

Modelling social processes

Taking stock:
Why, What, How

Theory: role of
- status-power game
- culture



Let's meet in SiLiCo!

SiLiCo centre Wageningen: Complex Adaptive Systems



SiLiCo Centre Wageningen (Simulating Life Science's Complexity) is a virtual centre that acts as a portal to Wageningen University's expertise on modelling complex systems through agent-based simulations.



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Contact form

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Staff at SiLiCo



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Assistant Professor

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8th ESSA / SiLiCo
Summer School in Social
Simulation
"Agent-based modelling
for resilience"
26-30 June 2017



WAGENINGEN UNIVERSITY

Why?



Theseus and Procrustes



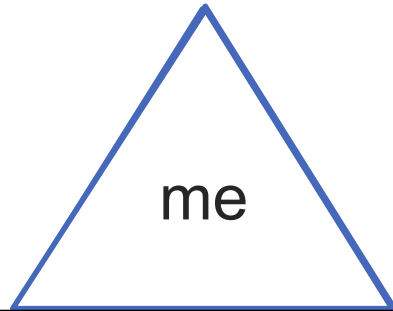
What?

- What is social?
 - Purely social
 - Instrumental (e.g. €, \$)
 - Applied (e.g. spatial, legal...)
- How to model depends
 - on your research question
 - on your reference community
 - on your ambition



What? – purely social (1)

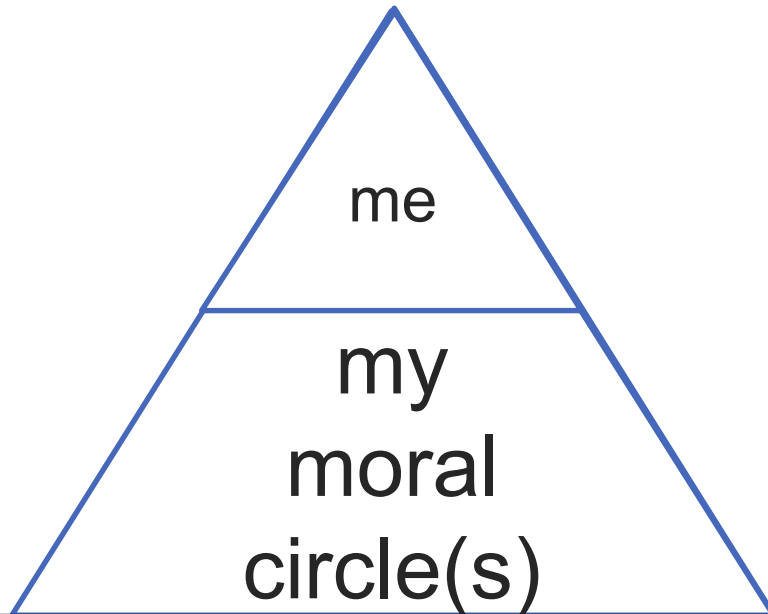
We are unique



personality: Big Five;
life experience;
plans, goals, aspirations

Purely social (2)

We belong / commit to groups

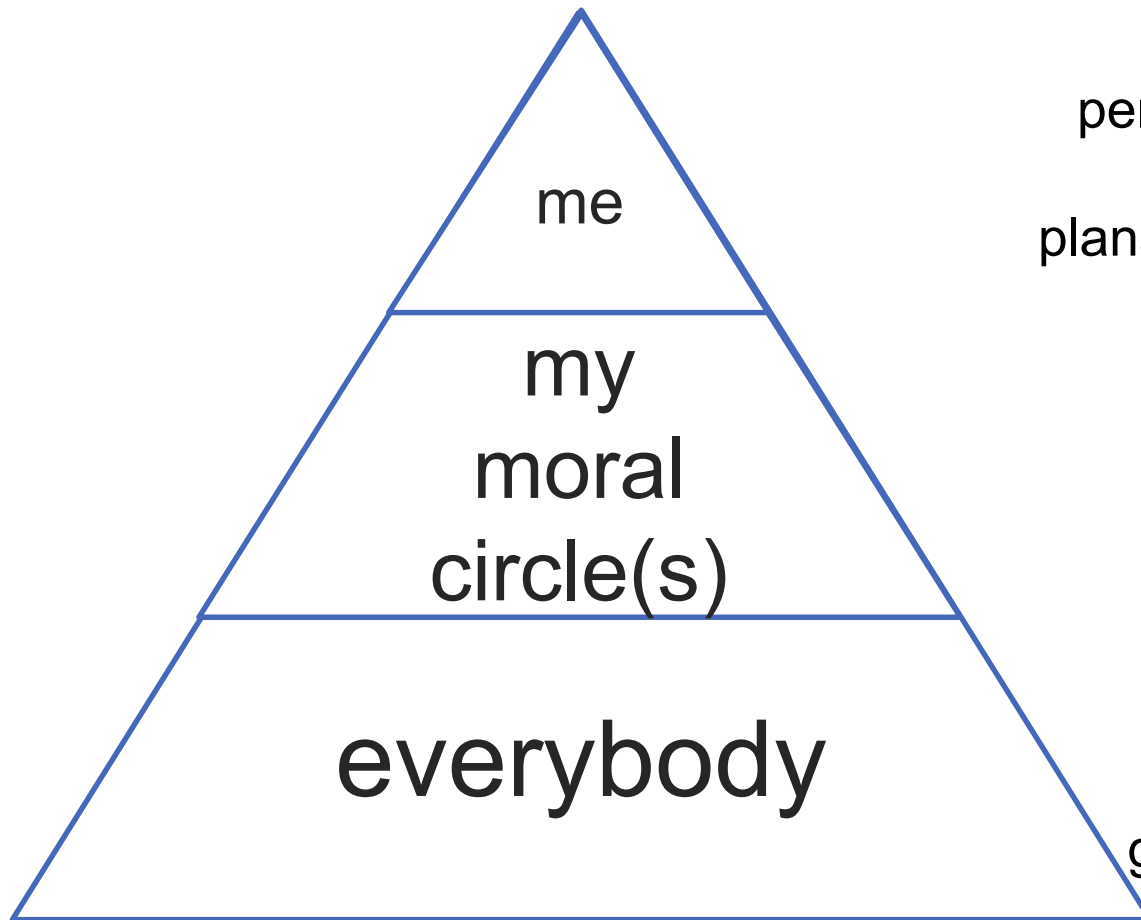


personality: Big Five;
life experience;
plans, goals, aspirations

family, tribe, country;
profession;
team, organization:
norms, values

Purely social (3)

We are all the same



personality: Big Five;
life experience;
plans, goals, aspirations

family, tribe, country;
profession;
team, organization:
norms, values

human nature:
status – power drives, emotions;
genes, hormones, brains, cultures

Level of analysis



What do you
see?

