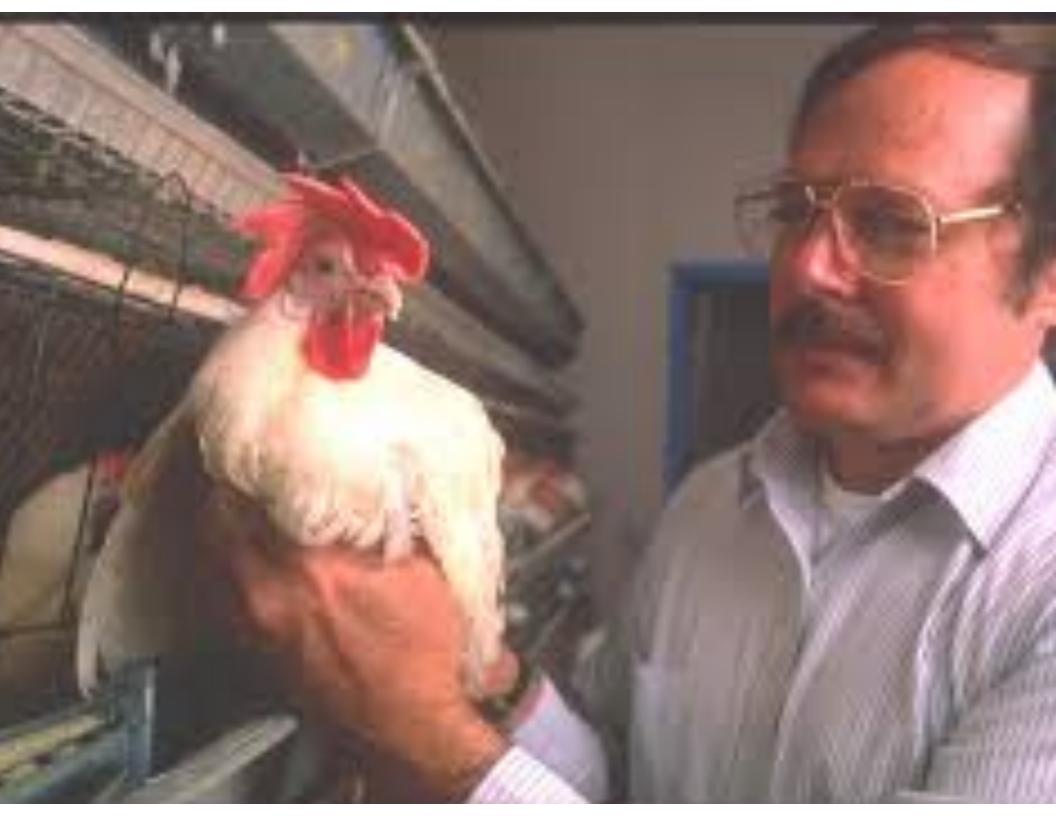
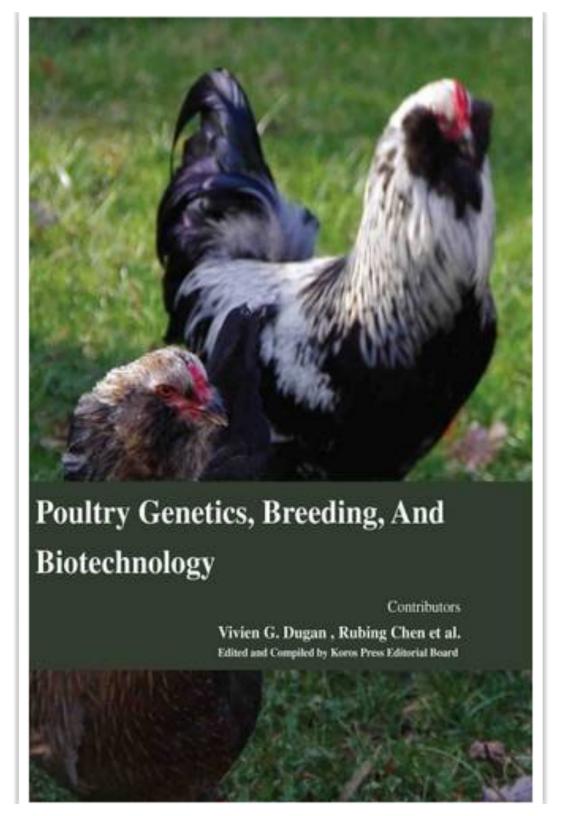
### last year's talk?...

