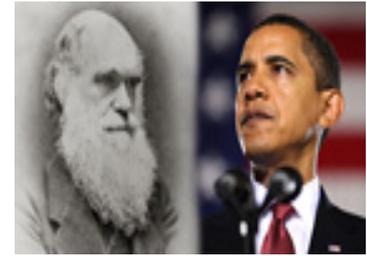




VU University Amsterdam



Complexity: Back to Stone Age Leadership



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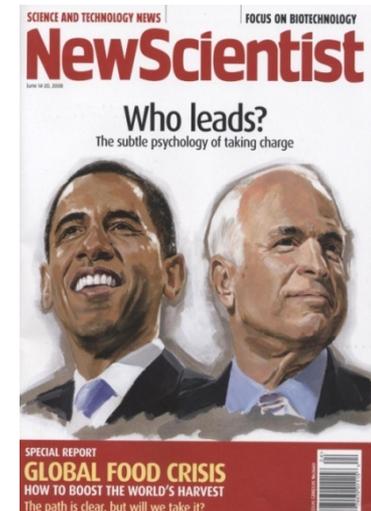
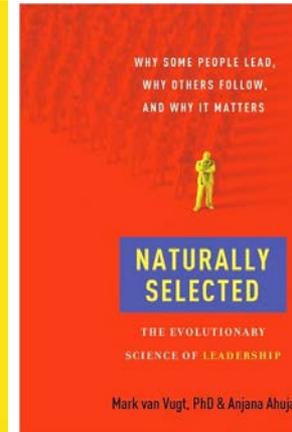
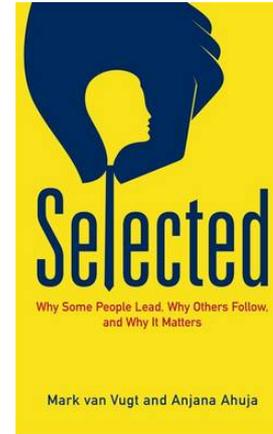




References

www.professormarkvanvugt.com

- Van Vugt, M. & Ronay, R. (2013). Evolutionary Psychology of Leadership. *Organizational Psychology Review*.
- Cartwright, E., Gillet, J. & Van Vugt, M.. (2013). Leadership in coordination games. *Economic Inquiry*.
- Spisak, B., Homan, A., Grabo, A., & Van Vugt, M. (2012). Warriors and peacekeepers. *PloS-One*.
- Spisak, B., Homan, A., Grabo, A., & Van Vugt, M. (2011). Facing the situation: Testing evolutionary hypotheses about leadership. *Leadership Quarterly*
- Van Vugt, M. (2011). The Nature in Leadership. In D. Day & J. Antonakis. *The Nature of Leadership*. London: Sage.
- **Van Vugt, M. & Ahuja, A. (2011). *Naturally Selected: The Evolutionary Science of Leadership*. London: Profile/New York: Harper Collins/Toronto: Random House**
- Gillet, J., Cartwright, E., Van Vugt, M. (2010). Selfish or servant leadership: Testing evolutionary predictions. *Personality and Individual Differences*.
- King, A., Johnson, D., & Van Vugt, M (2009). The origins and evolution of leadership. *Current Biology*
- Van Vugt, M. (2009). Despotism, democracy and the evolutionary dynamics of leadership and followership. *American Psychologist*, 64, 54-56.
- Van Vugt, M. (2009). The male warrior hypothesis. *Annals of the New York Academy of Sciences*.
- Van Vugt, M. (2008). Follow me: The origins of leadership. *New Scientist*, 14 June, 2660
- Van Vugt, M., & Spisak, B. R. (2008). Sex differences in leadership emergence during competitions within and between groups. *Psychological Science*.
- Van Vugt, M., Hogan, R., & Kaiser, R. (2008). Leadership, followership, and evolution: Some lessons from the past. *American Psychologist*, 63, 182-196.
- Wilson, D. S., Van Vugt, M., & O'Gorman, R. (2008). Multilevel selection theory and major evolutionary transitions: Implications for Psychological Science. *Current Directions in Psychological Science*.
- Van Vugt, M., Jepson, S., Hart, C., & De Cremer, D. (2004) Autocratic leadership in social dilemmas: A threat to group stability. *Journal of Experimental Social Psychology*, 40, 1-13.
- Van Vugt, M. and De Cremer, D. (1999). Leadership in social dilemmas: Social identification effects on collective actions in public goods. *Journal of Personality and Social Psychology*, 76, 587-599.





Who would you rather work for?

CEO Larry who is perennially on the list of most highly compensated chief executives in the world and who earns roughly 1000 times the average salary of the people working for him. Larry is an avid collector of luxury cars and yachts and has just started his third marriage.

CEO John who has just given himself an annual salary of 1 dollar because the successes of his company have already given him more than he needs in life. John's aim now is to make a difference in the lives of his employees and the world.



