

RAND HIE

- ✘ Length: 10 years (1971 – 1982)
- ✘ Cost: “multi-millions”
- ✘ Finding: Managed care vs. free care has little impact on health outcomes

SIME-DIME

- ✘ Length: 12 years (1971 – 1983)
- ✘ Cost: ?? (had to be millions)
- ✘ Findings: Work and marriage effects

MILLENNIUM CHALLENGE

- ✘ Length: 3 weeks
- ✘ Cost: \$235m
- ✘ Findings: Asymmetric warfare hurts

INDIAN TEACHER ABSENCE STUDY

- ✘ Length: 1 year
- ✘ Cost: ? (120 teachers in India plus two MIT professors)
- ✘ Findings: Take pictures of teachers → absentee rate declines 50%, test scores rise.

Why is the last one better?

Replication

REPLICATION

- ✘ Generality
- ✘ Accidents
- ✘ Biases

HOW DO YOU MAKE REPLICATION POSSIBLE?

Duflo: “While the cost of a good randomized policy evaluation in the U.S. easily reaches millions of dollars, both program costs and data collection costs are much lower in developing countries. This has allowed the practice to generalize beyond a few very well-crafted, major projects to a multiplicity of programs, countries, and contexts.”

<http://econ-www.mit.edu/files/800>

This is great
if you happen to study only places
where annual wages
are below \$20

WHAT ARE WE MISSING?

- ✘ Natural problems can be solved
 - + Find oil under the ocean ✓
 - + Go to the moon ✓
 - + Keep preemies alive ✓
- ✘ The problems that vex us are SOCIAL
 - + Global warming
 - + Terrorism and religious intolerance
 - + Administrative response to emergency

HOW DO WE ANSWER SOCIAL QUESTIONS?

- ✘ Pure Theory
 - + Usually delivers nothing
 - + When it does deliver something, its a disaster
- ✘ Observational studies
 - + No causation
 - + No replication
 - + No 'apparent facts' – no induction
- ✘ Debates about trials and errors
 - + Endless
 - + Ideologically driven
 - + “I wish more lessons were not just observed but also learned.”

WE MAKE POLICY IN A KNOWLEDGE VACCUUM

Governments allocate massive shares
of national production
All over the world

Yet

Governments do not test their designs

VIRTUAL WORLDS

- × Massively Multiuser Online Spaces
 - + Persistent
 - + Gigantic
 - + Real
 - × Real people still act like real people
 - × Much stuff in real life is virtual
 - × Selling virtual goods is a \$6b business
 - × “Internal economies” much larger (Jamaica?)

GAME POLICY METHODS

1. Observe player dissatisfaction
2. Develop new design rules (= policies)
3. Announce new direction, gather feedback
4. Implement new design internally
5. Test internally with small numbers
6. Release new design to “test worlds,” observe results
7. Return to step 1
8. ITERATE until new design meets standards

Governments
do not iterate
prior to implementation

BUT

They could

THE SIZE OF VIRTUAL WORLDS

- × Farmville

 - + Farming

 - + 70m users

- × Tribal Wars

 - + Combat

 - + 600,000 users

- × Nile Online

 - + City-Building

 - + 5,000 users

THE NEGATIVES

- ✗ “Games are not relevant”
 - + Policy is game design
- ✗ “It’s not real”
 - + A Petri dish isn’t real either
- ✗ “We can’t control everything”
 - + You don’t control everything in the lab either
- ✗ “It’s too expensive to simulate social things”
 - + Labs don’t simulate, they experiment

THE POSITIVES

- ✘ Replication

 - + Replication

 - ✘ Replication

- ✘ Causation

 - + Causation

 - ✘ Causation

- ✘ Reliability and Robustness

 - + Big N

 - + Big T

EXPLORING THE FEASIBLE

Arden

Greenland



Pavel

Pavel damages Weak Skeleton: 6 (6 Physical)
Experience Points Gained: 16
Pavel killed Weak Skeleton
Weak Skeleton : Damage Immunity absorbs 4 point(s) of Physical



Talk:



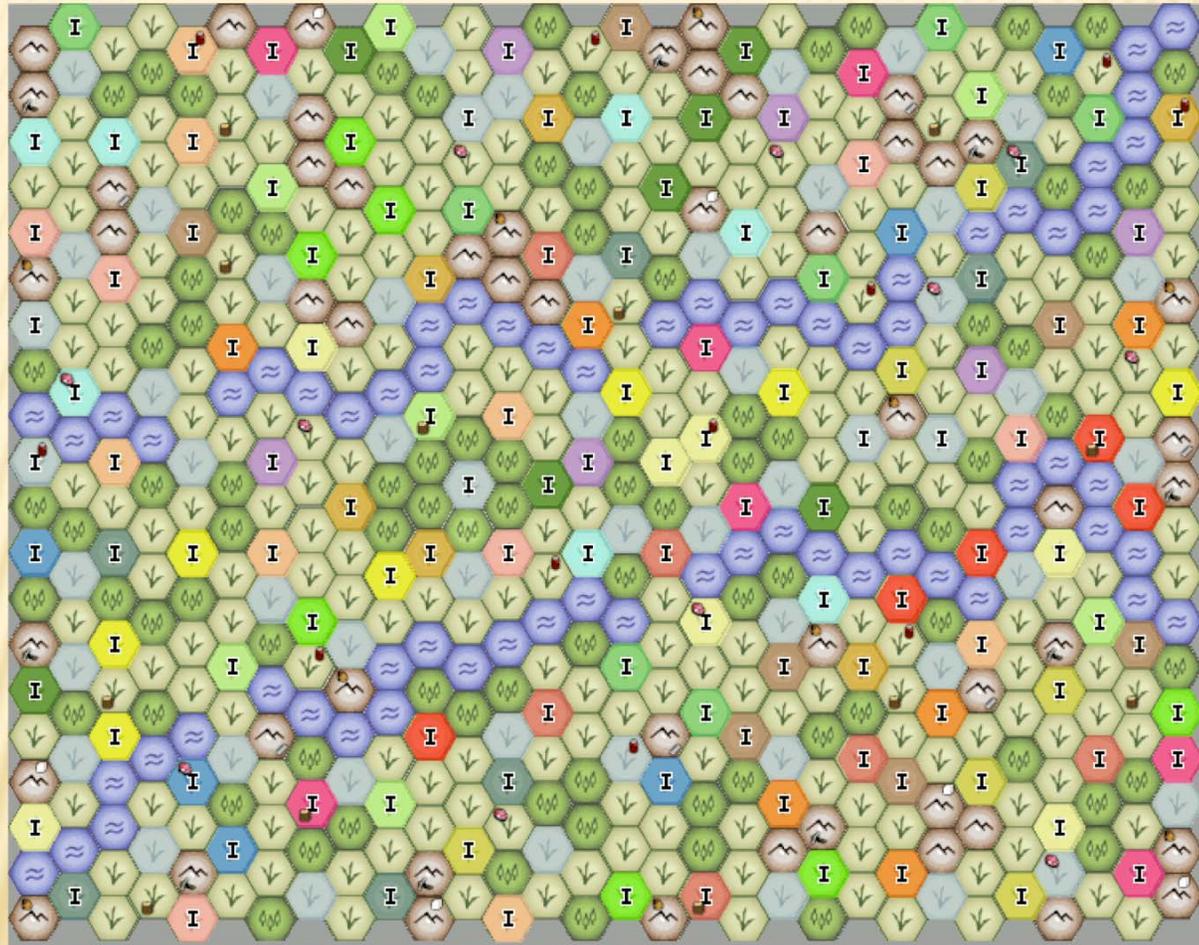
ARDEN: FANTASY RPG BASED ON RICHARD III

- × Immersive, 3D
- × RQ: Does economic rationality map into fantasy environment
- × Make a tiny world
- × Use File → Save As to copy
- × Potion of Cure Light Wounds
 - + World A: Price = 15 gold
 - + World B: Price = 30 gold
- × Per capita consumption 40% lower in World B

GREENLAND

- ✘ MMBBG
- ✘ Similar to Nile Online
- ✘ Production, development, trade, some combat
- ✘ Objective: Make a small-scale virtual world that anyone can deploy quickly to test something social

KINGDOM GROWTH IN GREENLAND A1



Would it have been different
if we had
changed the rules?

You bet.

That's the point.

