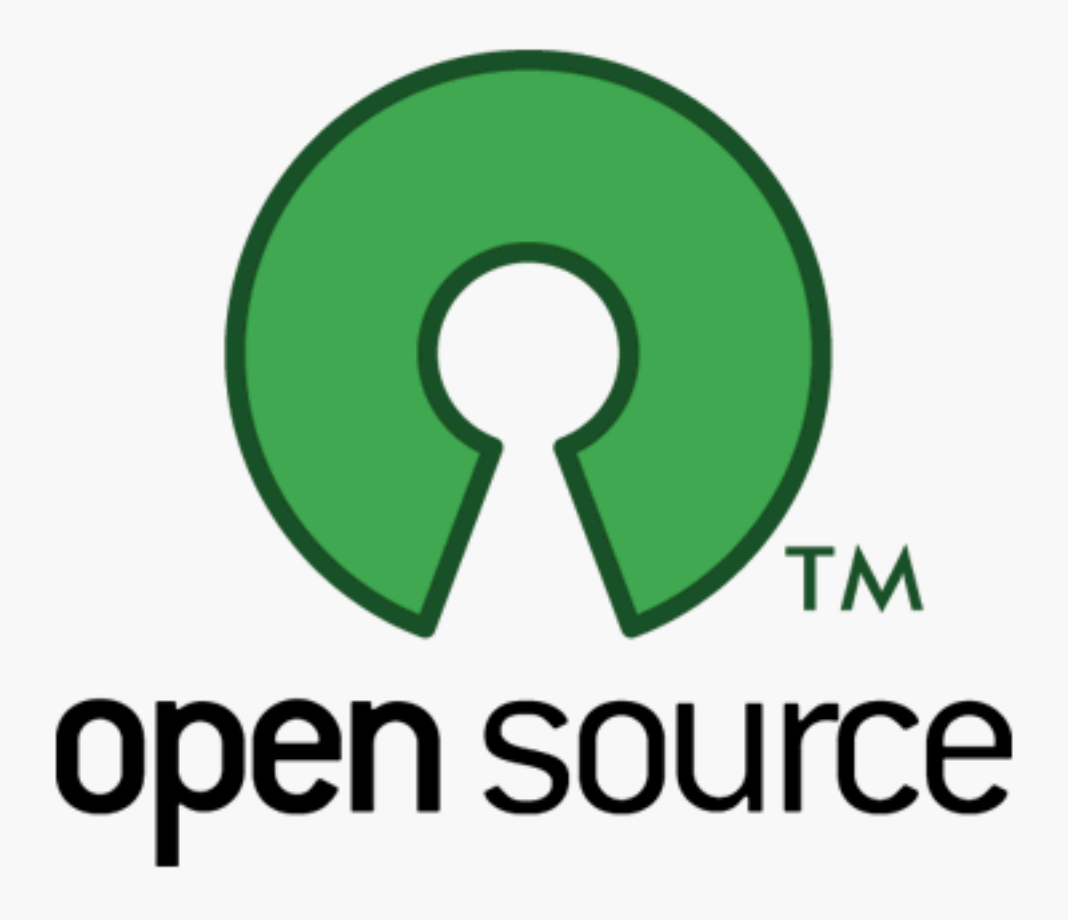

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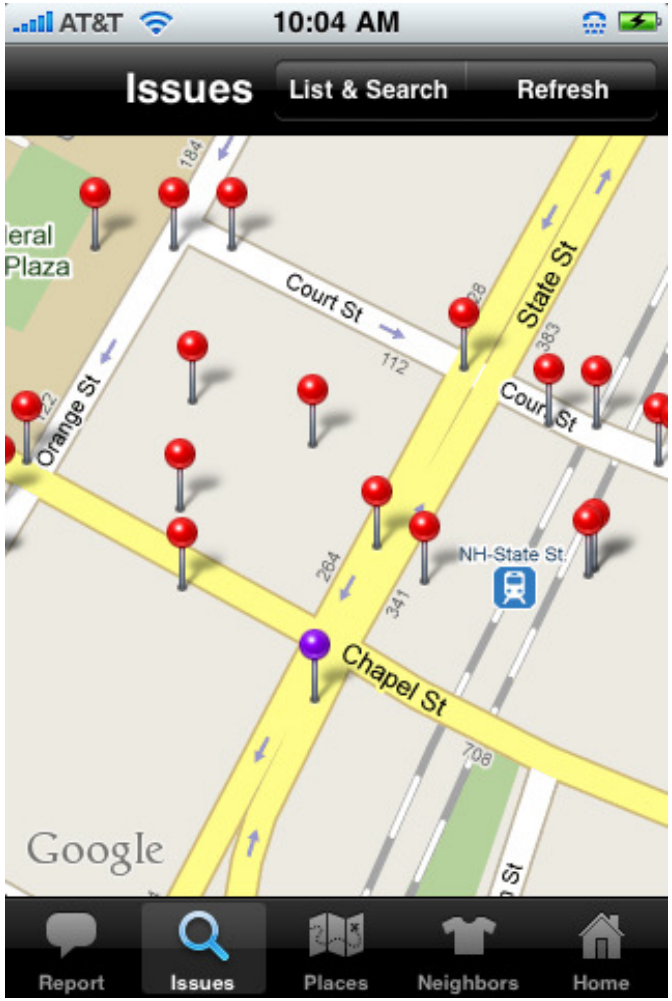