Level of analysis



So what is a 'social process' for you?

- Cognitive (mind)
- **Affiliative**
- **Hierarchichal**
- Applied
 - Economic
 - Spatial
 - ...
- Emergent (pattern)



Depends on RQ



State of the art

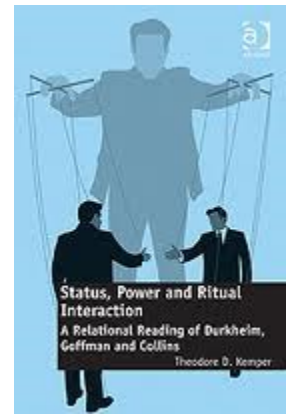
- Advances in
 - Norms, punishment, norm emergence
 - Theory of mind
 - Game theory
 - Commons
 - Spatial behaviours
- Little work on
 - Human motives (Sociology, social psychology)
 - Implicit knowledge (e.g. shared values)



My modelling dream: Human nature

According to Theodore D. Kemper

- We are driven to
 - Confer appropriate 'status'
 - Expect (& 'claim') the same
 - When thwarted: use 'power'
- We do this in a reference groups context
 - Strive for equal status across groups
 - Commit to where we get status
- **Sociological constructs**
 - **As basis for ABM**



Status conferrals



Status claims



CURRICULUM VITAE

Dipl.-Inf. I.M. Yourman, Ph.D.

Executive Summary

Rolf S. Engelschöll is a 34-year old independent Computer Scientist, Senior Project Manager and Unix Software Developer, living with his wife and two children in Munich, Germany. He has 20 years of computing, 17 years of software development and 7 years of management experiences.

Achievements He is the author of the book *Apache Desktop Reference*, author of over a dozen IT magazine articles and author of three dozen widespread Open Source software components, including the popular *Apache mod_rewrite* and *mod_ssl* extensions, the *GNU Portable Threads* and *GNU Portable Shell Tool*, the *OSSP* software component collection, and the comprehensive *OpenPKG* cross-platform multi-instance Unix software packaging solution.

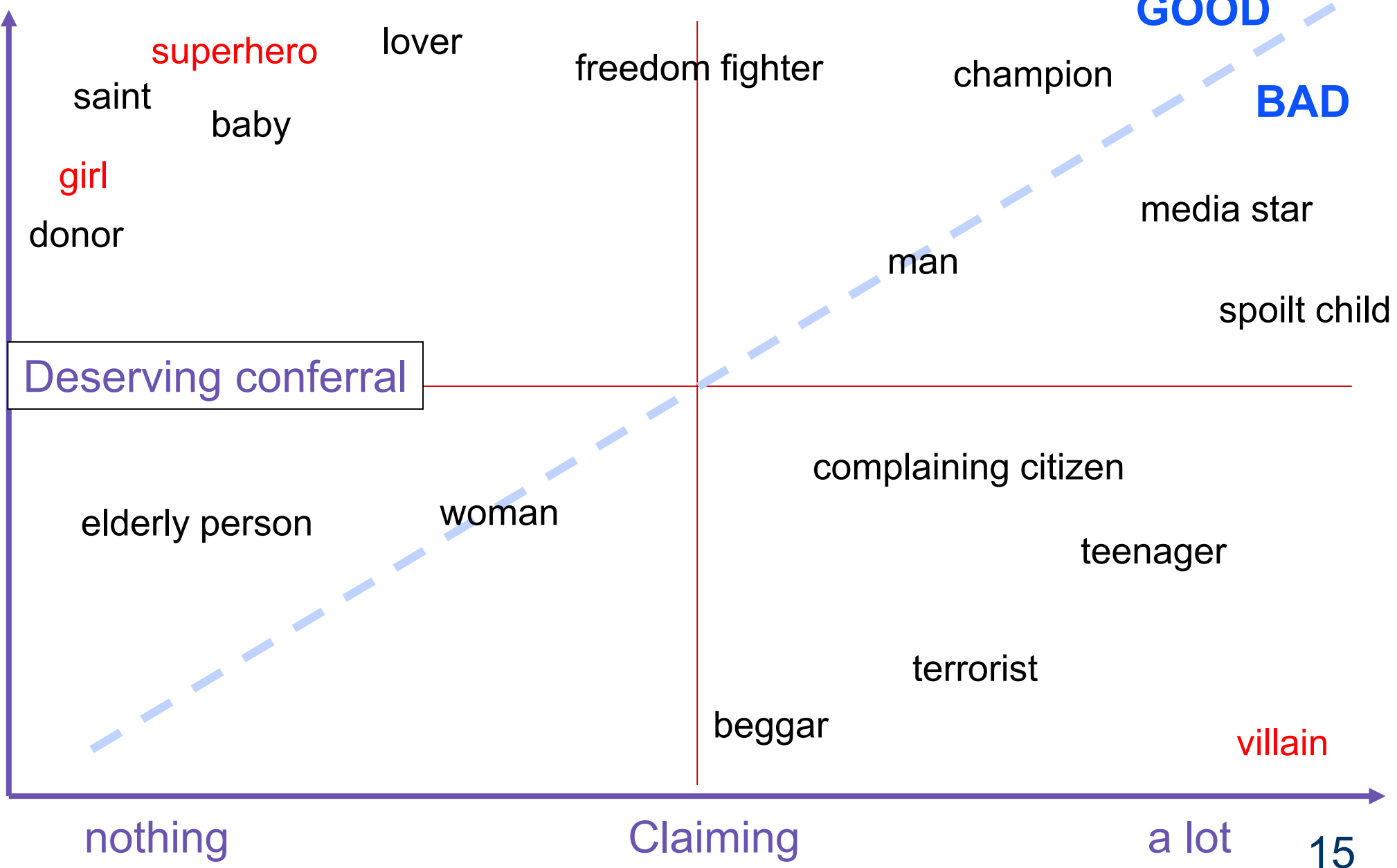
He developed many comprehensive solutions, including a secure download platform for the music industry, a maintenance-free

Going the
extra mile...

