

THE NEVER ENDING STORY

*The Cultural Evolution
of Narratives*



Part IV...

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of Narratives*



By

Joe Stubbersfield

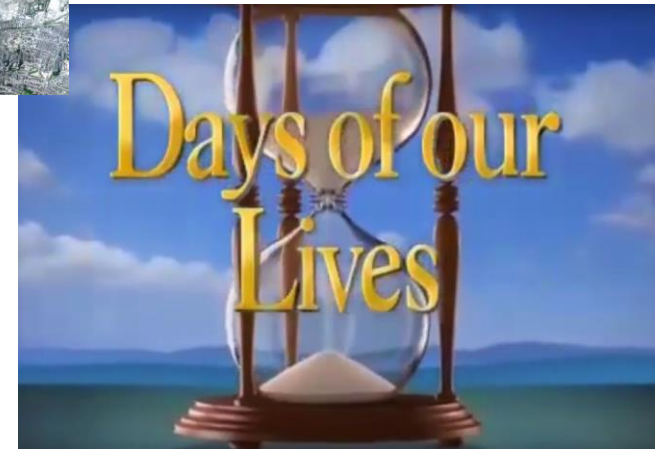
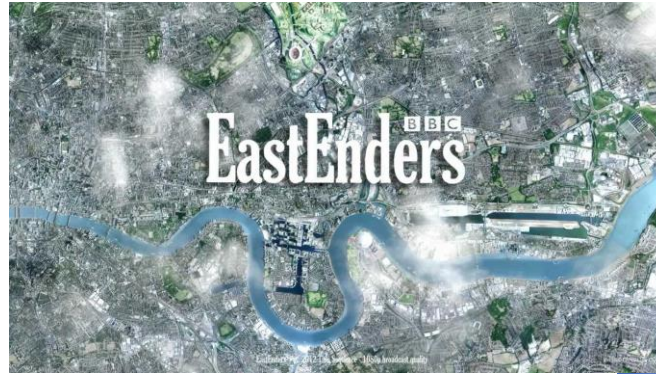
Jamie Tehrani

The background of the image is a bright blue sky filled with soft, white, fluffy clouds. The clouds are scattered across the frame, with some appearing more dense and others more wispy. The overall lighting is bright and natural, suggesting a clear day.