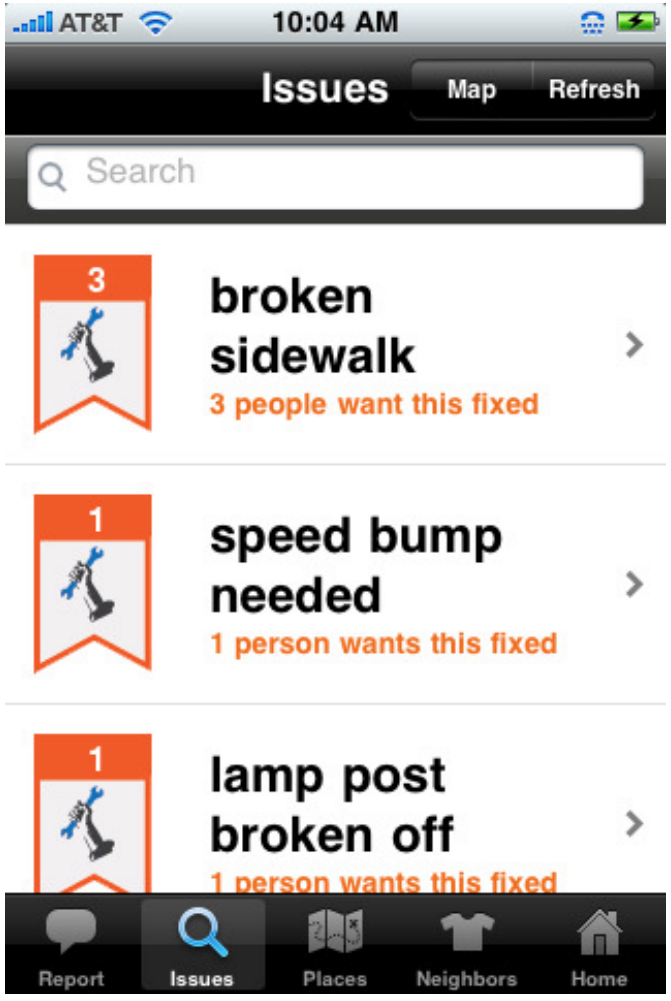

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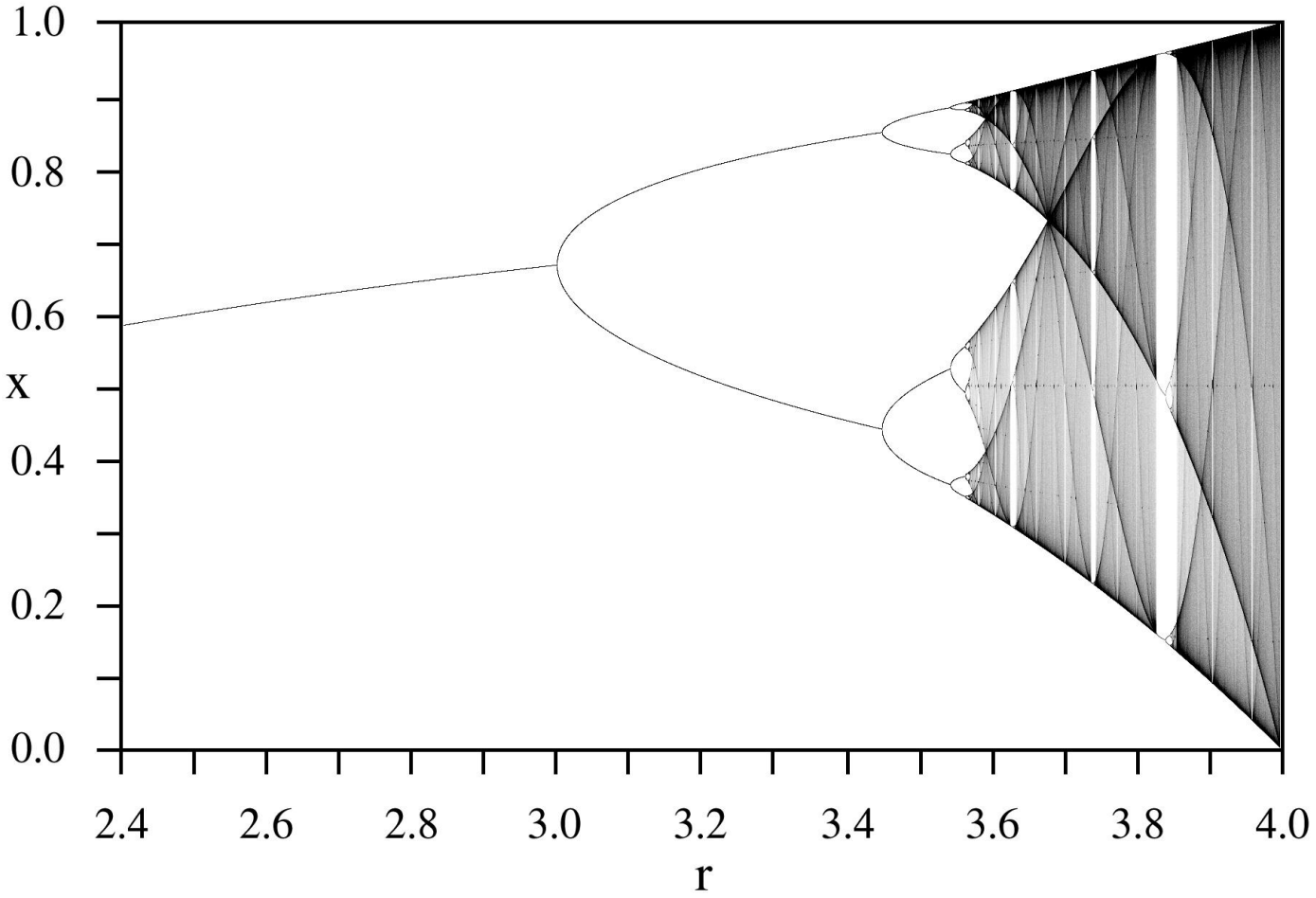