Leadership in turbulent times





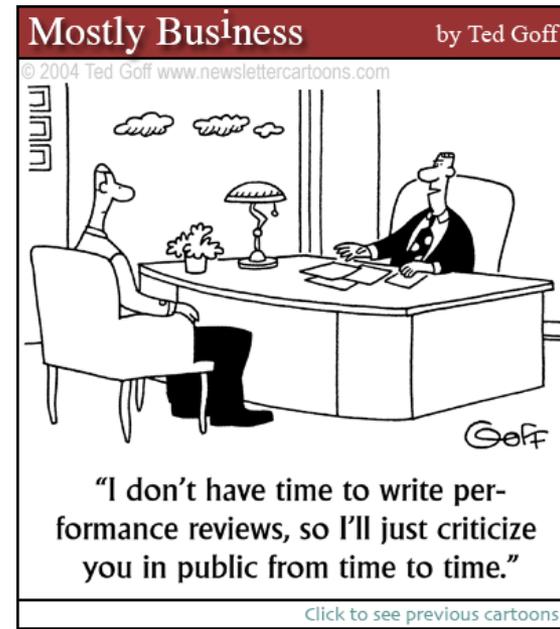
Leadership is a human universal

- All cultures and societies have some form of leadership (Brown, 1991)
- Good leadership can save lives and bad leadership can kill you!
- The “romance” of leadership (Meindl et al. 1985)



...Yet leadership often fails:

- The failure rate of managers in corporate America is about 50%
- Two-thirds of employees report that the most stressful aspect of their job is....their boss!





Leadership emerges spontaneously ...in about 25 seconds!

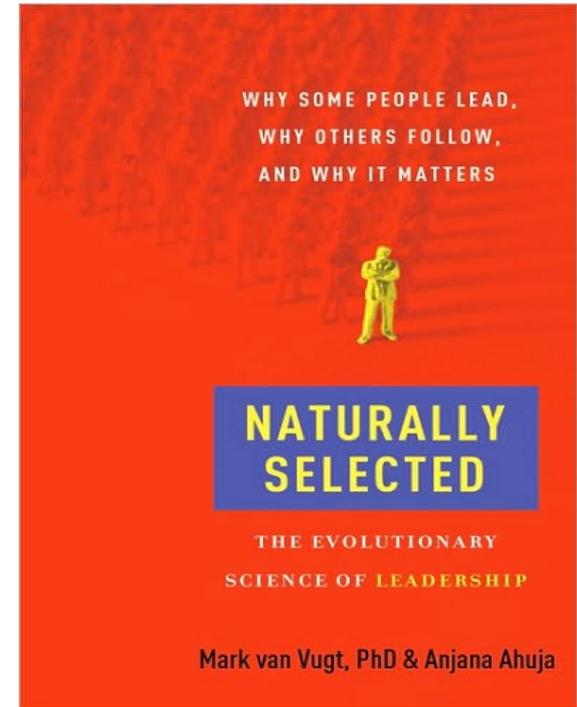
	X	Y	coordination
You	11	4	2
Player A	4	4	9
Player B	4	11	1
Player C	6	6	12

Player A hasn't chosen yet
Player B hasn't chosen yet
Player C hasn't chosen yet
Your choice X
 Y



What we don't (yet) know...

- After more than 2.5 million scientific publications on leadership, there are still so many unanswered questions.....:
 - Why do follow?
 - Why is there a preference for tall leaders?
 - Why do women CEO's attract hostility?
 - Does power corrupt?



"The practical lessons from Selected are worth to be taken seriously. The book contains the ingredients of a social leadership model. Finally a scientific treatment of leadership, something this important subject has long been lacking for long."

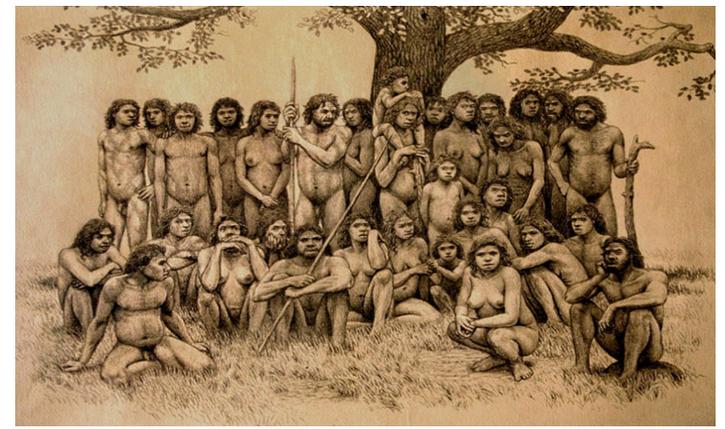
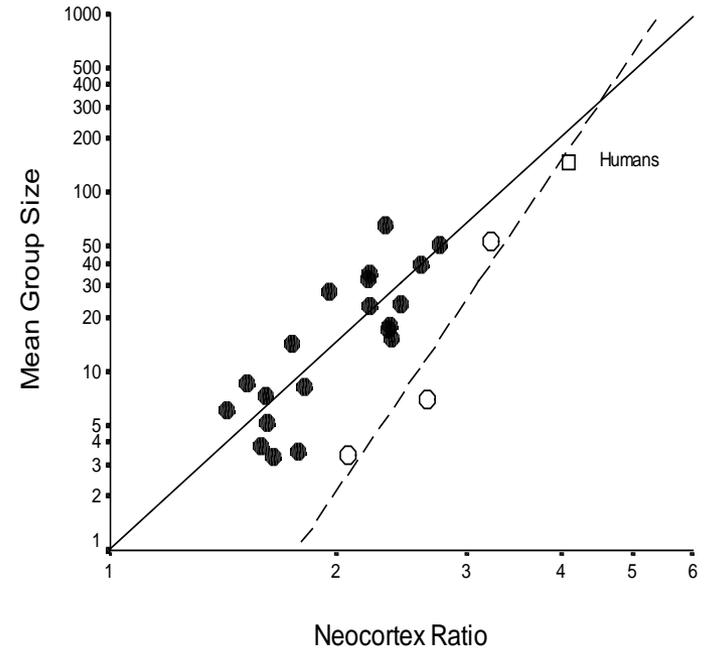
- Nature (2010)