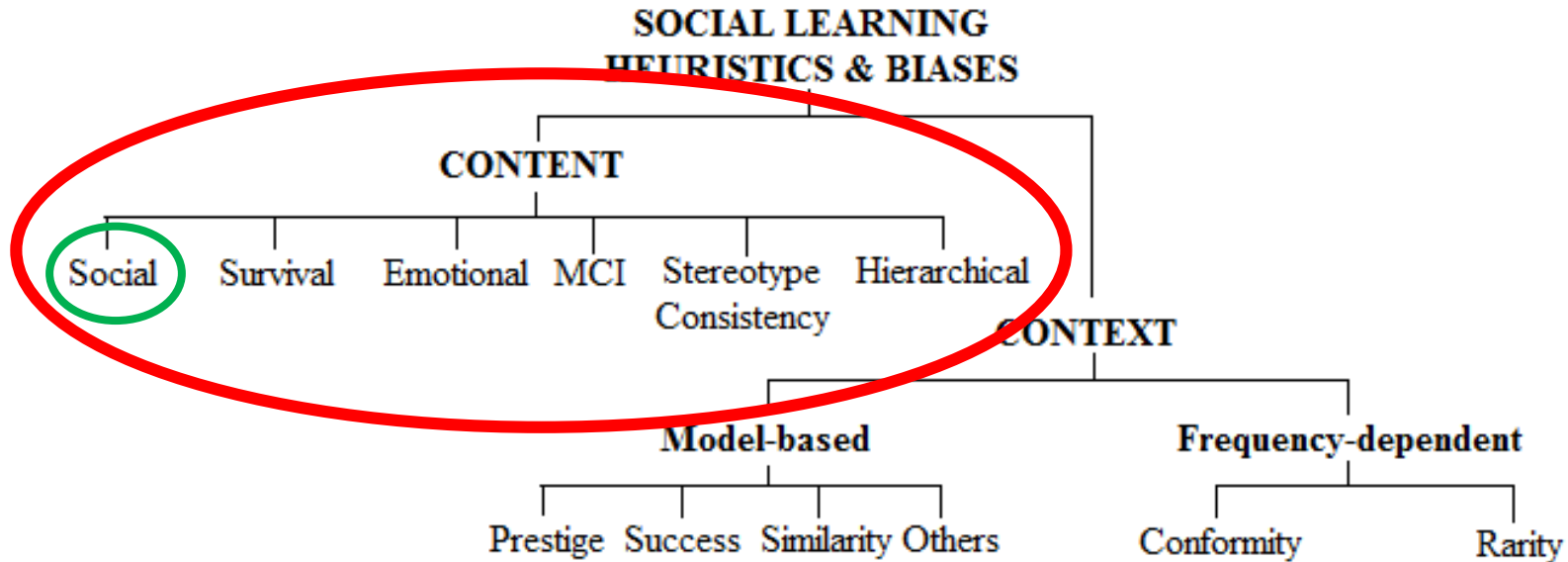
Soap Opera

Soap Operas

- Social drama – i.e. conflict is centred around the relationships of a group of characters – is by far the most popular TV genre
- The social aspect epitomised by soap opera: widely popular, open-ended stories about the day-to-day lives of a more-or-less closed group of characters (family, work colleagues, etc.)
- Success could be explained by **social content bias**



What are content biases?



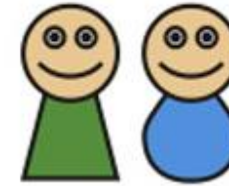
- Cognitive disposition towards preferentially learning, recalling and transmitting certain types of information over others
- Disposition could have evolved as a useful function in our evolutionary past
- Shaped the way culture has been transmitted and has evolved

Why are humans so clever?

Exceptional cognitive abilities:

- Theory of mind
- Levels of intentionality
- Social learning

first-order



second-order



third-order

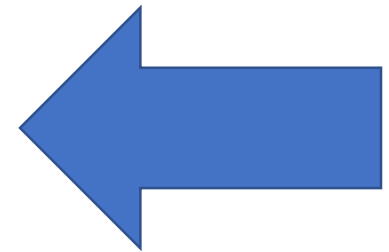


Why are humans so clever?

Two key explanations:

1. Ecological explanation – keeping track of food resources and predators, foraging techniques, hunting etc

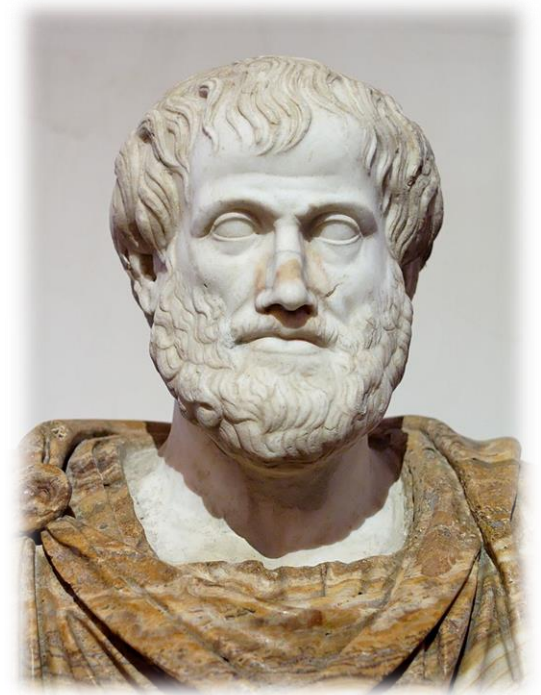
2. Social explanation – Keeping track of complex social relationships in large groups