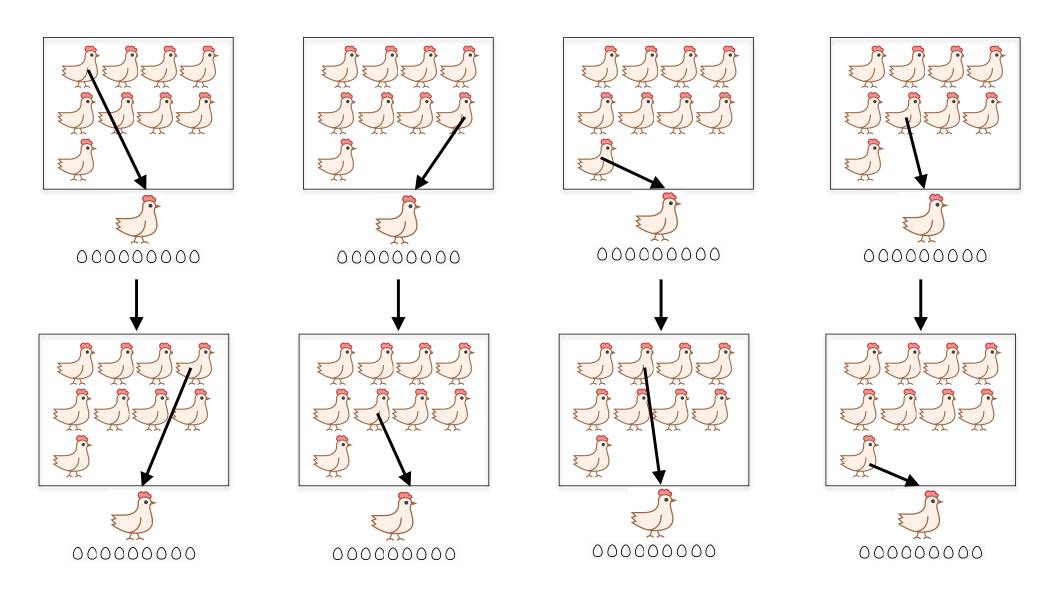
# evolutionary impact on individual cognitive biases & behavior

# Chicken Breding





### Select Top-Performing Chicken



... for 6 generations

## prediction?

### Select Top-Performing Chicken

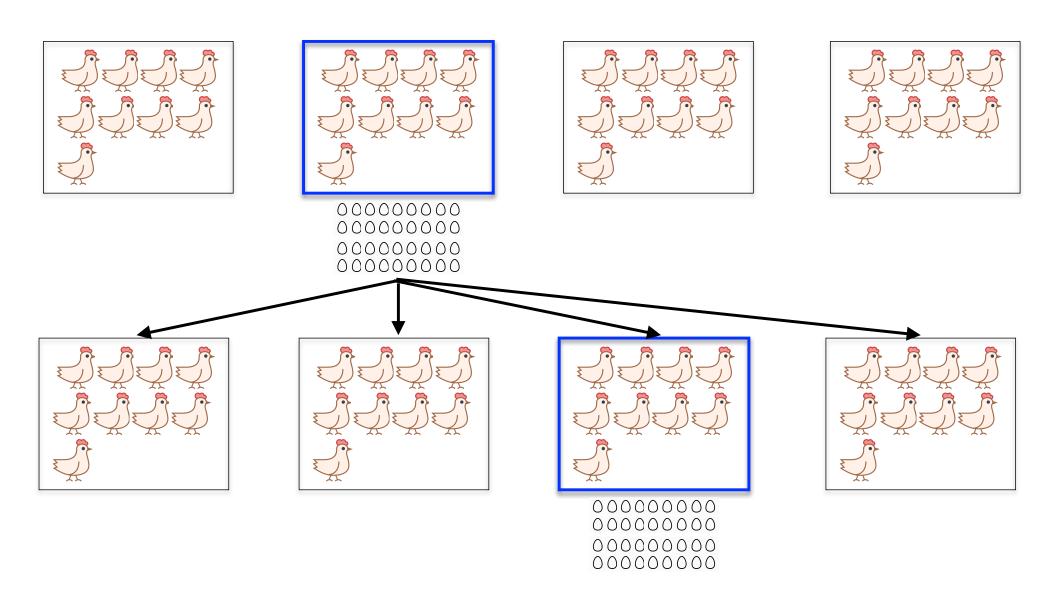
6 generations later...

on average, 3 half-dead hyper-aggressive hens per cage, 6 killed from the remaining. ALMOST NO EGGS



## experiment #2...

### Select Top-Performing Group



... for 6 generations

### Select Top-Performing Group

6 generations later...

9 healthy chickens per cage. 160% increase of total egg production.