Evolutionary Leadership Theory

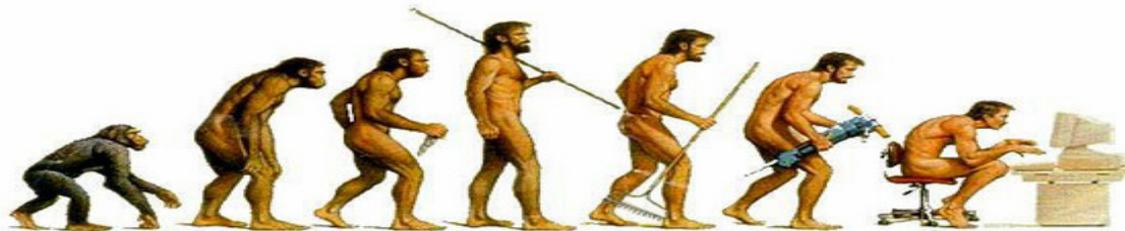


- Humans are primates, all of them live in groups (Darwin, 1859)
- Humans have “social” brains
 - Dunbar’s number 150
 - Size of hunter-gatherer groups, neo-lithic villages, religious communities, X-mas card lists, Facebook friends, business divisions
- Leadership and followership evolved to coordinate group activities
- Stone Age Leadership “rules” (2.5 MYA-10,000 years ago)





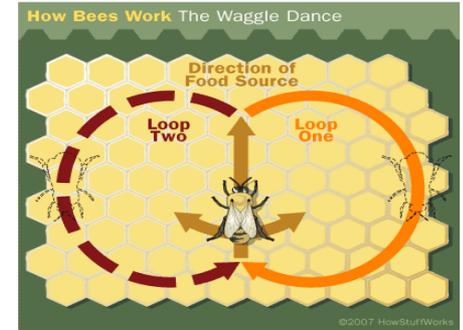
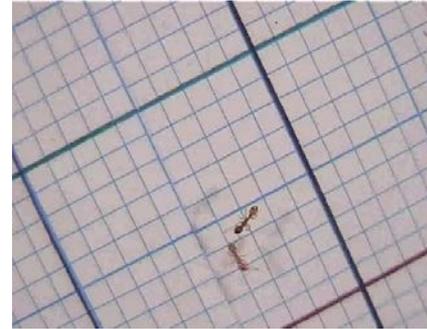
Lessons on Leadership from the Stone Age