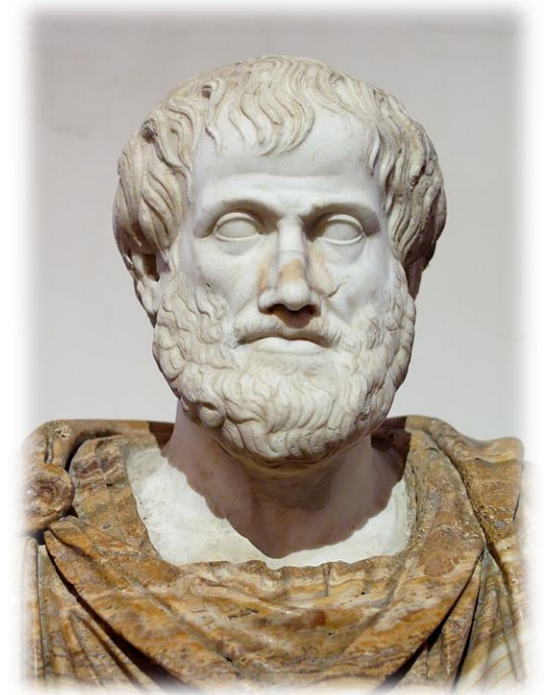
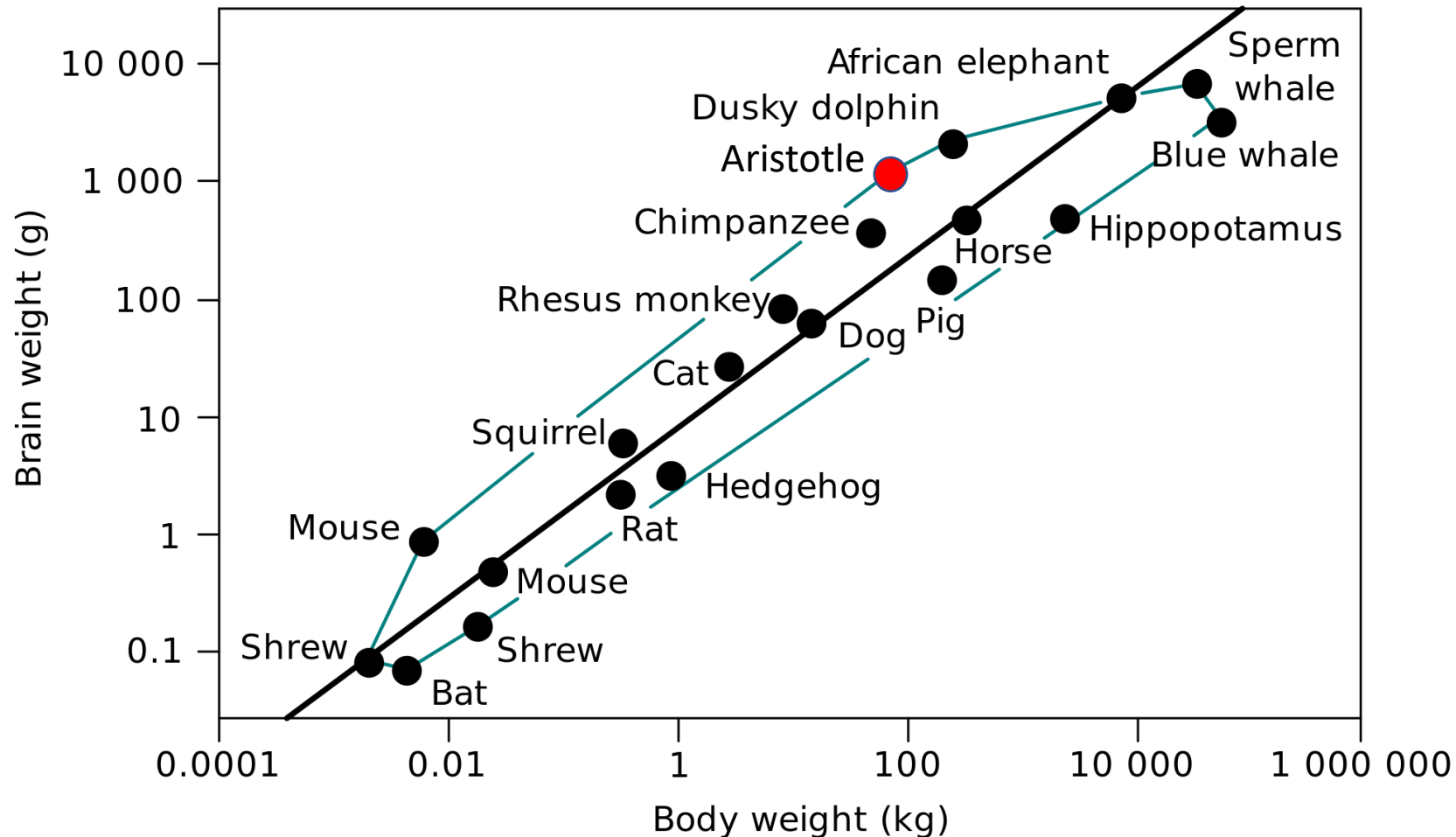
We have big brains for our body size