## conclusions?...

# don't select for bastard chickens

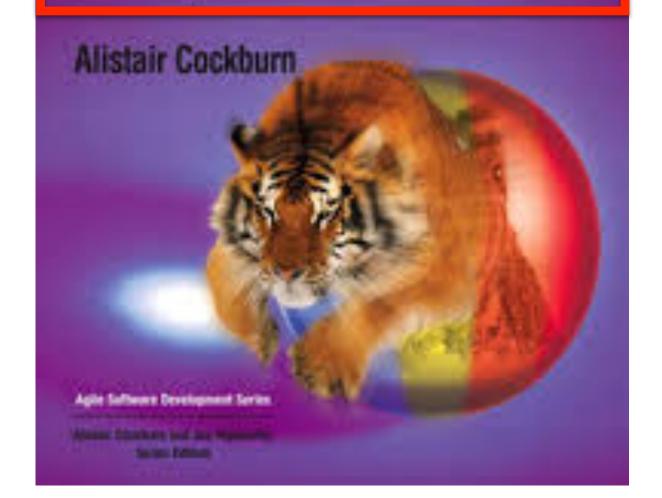


selecting for "best" individuals can cause a cooperative society to collapse



## Agile Software Development SECOND EDITION

The Cooperative Game

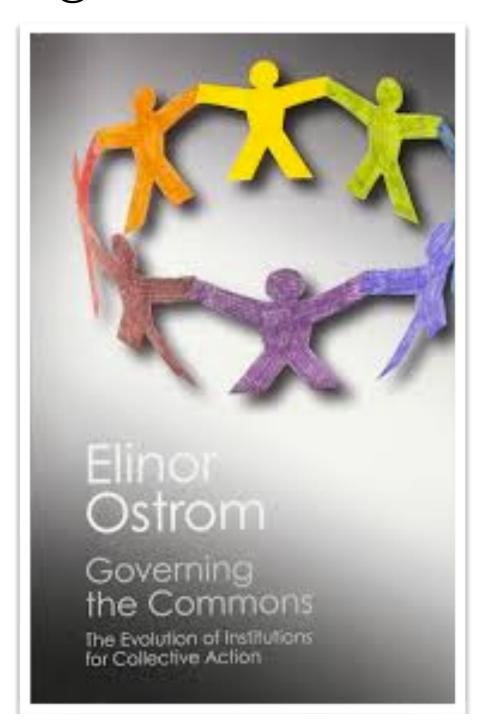


## this year's talk?...

evolutionary & other forces in cooperative societies



### "Governing the Commons" (1990)



## "tragedy of the commons" is *not* inevitable

cooperative societies succeed in governing the commons, and there are success patterns (design principles)

### Ostrom's Study of "Common-Pool Resources"



# "commons" in a LeSS org?

### "Commons" in a LeSS Org

> code

> shared responsibility for done
Product Increment

> decisions & resulting policies

> ...



### Journal of Economic Behavior & Organization



journal homepage: www.elsevier.com/locate/jebo

Generalizing the core design principles for the efficacy of groups

David Sloan Wilson a,b,\*, Elinor Ostrom , Michael E. Cox d

"... the principles have a wider range of application than Common-Resource Pool groups, and are relevant to nearly any situation where people must cooperate and coordinate to achieve shared goals."

 clear defined boundaries of the commons, clear group identity of those using it, & effective exclusion of un-entitled parties

#### 2. proportional benefits & costs

- >normal case: members of the group must negotiate a system that proportionally rewards members for their contributions
- >edge case: high status or other disproportionate benefits must be earned through special contribution
- >unfair inequality poisons collective efforts

#### 3. collective-choice arrangements

- >the group those affected by the arrangements ("rules") can participate in creating the rules; not outside-imposed rules
- >they decide the arrangements by consensus

#### 4. monitoring agreed-upon behaviors

- >warning: managing a commons is vulnerable to free-riding & exploitation
- >unless undermining strategies can be detected at relatively low cost by norm-abiding members of the group, the tragedy of the commons will occur

### 5. graduated sanctions

> "friendly social pressure" is often sufficient to start, but more severe forms of punishment must exist

6. fast/simple & fair conflict-resolution mechanisms

#### 7. local autonomy, authorized

- > group must have authority to decide & conduct own affairs
- > related to principle 3 (collective-choice arrangements), here emphasizing the formal authorization by a higher-level party (e.g. a government) of legitimate local autonomy
- 8. for groups that are part of larger groups, there must be appropriate coordination among peer and tiered groups, with *polycentric governance* and *subsidiarity* 
  - > every sphere of activity has an optimal scale; e.g. a *federal government* probably shouldn't manage a *small pasture*
  - > **polycentric governance:** large-scale governance requires finding optimal scale (and related optimal group) for each sphere of activity, & appropriately coordinating
  - > **subsidiarity:** assign governance tasks by default to the lowest jurisdiction, unless explicitly determined to be ineffective

# "everyone" take a photo of the slides

# quickly create a terse mindmap of the 8 CDPs. on a flipchart

### Team Discussion

- > which CDPs in place in your product group? how does it help govern any of your "commons"?
- > if some CDPs missing in your group, what is the impact on any of your "commons"?
- > ideas for future concrete use?