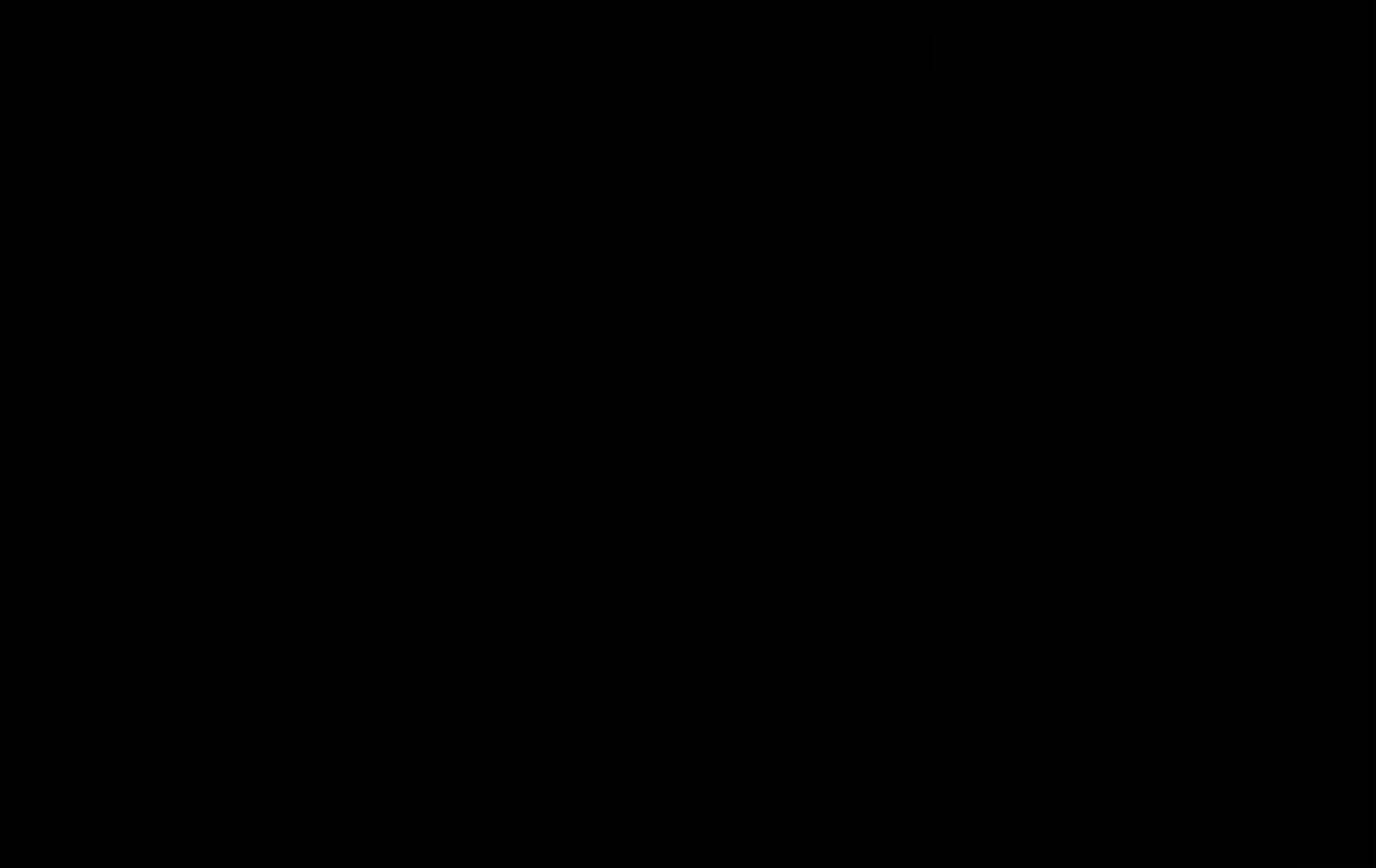


#1 Leadership does not require much brain power

- Leadership is abundant in the animal kingdom, e.g.:
 - Teacher leaders in ants
 - Bold leaders in stickleback
 - Wise leaders in elephants
 - Warrior leaders in chimpanzees
 - Scout leaders in honey bees



Scout leaders among honeybees





Stone Age leadership roles

- **How important do you find**

(1 - unimportant, 2 - neutral, 3 - important)

- ...That my team is doing better than others?
- ...That my team gets extra resources?
- ...That my team has a good reputation?
- ...That team conflicts are resolved?
- ...That my team performs its tasks properly?
- ...That team members are properly trained?



Stone Age leadership roles

- How important do you find....

(1 - *unimportant*, 2 - *neutral*, 3 - *important*)

...That my team is doing better than others?

-Warrior

...That my team gets extra resources?

-Scout

...That my team has a good reputation?

-Diplomat

...That team conflicts are resolved?

-Peacekeeper

...That my team performs its tasks properly?

-Manager

...That team members are properly trained?

-Teacher



#2 Leadership is inevitable

Table 1. A pure coordination game

		Pat	
		Hole A	Hole B
Jamie	Water Hole A	1, 1*	0, 0
	Water Hole B	0, 0	1, 1*

Note. Payoffs are for Pat and Jamie, respectively; Hole A and Hole B represent alternative game strategies (underpinned by gene alleles); game equilibria are indicated with asterisks

Yet conflicts do emerge....

Table 2. A leader game (Battle of Sexes)

		Pat	
		Hole A	Hole B
Jamie	Water Hole A	9, 1*	0, 0
	Water Hole B	0, 0	1, 9*

Note. Payoffs are for Pat and Jamie, respectively; Hole A and Hole B represent alternative game strategies (underpinned by gene alleles); game equilibria are indicated with asterisks



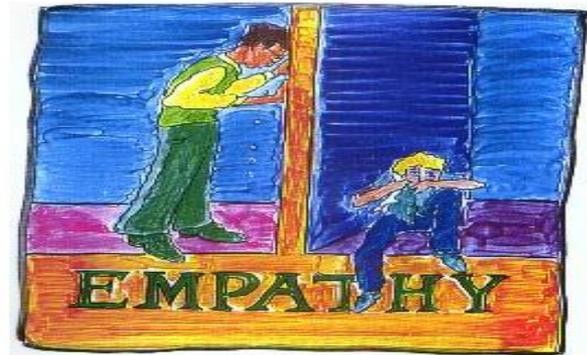
The Leader Game

You have 10 Euros, any amount you can keep or give to another person.