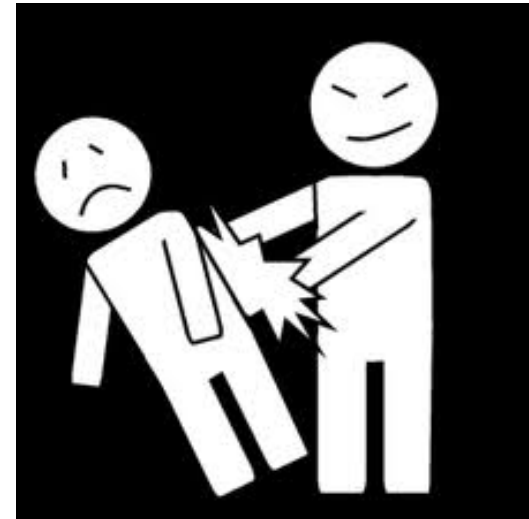
Hi. I'm ...
and I want ...



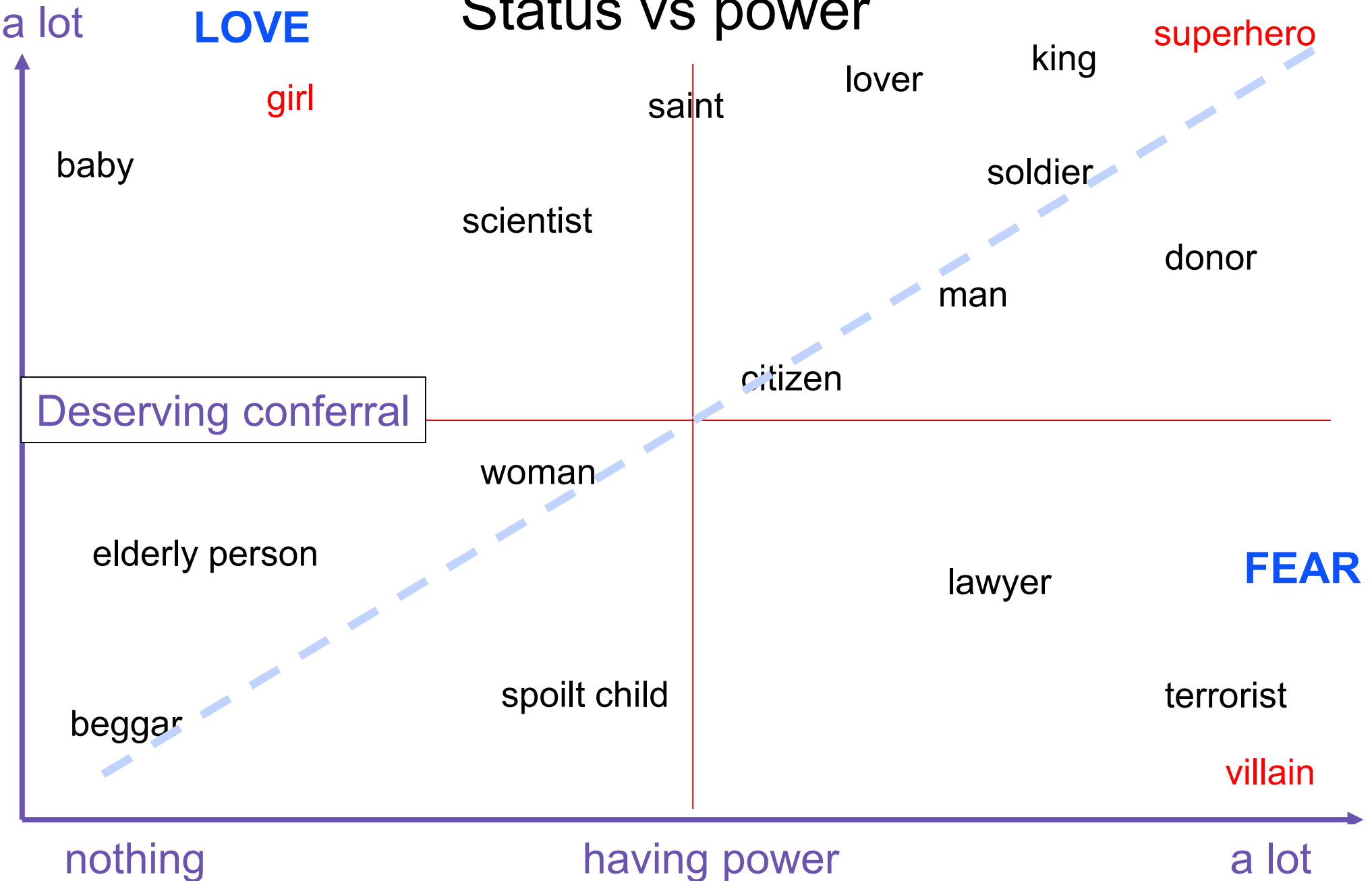
Claiming vs conferring status



Power moves



Status vs power



Social landscape

Is a status-power landscape

...whose defaults vary across cultures

...and according to group-based perspective

...and per person.