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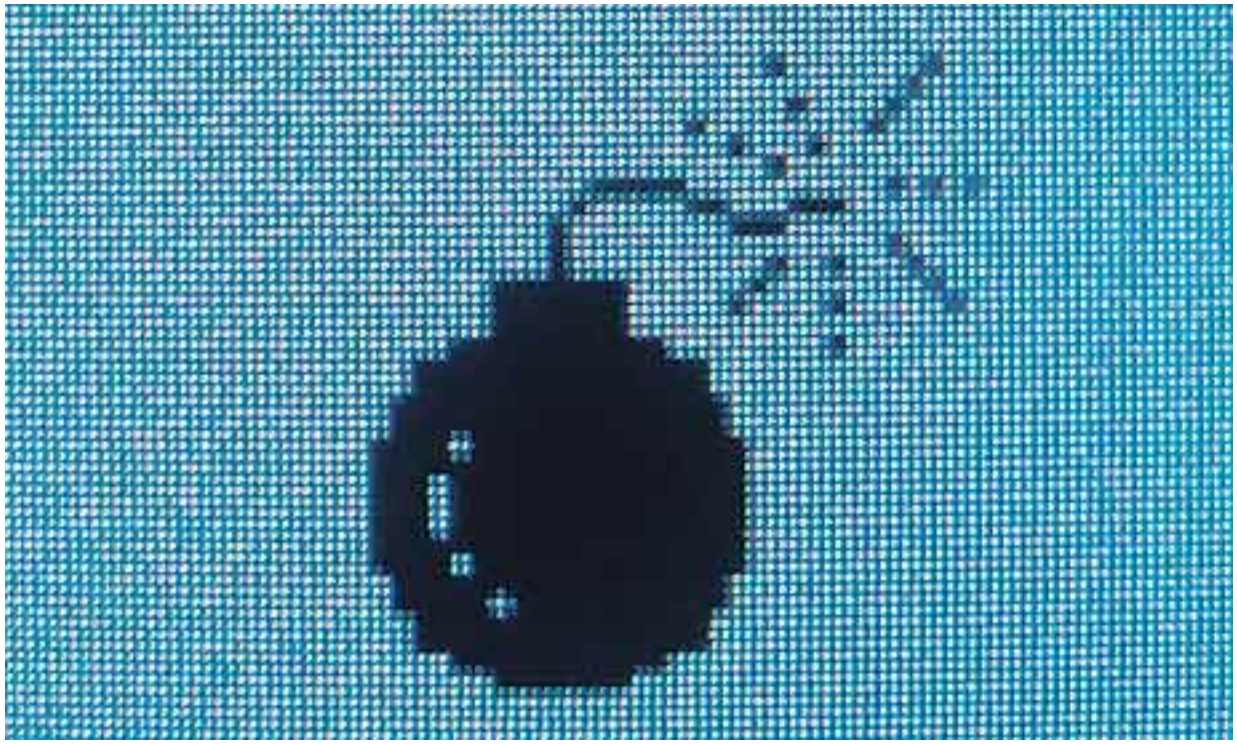
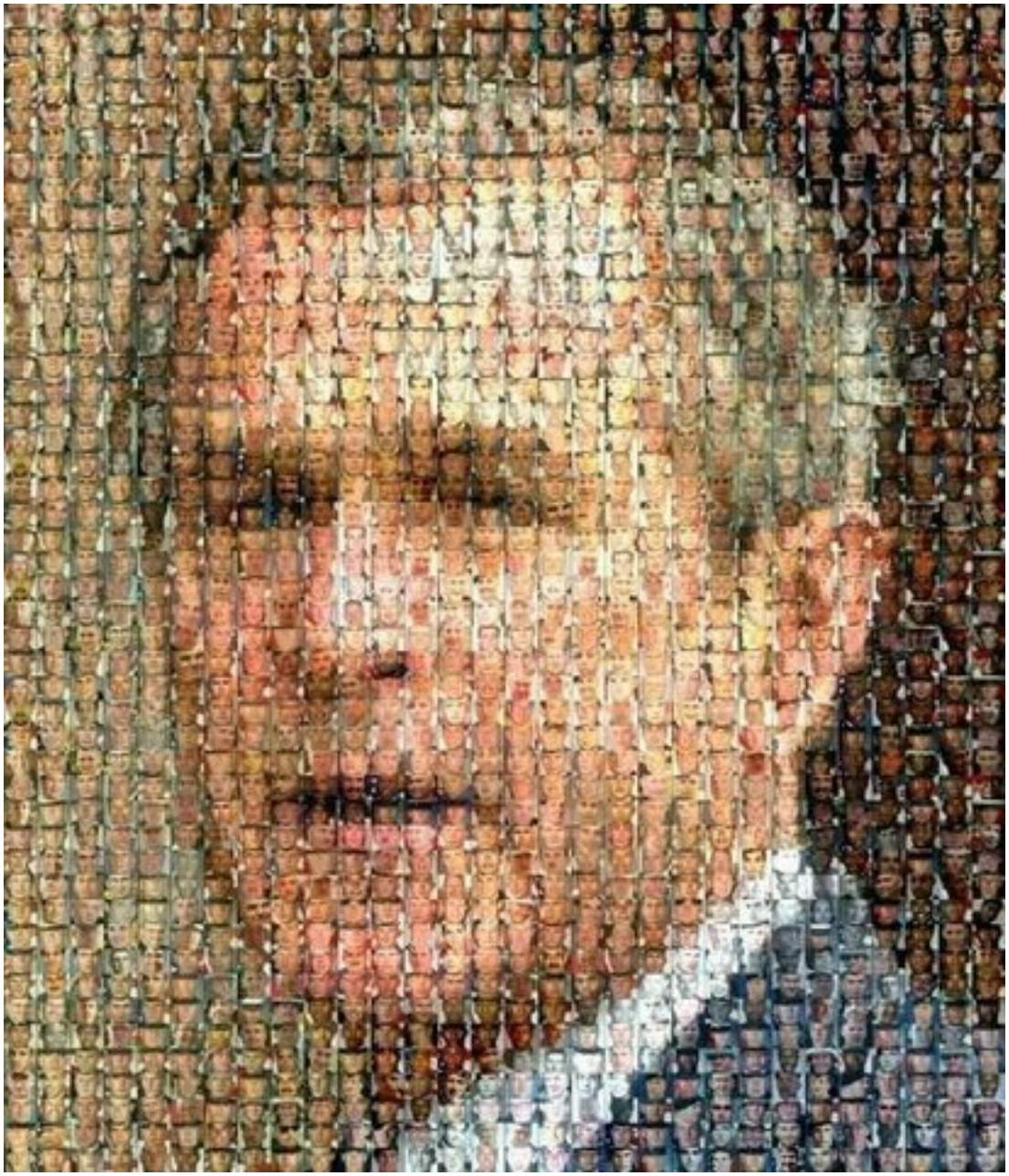