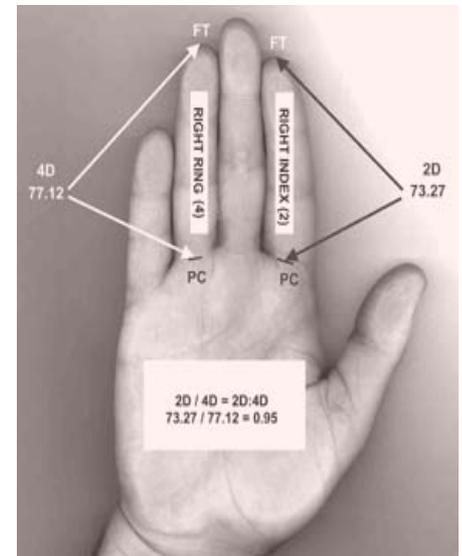
Ultimatum: The other person can either accept or reject your offer.

If your offer is rejected nobody gets anything

- How much would you offer?
- What minimum offer do you accept?



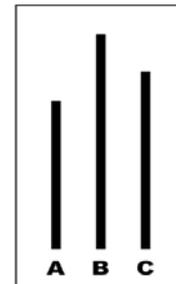
"Understanding what the other person is going through and being there."





#3 Humans are natural born followers

- Followership is default setting in our brains:
 - Babies follow the eyes of their parents
 - Pointing comes naturally in humans...and in dogs
 - No language required!
- But...why be a follower?
 - *No leadership ability*
 - *Desire to become leader*
 - *Learning something new*
 - *Sticking with the group*





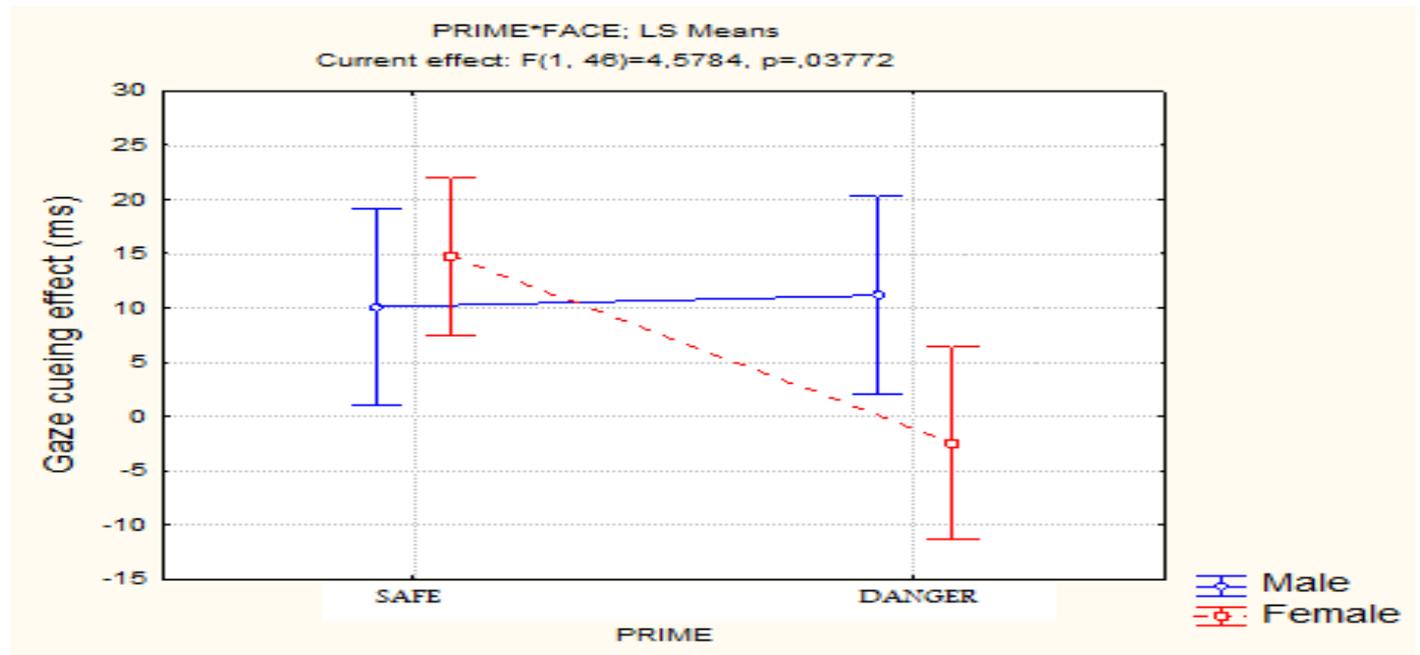
In crisis we follow a masculine leader (Ohlсен, van Zoest, Van Vugt, 2012)