Doema



Folketinget



So: 'Raising' agents using Kemper

- Need to navigate social landscape: GRASP
 - Groups,
 - Rituals,
 - Affiliation /
 - Status: claims, conferrals
 - Power: enforced vs authority
- Everything else can be converted into status
 - using 'counts-as' (Searle)
 - e.g. possessions, beauty, kindness, reproductive fitness, sex, age, money, ...
- Culture is the small print of status-power rules

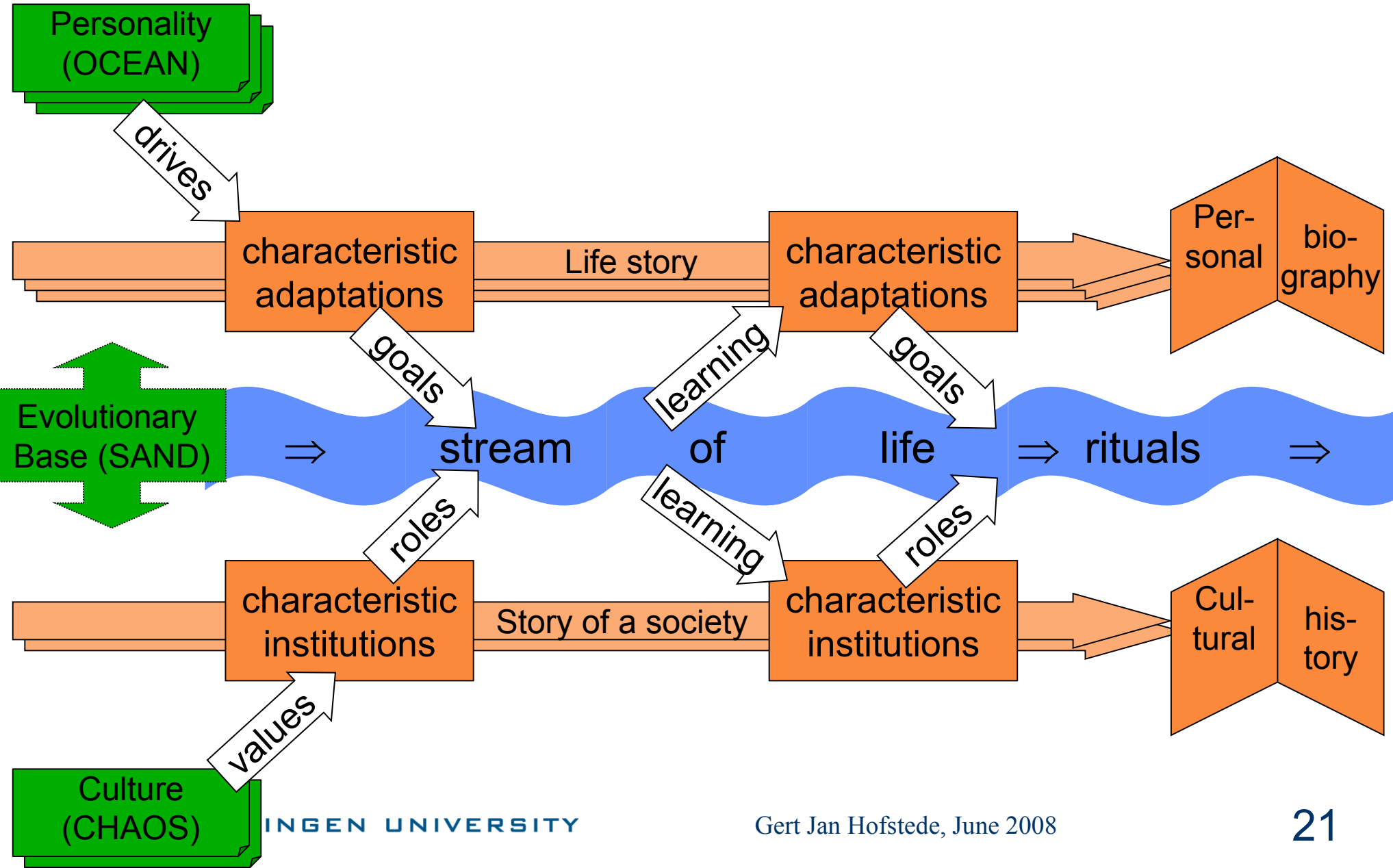


Life goals of business leaders

Questions to MBA students: “typical successful business leader in your country is driven by...”

Overall ranking	Brazil	China	India	Germany	USA
1. Growth			4		1
2. Continuity	4		1		-
3. Year profits	3			-	4
4. Personal wealth					3
5. Power	2	3	3		5
6. Honour		4			
7. Create sth new				3	
8. 10 yr profits			5	4	
9. Law		-			
10. Responsibility emps	-			2	
11. Ethical norms		1	-	5	2
12. Responsibility soc		5		1	
13. Game spirit	1				
14. Patriotism		2	2		
15. Family interests	5				