GREENLAND CURRENT STATUS

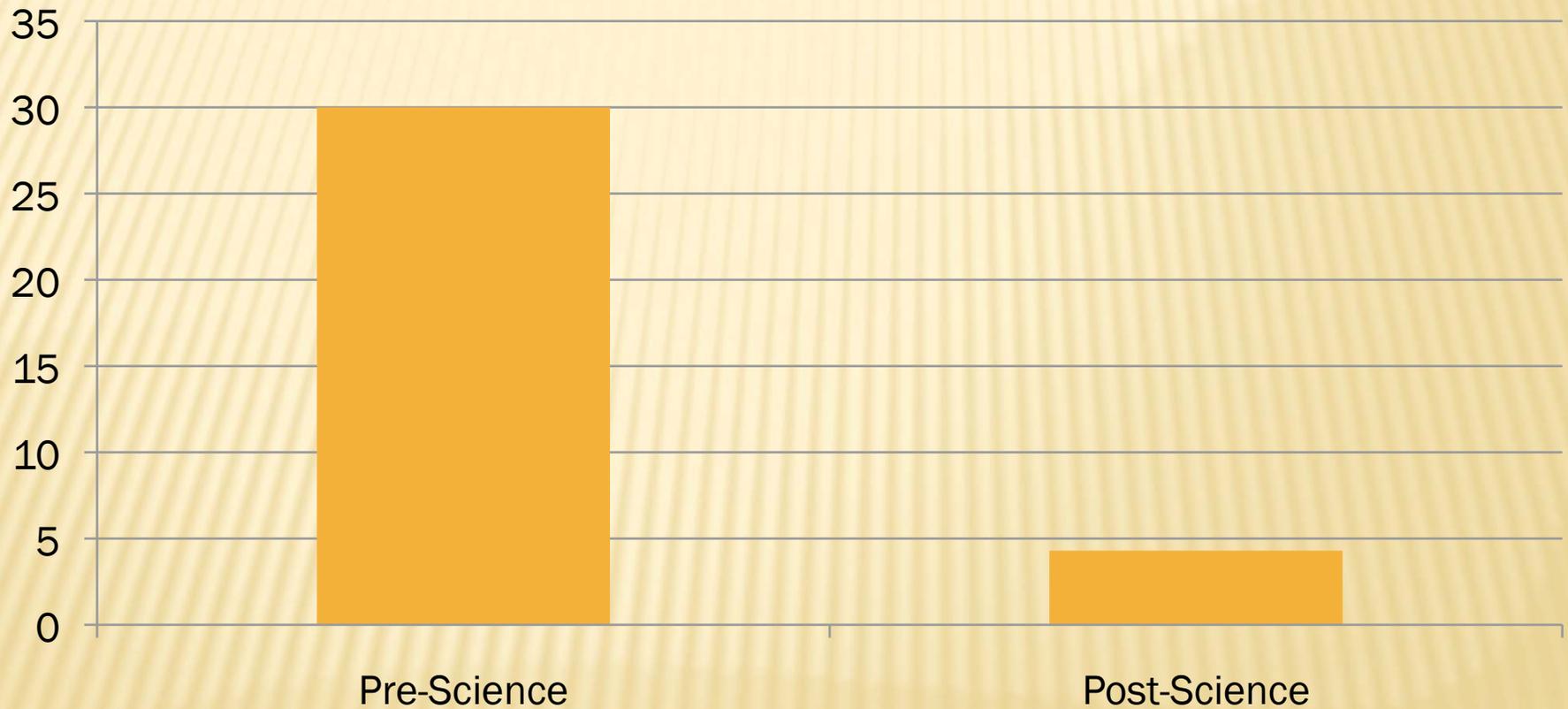
- ✘ Massive increase in potential scale, security, and flexibility
- ✘ Back-end done
- ✘ Need artists and designers to create compelling front-end content
- ✘ “Facebook-sized development”: 5-6 people for a year.
 - + (< \$1m)

WHY ME? WHY YOU?

- ✘ The game industry has other fish to fry
- ✘ The technology of world creation is a fundamental and critical skill in the 21st century
- ✘ Innovations that people believe in must come from many small, cheap, repeated experiments
- ✘ We need a tool
- ✘ Much is at stake

WORLD INFANT MORTALITY

Rates in Percent





However,
we are not losing babies today

because of a poor understanding of
the natural world



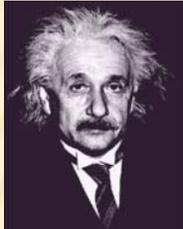
Higgs-Boson will not help us save babies.

Moreover,

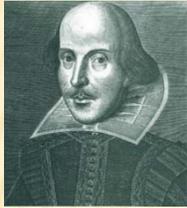
We may have bigger problems than that

Several hundred million people
now have some sort
of virtual world account.

Why?



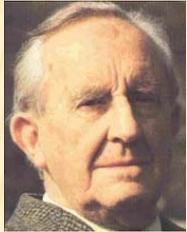
One of the strongest motives
that lead persons to art or science
is a flight
from the everyday life.



Our revels now are ended. These our actors,
As I foretold you, were all spirits and
Are melted into air, into thin air:
And, like the baseless fabric of this vision,
The cloud-capp'd towers, the gorgeous palaces,
The solemn temples, the great globe itself,
Yea, all which it inherit, shall dissolve
And, like this insubstantial pageant faded,
Leave not a rack behind. We are such stuff
As dreams are made on, and our little life
Is rounded with a sleep.



Who looks outside,
dreams;
who looks inside,
awakes.



Why should a man be scorned if,
finding himself in prison,
he tries to get out
and go home?



THE EXODUS

“Get out and go home.”

What is this home?

Why does it attract us?

How many will try to go there?

What’s wrong with here and now?

To respond to the Exodus,
we need advances
that can only come
from social science