X



X



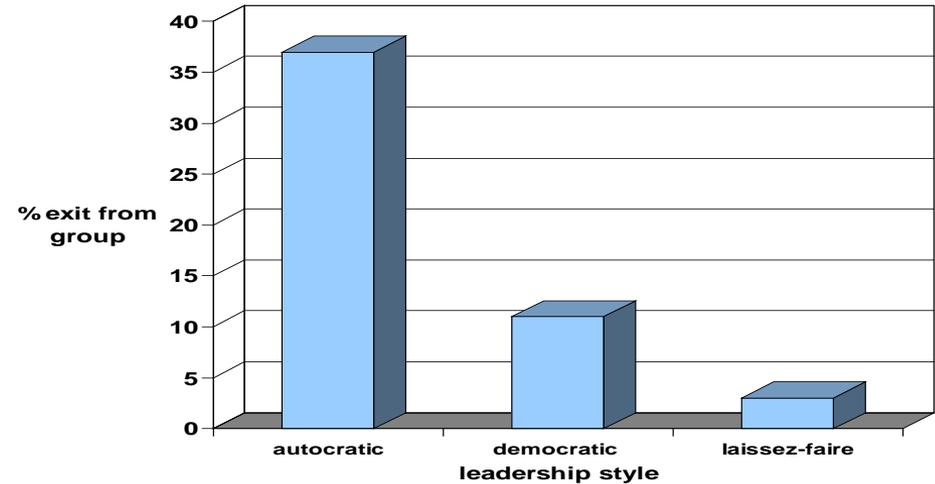
No Leaders Without Followers





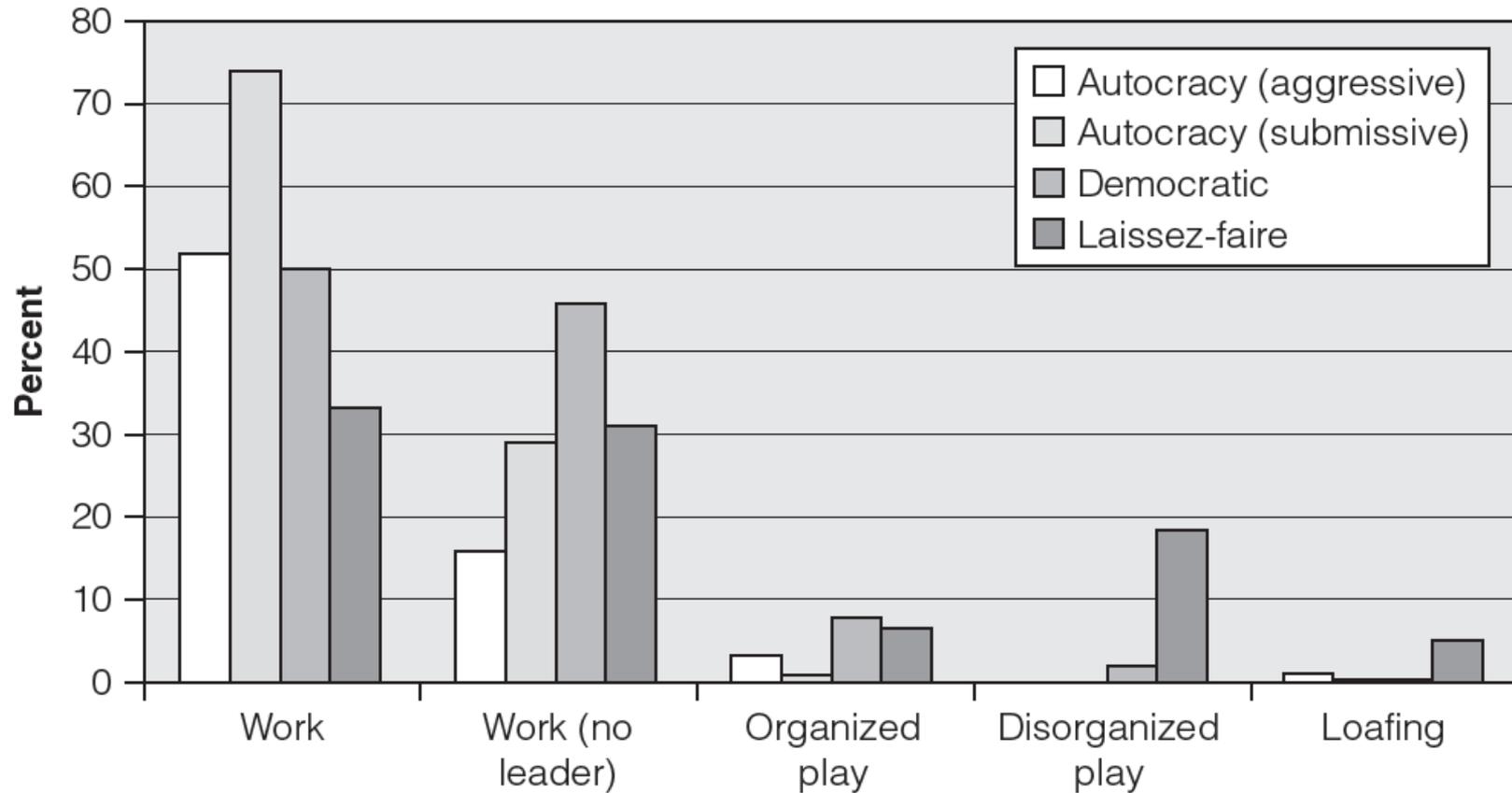
#4 Humans are egalitarian apes

- Democracy on the Savannah (Boehm, 1999)
- Aversion to being dominated
- **STOPS: Evolved Strategies To Overcome the Powerful**
 - Gossip and ridicule “Whistle-blowing”
 - Public criticism
 - Replacement of leaders
 - Disobedience or rebellion
 - Desertion
 - Assassination





Dictatorships work...but not for long!