Personality – culture mutual homeostasis system

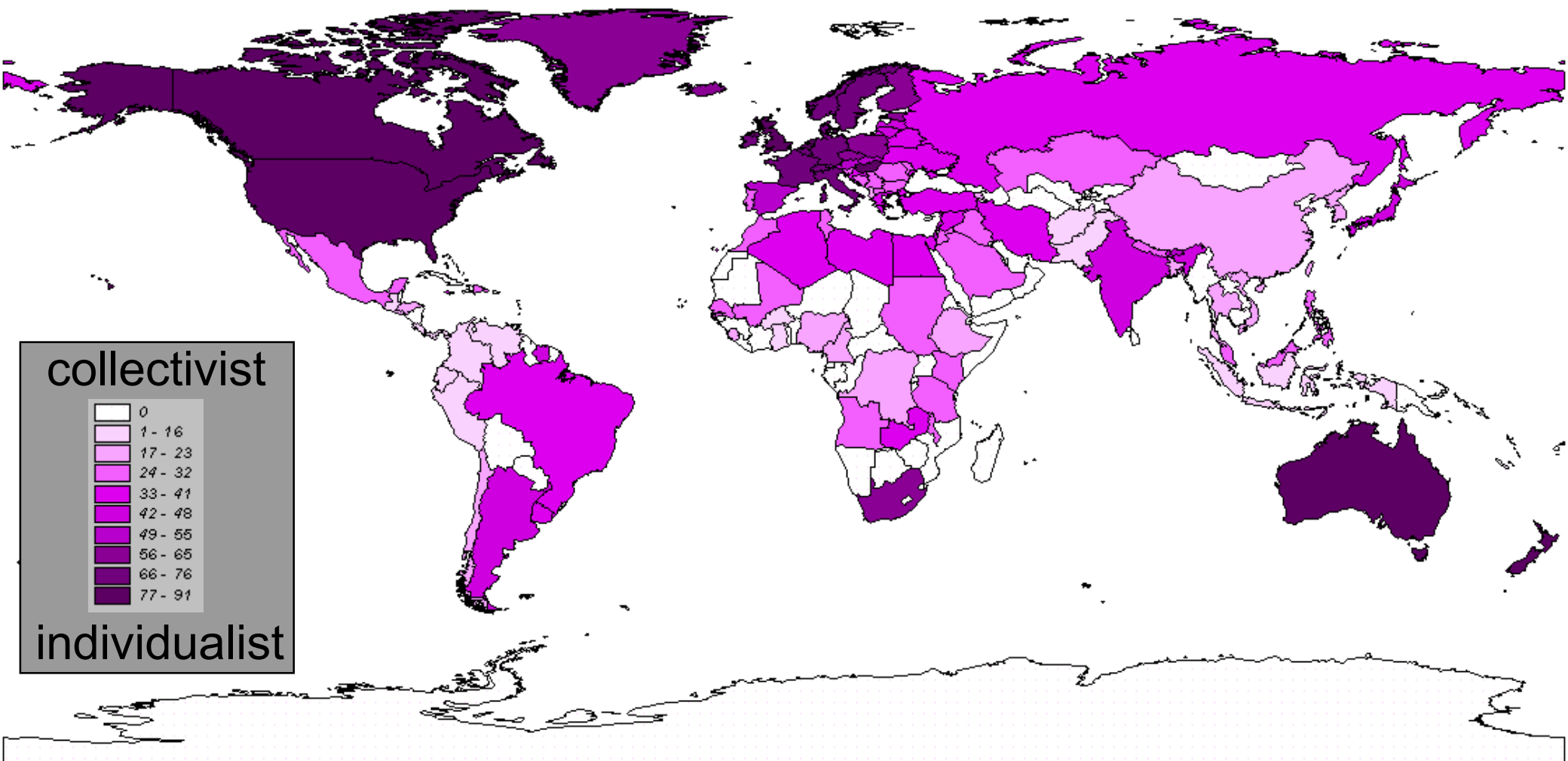


Vote 1

- You have a choice of holiday destination. Where do you go?
 - Where it is suitable for someone in my position
 - Where I went last year
 - An unknown adventurous place