http://www.guardian.co.uk/politics/2010/oct/18/national-security-strategy-cyber-attacks



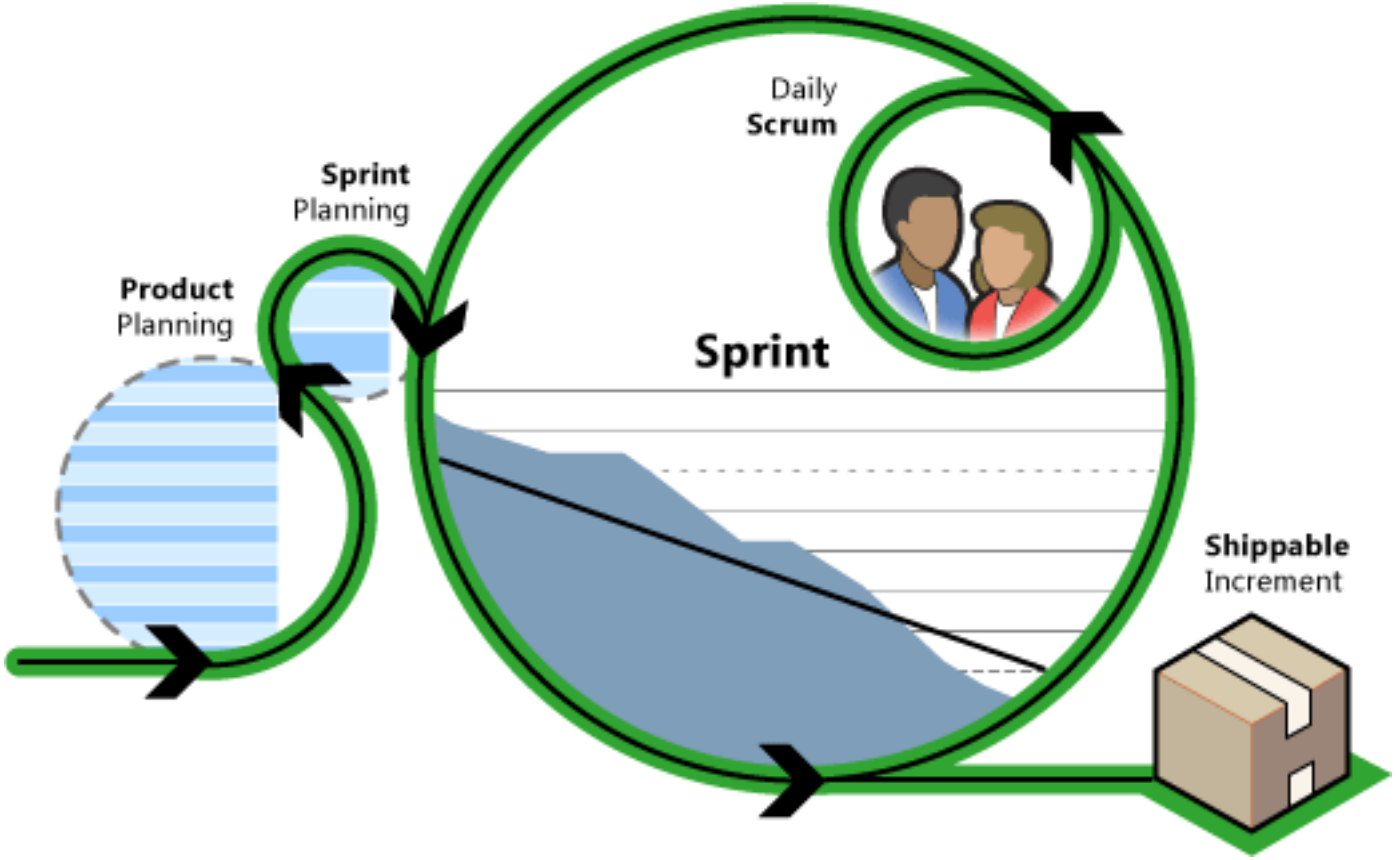
http://www.ukuleleman.net/uploaded_images/Bush%20Faces%20of%20the%20dead-795931.jpg

A Brief Pause.

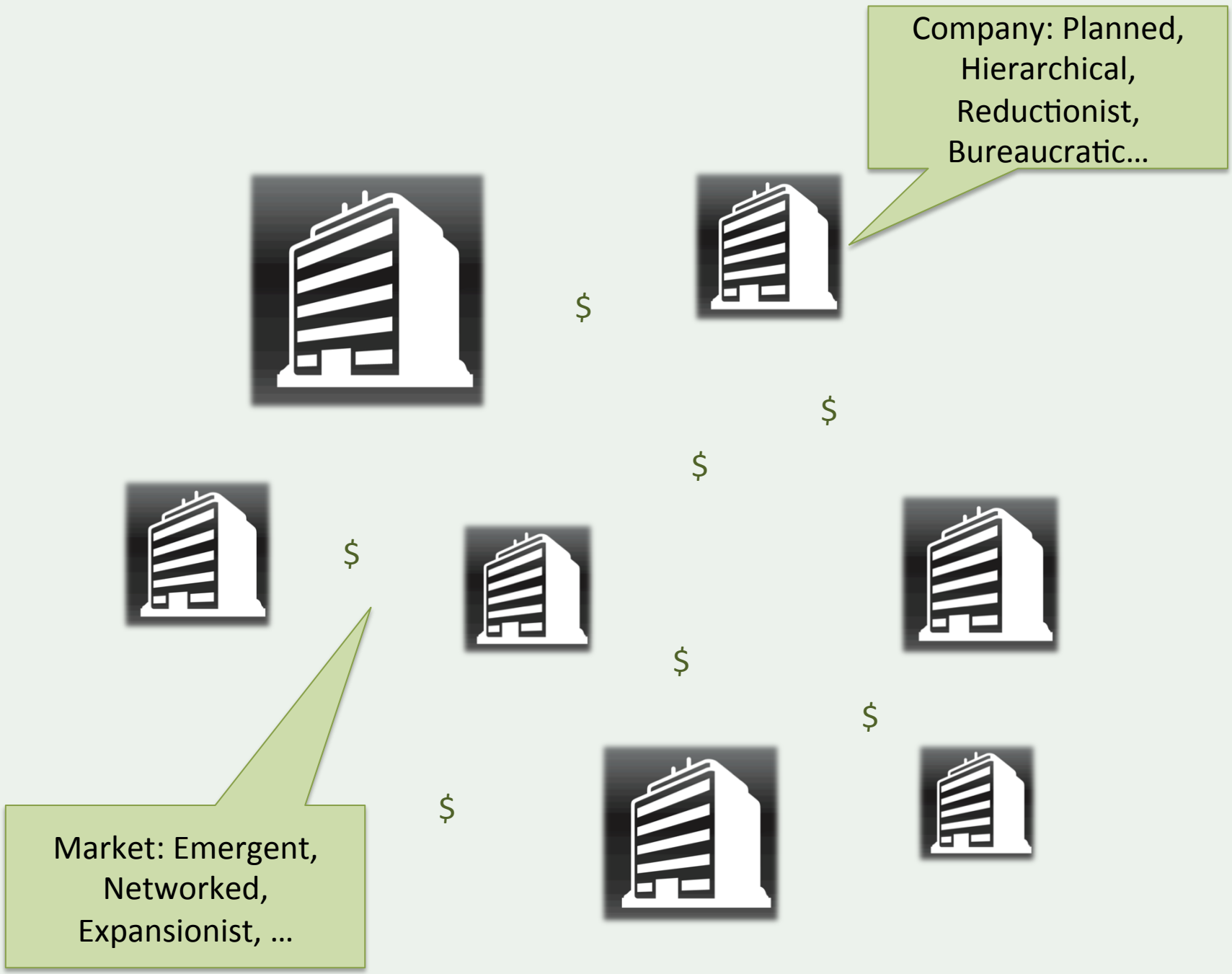
What the hell is he talking about? I thought this was a technology conference.

Q: Does the network age allow us (or require us) to adopt technology-enabled post-bureaucratic corporate models?