Distributed leadership (the Ona of Tierra del Fuego)

“The Ona had no hereditary or elected chiefs, but men of outstanding ability almost always became the unacknowledged leaders of their groups. Yet one man might seem leader today and another man tomorrow, according to whoever was keen to embark on some enterprise”

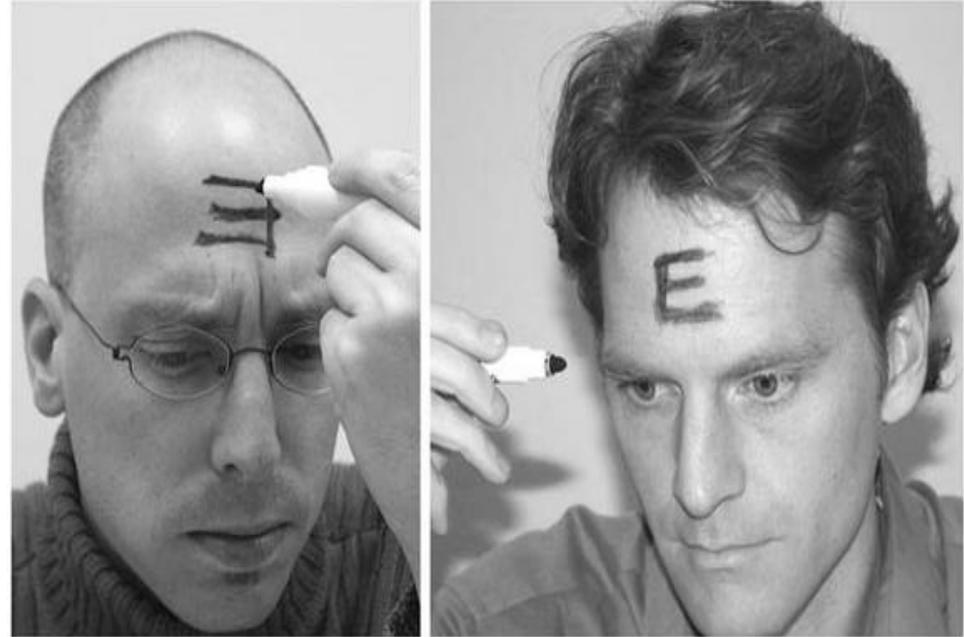
(E. Lucas Bridges, 1949)





#5 Power corrupts

*“Please think of a time when you were having **power over other people** (high power)/other people were **having power over you**” (low power)*



Now write the letter “E” on your forehead!

(Galinsky et al., 2006)

Inverted E:

High Power: 33%

Low Power: 12%



“Understanding what the other person is going through and being there.”



Who would you vote for?

- Who would you vote for as the new leader of your country?

War

Your country of Taminia is at war with the neighbouring country of Robania. It has been an aggressive and costly war and no side is willing to concede.

Peace

Your country of Taminia has a longstanding peaceful, relationship with the neighbouring country of Robania. This alliance must be preserved.



A



B

#6 Face of a leader

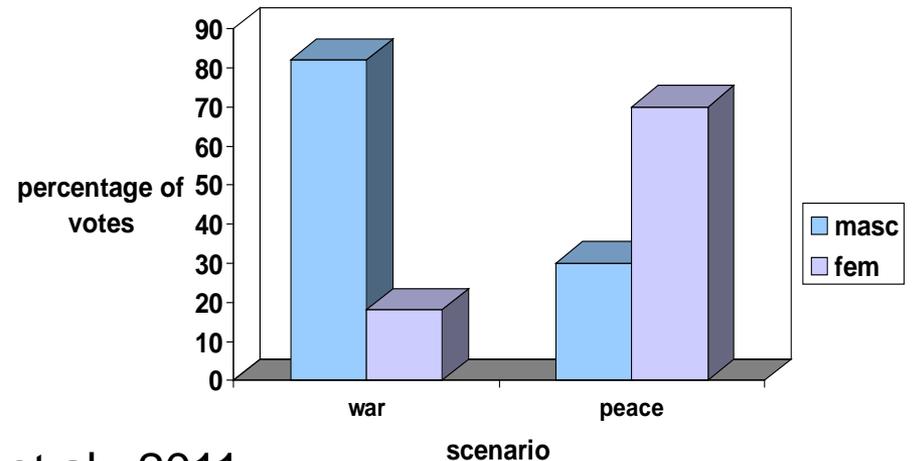
- Masculine looking individuals preferred as war leaders and feminine looking individuals as peace-leaders
- Young children can predict outcomes of elections based on the face of the candidates (Antonakis & Dalgas, 2009)



Masculine



Feminine



Men: Task Leaders

This difference between men and women is only a tendency; it does manifest itself across all group situations

- Assigns tasks to members
- Makes attitudes clear to the group
- Critical of poor work
- Sees to it that the group is working to capacity
- Coordinates activity

Women: Relationship Leaders

- Listens to group members
- Easy to understand
- Friendly and approachable
- Treats group members as equals
- Willing to make changes





Which person looks most like a leader?