Collectivism – Individualism World map



What builds status? Individualism

Collectivist

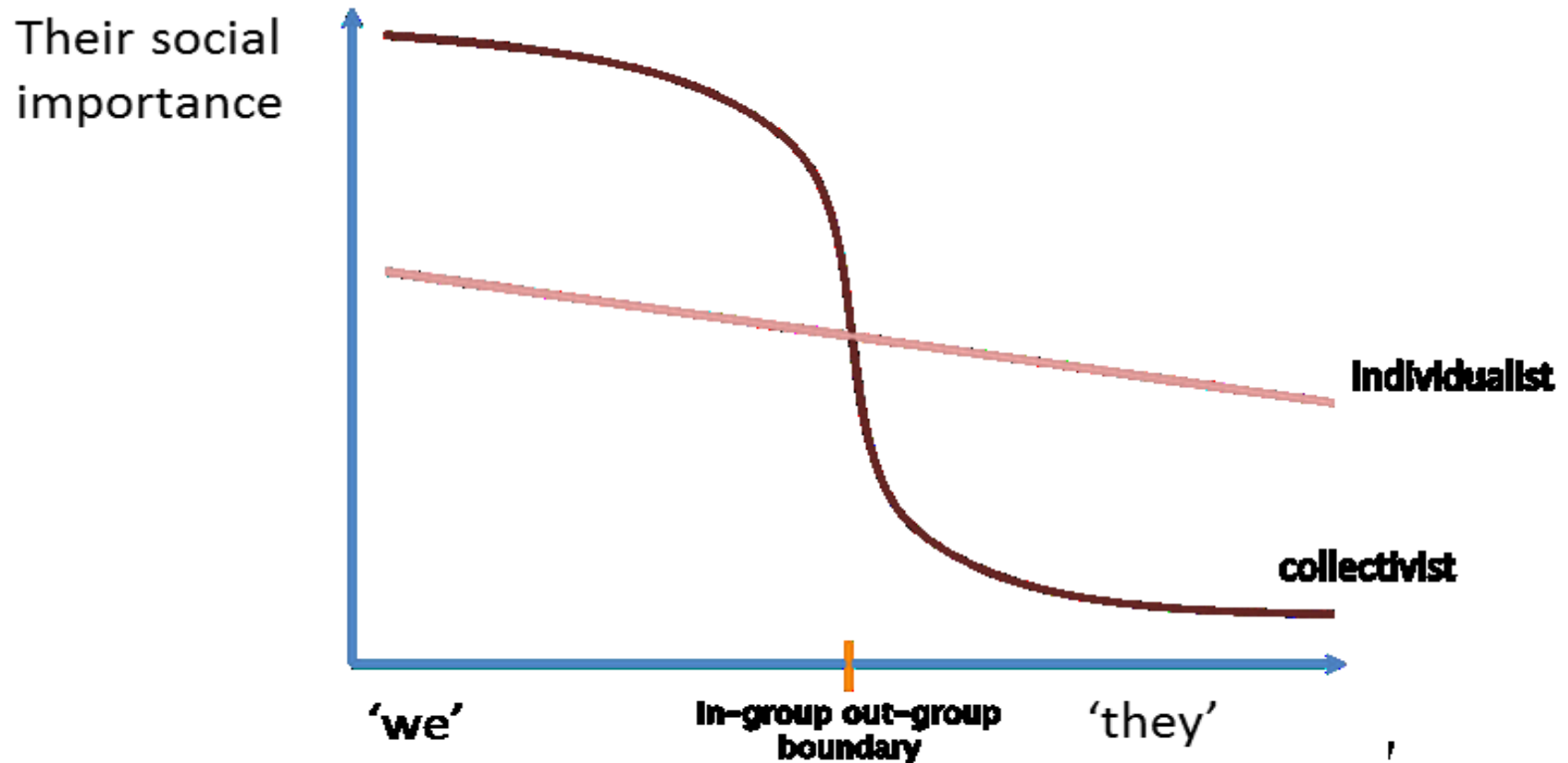
- loyalty
- role enactment
- sameness

Individualist

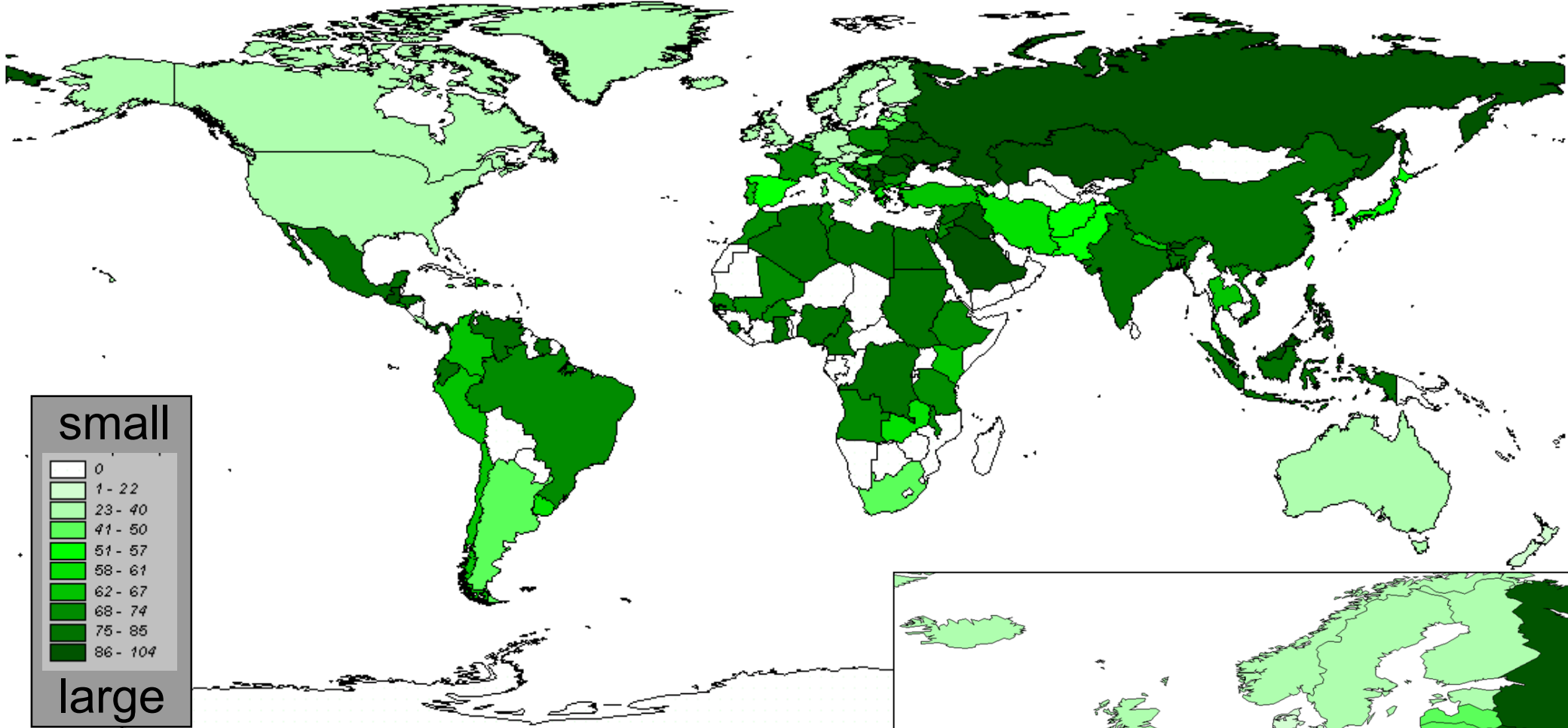
- initiative
- originality
- difference



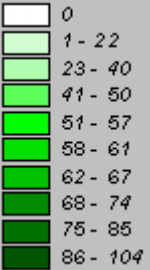
Who gets status? Individualism



Power Distance World map



small



large

Symmetry vs asymmetry:

- Allocate status equally or upward
- Citizen vs s



What builds status? Power distance

Small power distance

- responsibility
- equitability
- democratic leadership

Large power distance

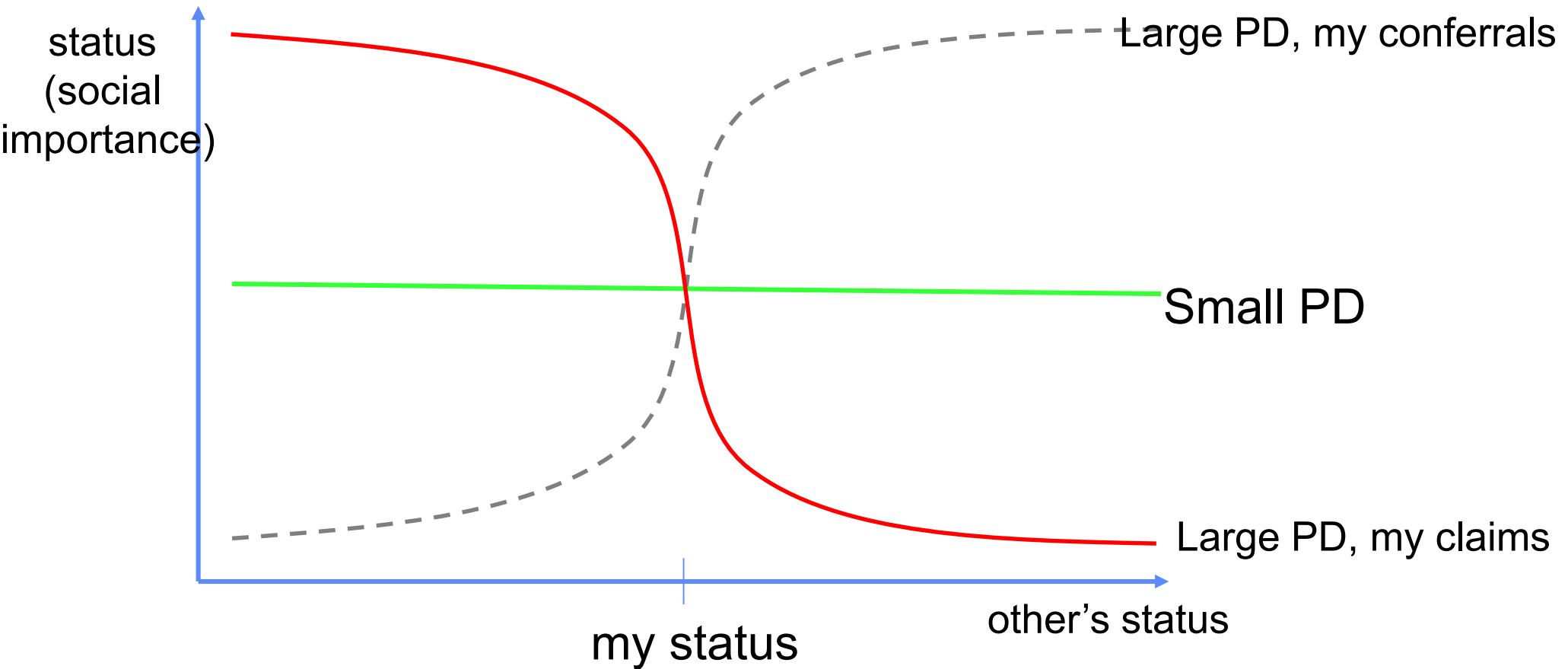
- obedience
- pleasing
- autocratic leadership

Moving with culture

- fairness
- efficiency

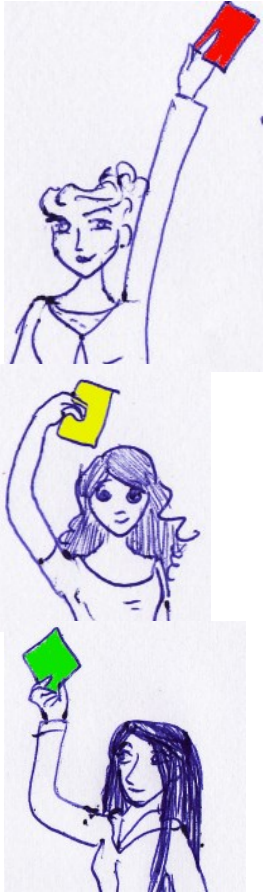


Who gets status? Power distance

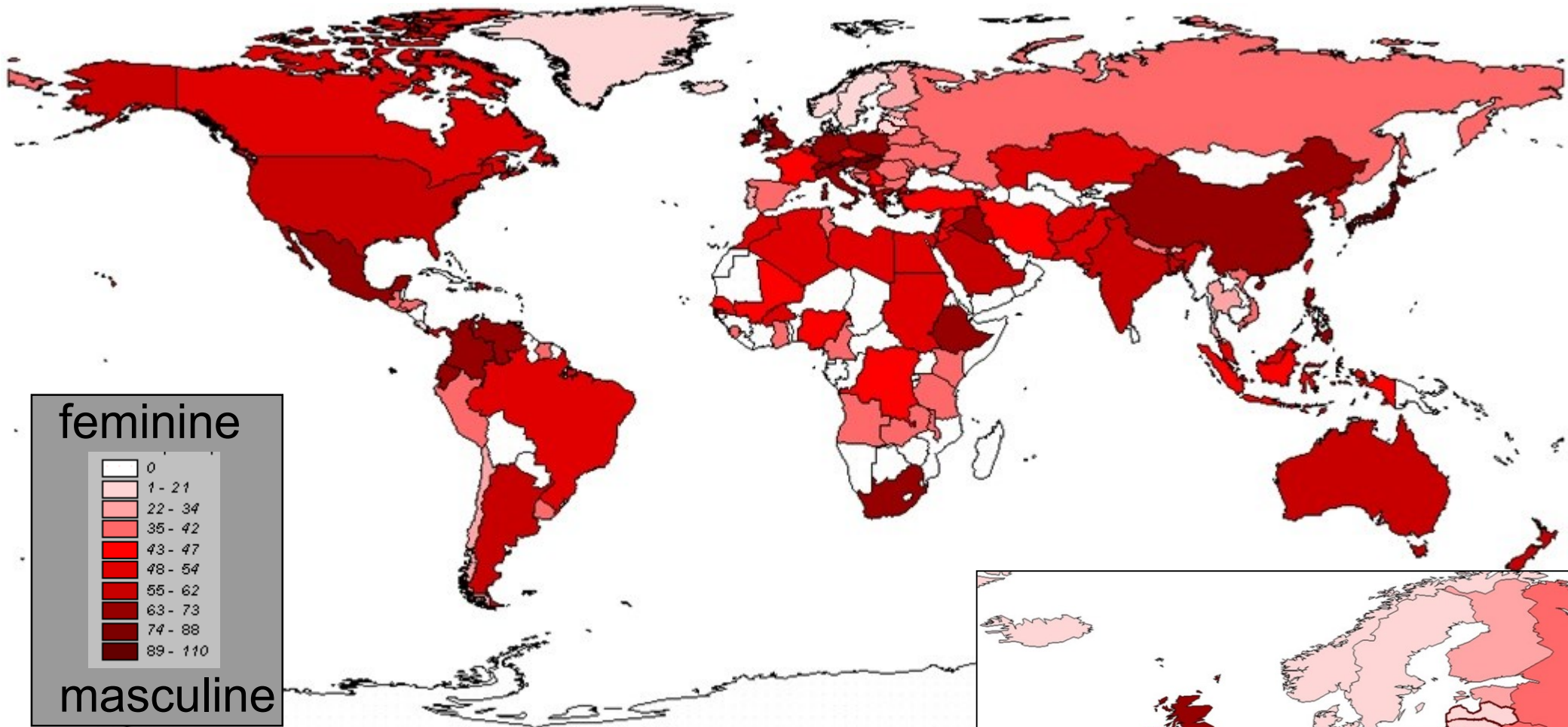


Vote 2

- Your subordinate, a clerk at your hotel, has been found dead drunk in a guest room. What do you do?
 - You fire him
 - You warn him
 - You talk to him to find out what's the matter.