!= SDLC



http://msdn.microsoft.com/en-us/library/dd380647.aspx


Company: Planned, Hierarchical, Reductionist, Bureaucratic…
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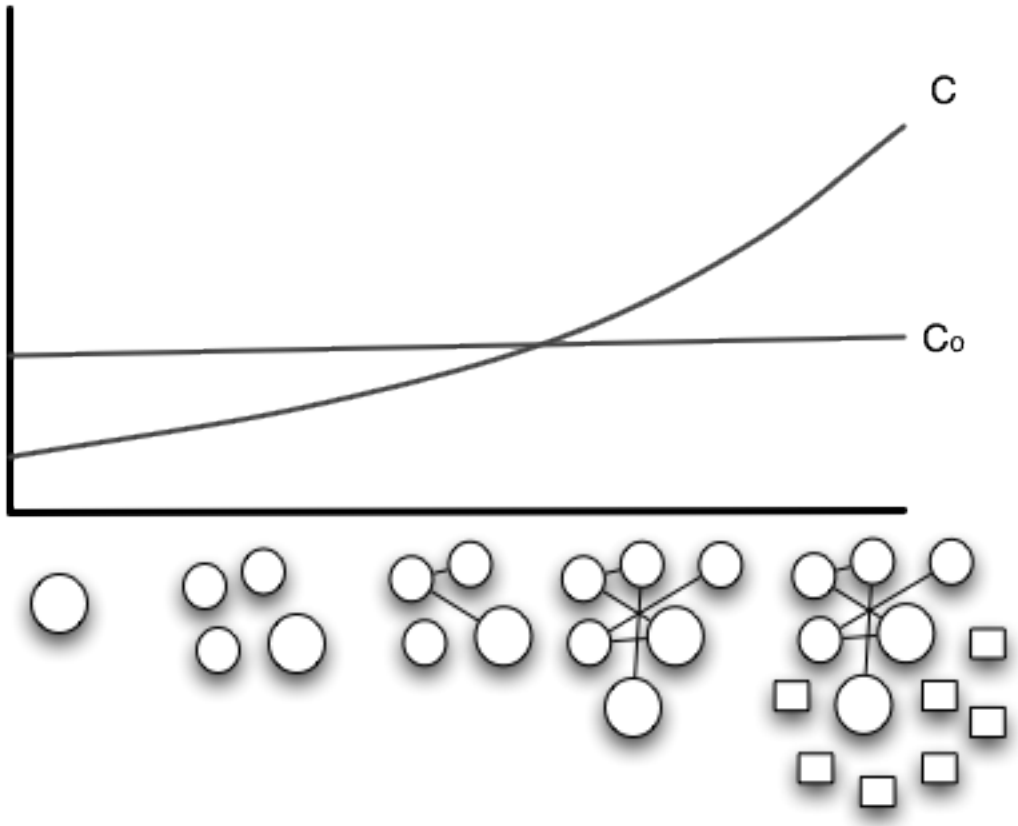
Market: Emergent, Networked, Expansionist, …


C
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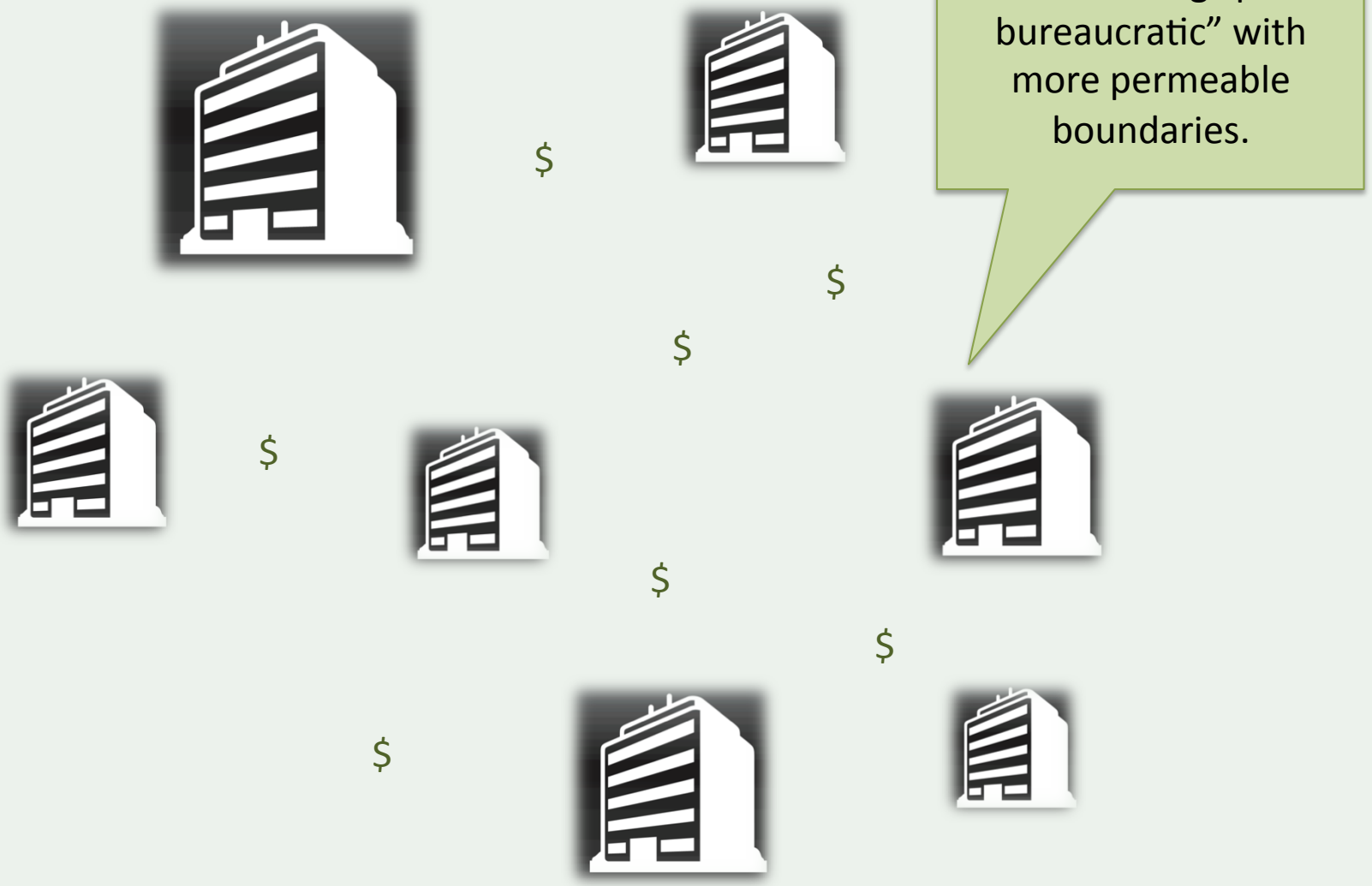
"It is no exaggeration to say that if we had had to rely on conscious central planning for the growth of our industrial system, it would never have reached the degree of differentiation, complexity, and flexibility it has attained.