“Of all the animals, man has the brain largest in proportion to his size”

- Aristotle, 335 BCE



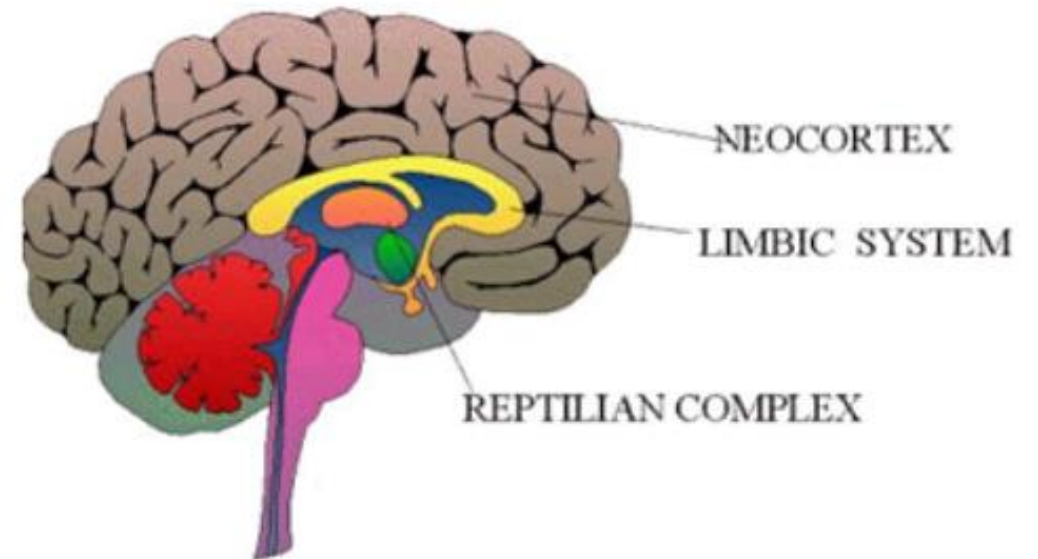
We have big brains for our body size



Qualitative differences

Disproportionately large neocortex

Area used for social computations
and complex cognition