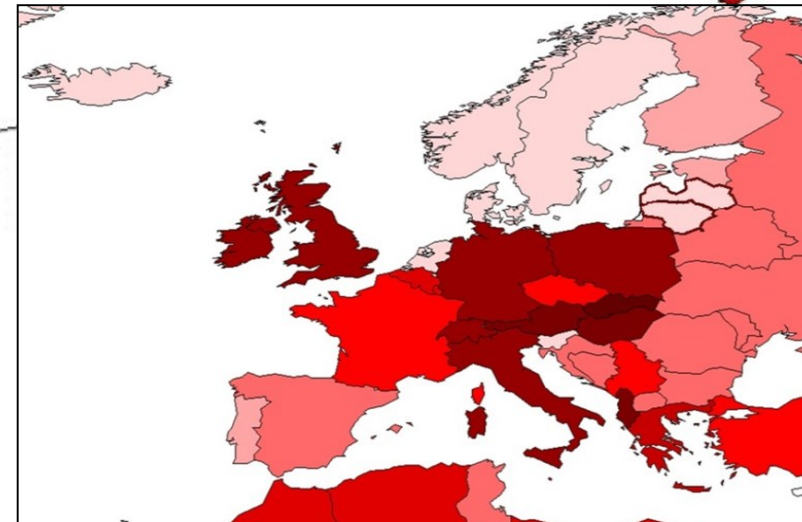


Femininity - Masculinity World map



Status vs power game:

- Sit down and talk vs stand up and fight
- Confer status upon weak vs strong



What builds status? Masculinity

Feminine

- care
- forgivingness
- empathy
- non-gendered identity
- small gestures

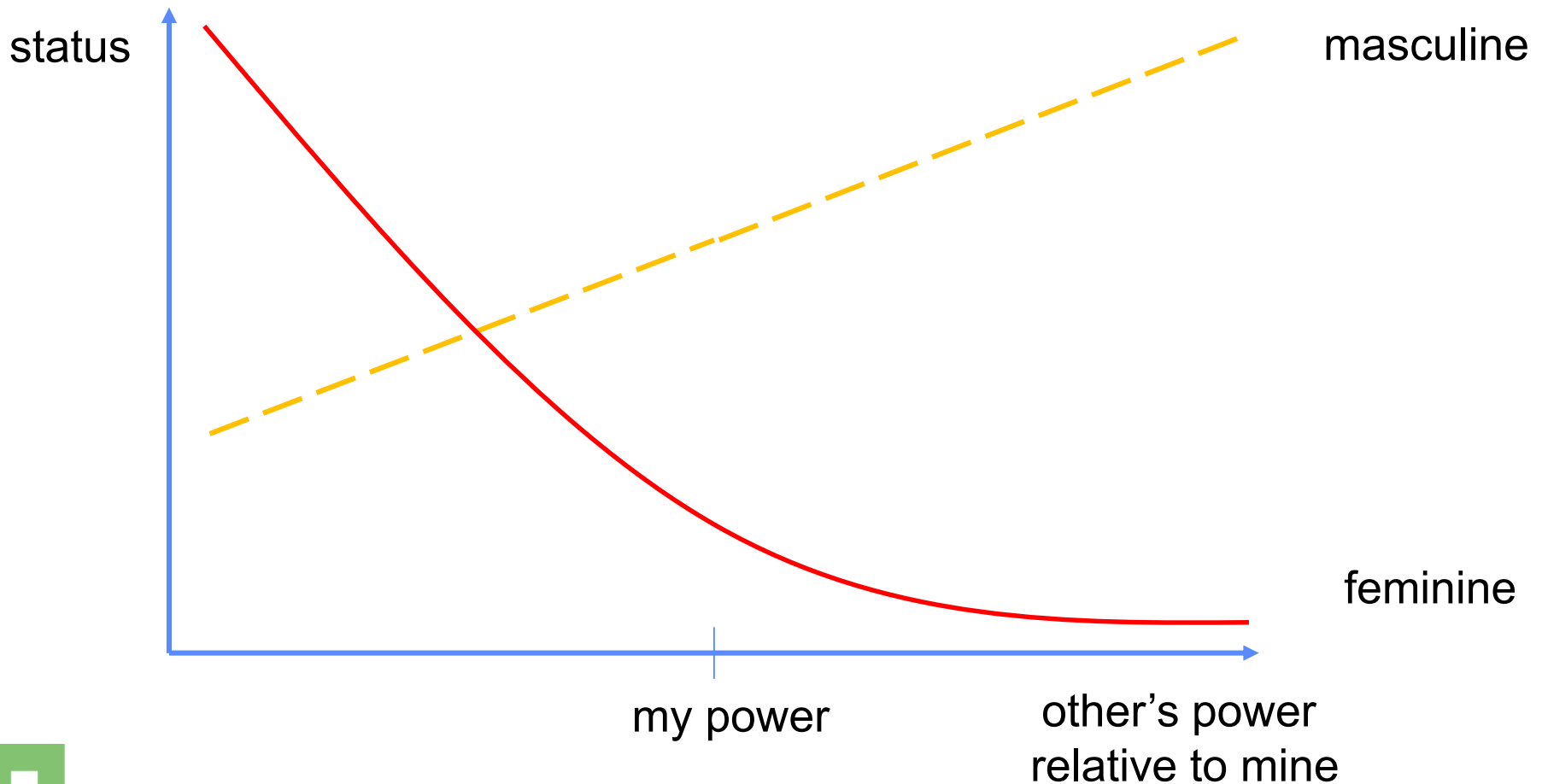
Masculine

- achievement, winning
- toughness
- power
- gendered identity
- male dominance over women



Who gets status? Masculinity

graph shows status conferred upon others depending on relative power



To conclude...



World Map Champlain 1612-1632