…

Any further growth of its complexity, therefore, far from making central direction more necessary, makes it more important than ever that we should use a technique which does not depend on conscious control."

Friedrich Hayak, The Road to Serfdom


Internal characteristics are becoming “post-bureaucratic” with more permeable boundaries.
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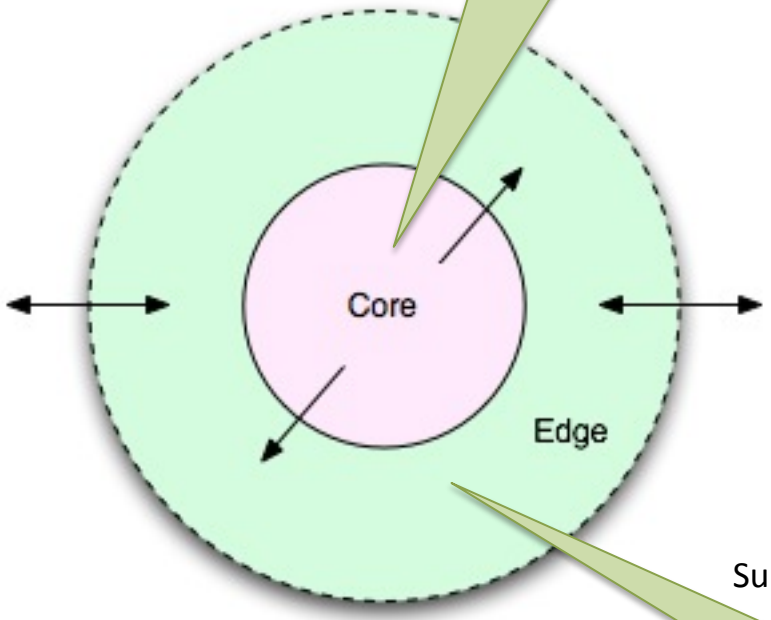
Enterprise Core: planned, hierarchical, reductionist



Surroundings

Market: Emergent, Networked, Expansionist, …

Edge: Impedance matched hybrid. Intentionally emergent.

Enterprise – Web ("outside")

Planned

Bureaucratic

Emergent

Post-Bureaucratic

Cost focus

Revenue focus

Reductionist

Capital budget approval

Coercive

Expansionist

Variable cost/self funded

Adoption

Proprietary

Open

Hierarchical

Industrialized

Networked

High Hurdle

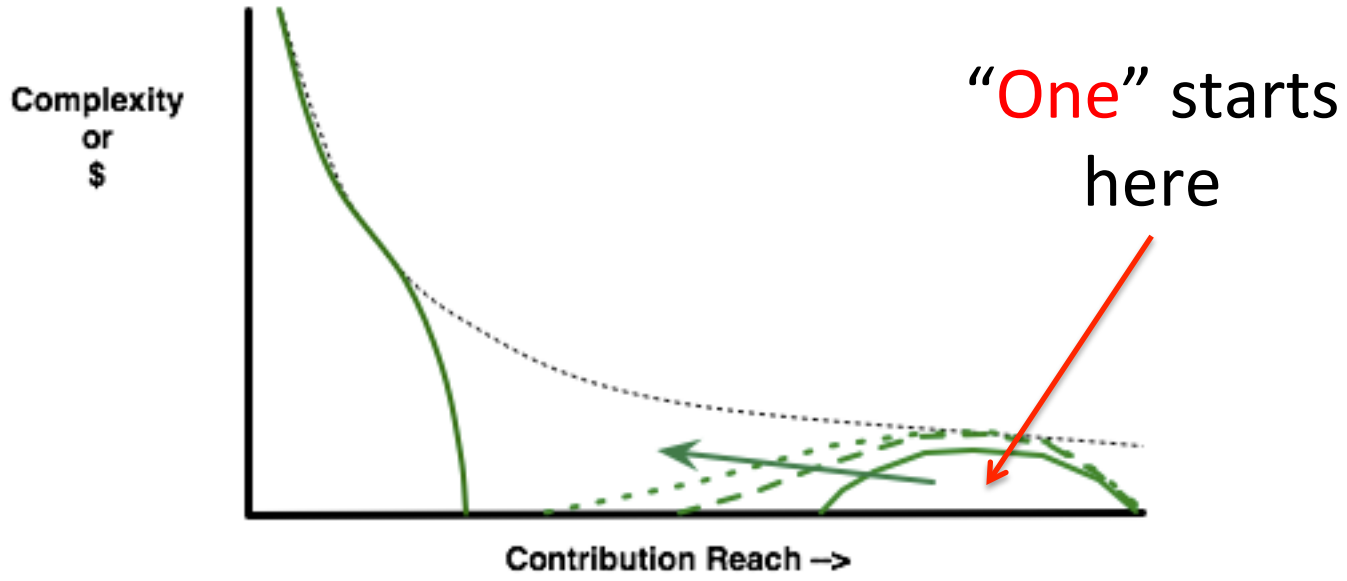
Participative

Low Hurdle

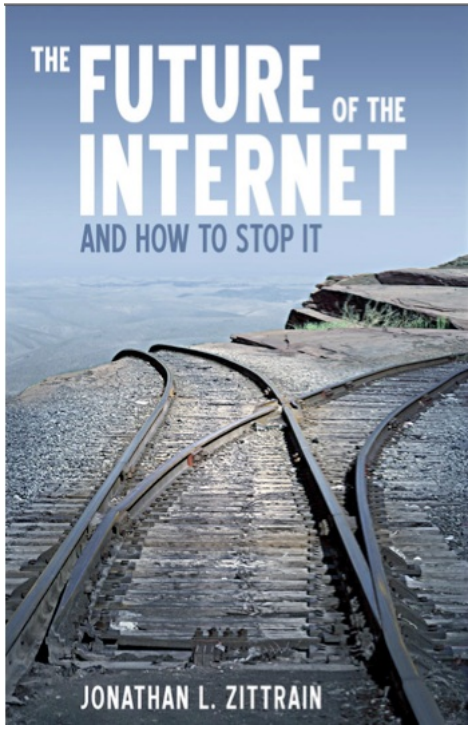
The Paradox of Control

Gall's Law: A complex system that works is invariably found to have evolved from a simple system that worked.

The skunk works of One



Building the long tail of IT contribution. On purpose.



Generativity = “a system’s capacity to produce unanticipated change through unfiltered contributions from broad and varied audiences.”