John Tall:
Name: John Lewis
Age: 44
Sex: Male
Height: 1.95 meters (6.4 feet)
Hobbies: Swimming, painting



John Small:
Name: John Lewis
Age: 44
Sex: Male
Height: 1.65 meters (5.4 feet)
Hobbies: Swimming, painting



Mary Tall:
Name: Mary Taylor
Age: 46
Sex: Female
Height: 1.85 meters (6 feet)
Hobbies: Reading, cycling

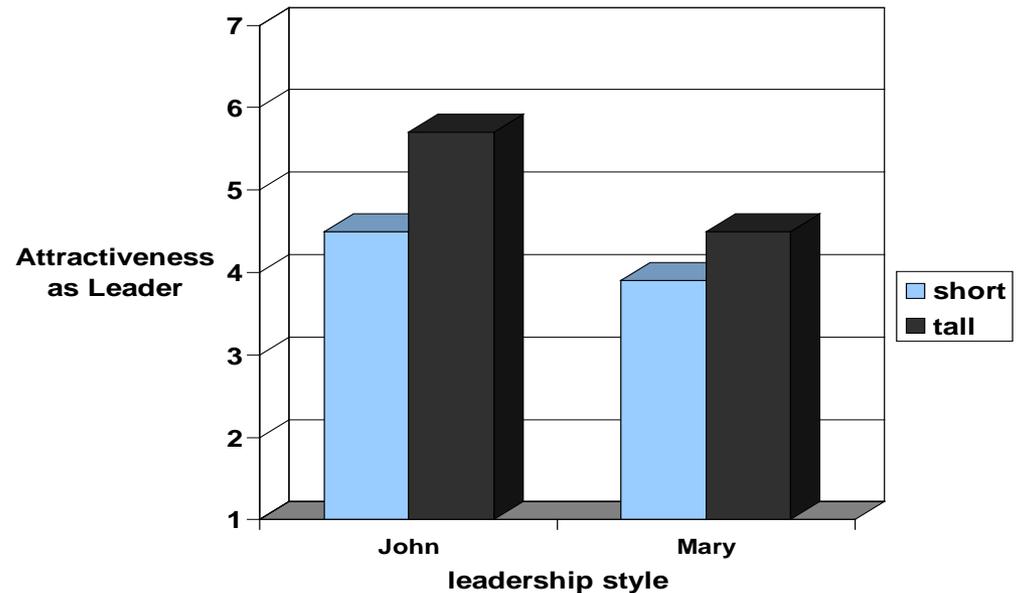


Mary Small:
Name: Mary Taylor
Age: 46
Sex: Female
Height: 1.55 meters (5 feet)
Hobbies: Reading, cycling

#7 *The mismatch hypothesis*

- Current leadership choices made by “Stone Age” brains

- “Savannah” traits
 - Height
 - Physical strength
 - Facial dominance
 - Symmetry





#8 From Savannah to Boardroom

- ❑ *Keep it small, informal, and egalitarian*
 - ❑ Find new ways to connect with followers (social media) and keep it personal

- ❑ *Distribute leadership*
 - ❑ About warriors, diplomats, arbiters, scouts, managers, and teachers as natural leader prototypes

- ❑ *Mind the (pay) gap*
 - ❑ 3XS (salary, status, sex) select for “toxic “leaders

- ❑ *Cherish your followers*
 - ❑ Promote STOPS and prevent STEPS to curtail the power of leaders

- ❑ *Do not judge leaders (only) on the shape of their jawlines*
 - ❑ Potential mismatches with ancestral environments (age, gender)





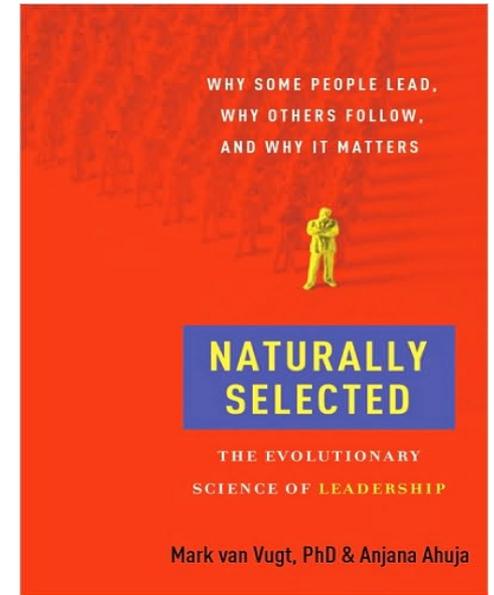
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Mange Tak!



Psychology Today



Blog "Naturally Selected"

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