Features of Generative Systems

- Transferability

- Leverage

- Adaptability

- Accessibility

- Ease of Mastery

Generativity

- **Leverage**: How strongly a system or technology leverages a set of possible tasks, meaning it makes our difficult tasks easier.
- **Adaptability**: adaptability to a range of tasks. The ease with which it can be modified to broaden its range of uses
- **Ease of Mastery**: Compare the mastery that is needed to use an airplane and to use a paper
- **Accessibility / Transferability**: The easier it is to obtain the technology, tools and information necessary to achieve mastery - and convey changes to others - the more generative a system is

Make choices that increase generativity.

Some things that contribute to generativity

Open Data

Open Source Software

Open Standards

Open API's

Low hurdles

Runtime Platforms

Simple rules

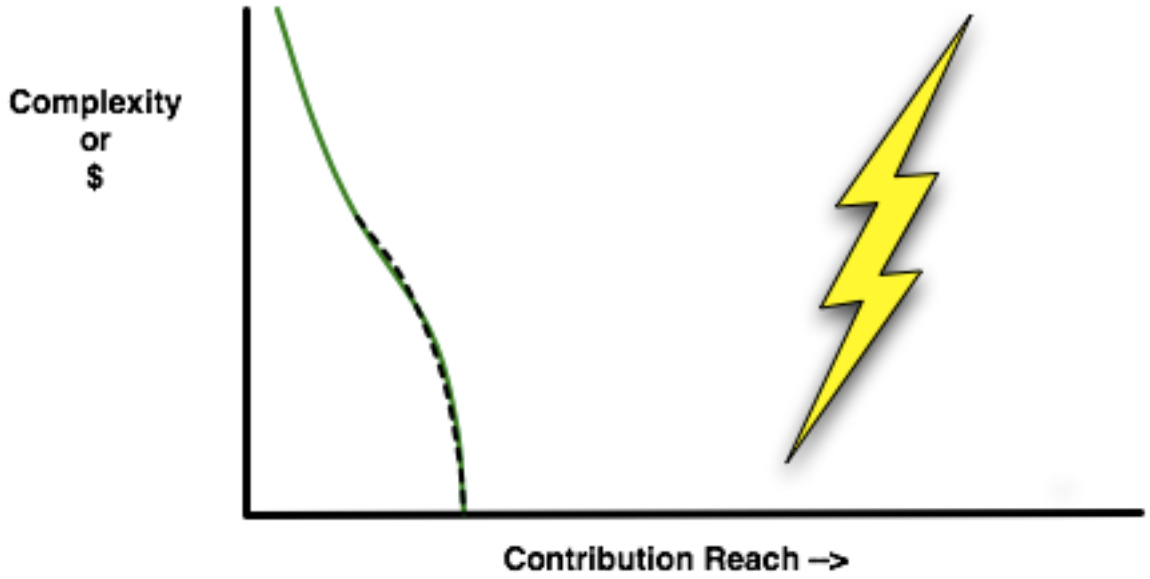
20% time

Small world networks

Variable Cost

Community

…


Complexity
or
$
Contribution Reach –>

SCRATCH

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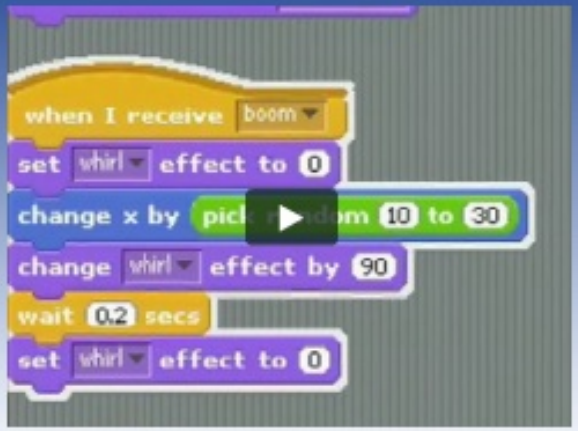

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by Starlyfan999

Growing Plants
by lizzy_1_year

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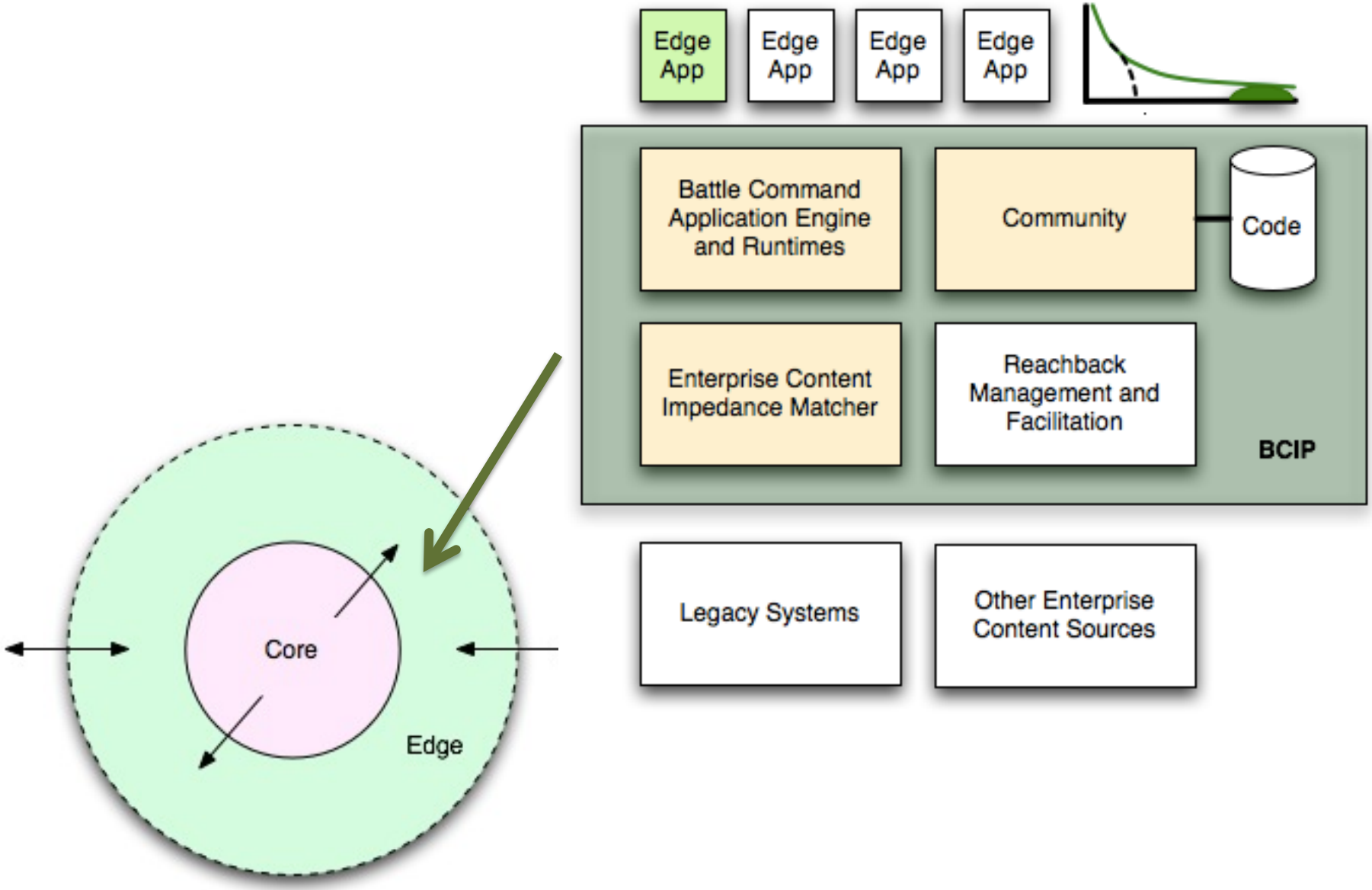
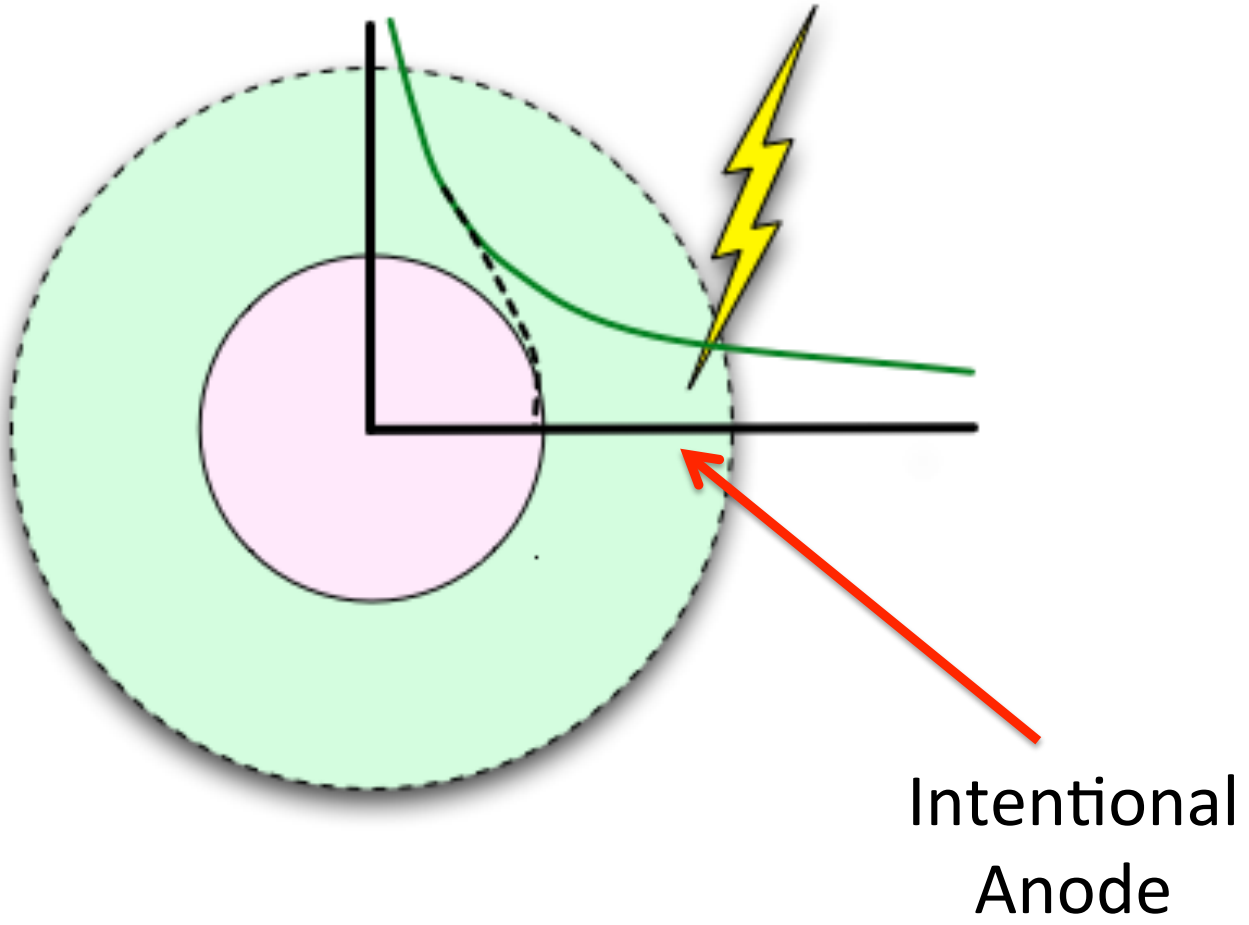
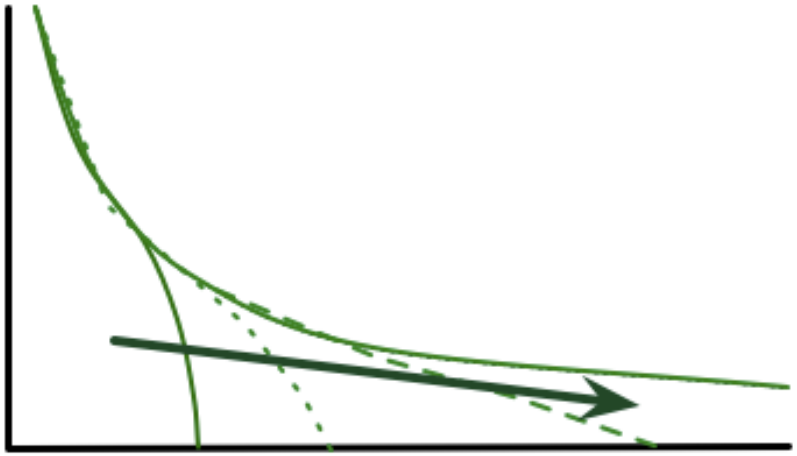

Edge App
Edge App
Edge App
Edge App
Battle Command Application Engine and Runtimes
Community
Code
Enterprise Content Impedance Matcher
Reachback Management and Facilitation
BCIP
Legacy Systems
Other Enterprise Content Sources
Core
Edge


Intentional
Anode

APPS FOR
THE ARMY

Q: At your workplace, what changes to policy, architecture, technology, or culture would enhance long tail emergence?



Q: How can you better impedance match your organization with the decentralized and emergent world it is immersed in?

Can we make IT not suck?