Brains and group size

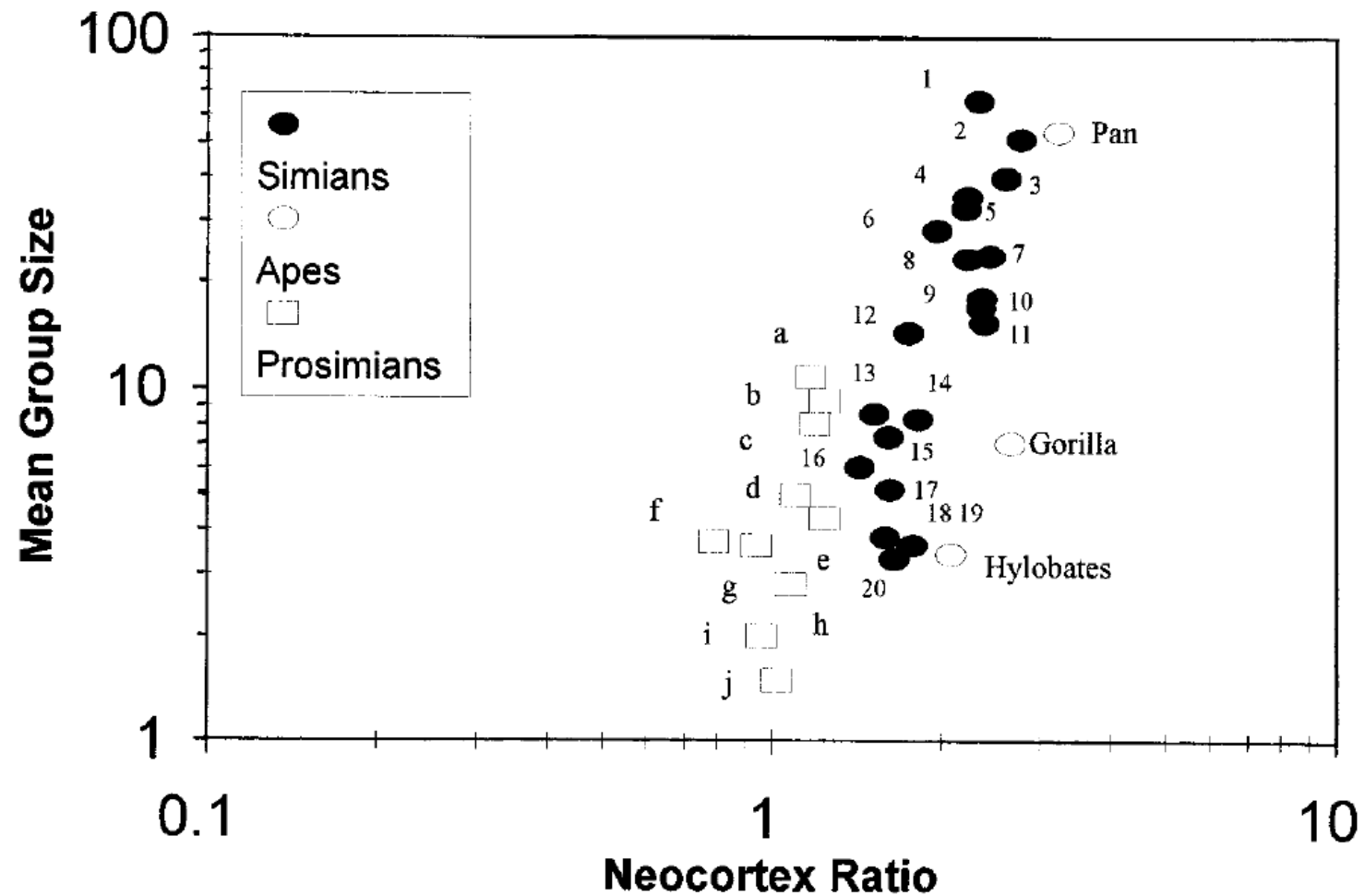


Figure from Dunbar, R. I. (1998). The social brain hypothesis.

Primate social worlds

- Primates have to keep track of a *lot* of social knowledge
- Cliques shift, coalitions reassemble, status and dominance climb and fall



The Social Brain Hypothesis

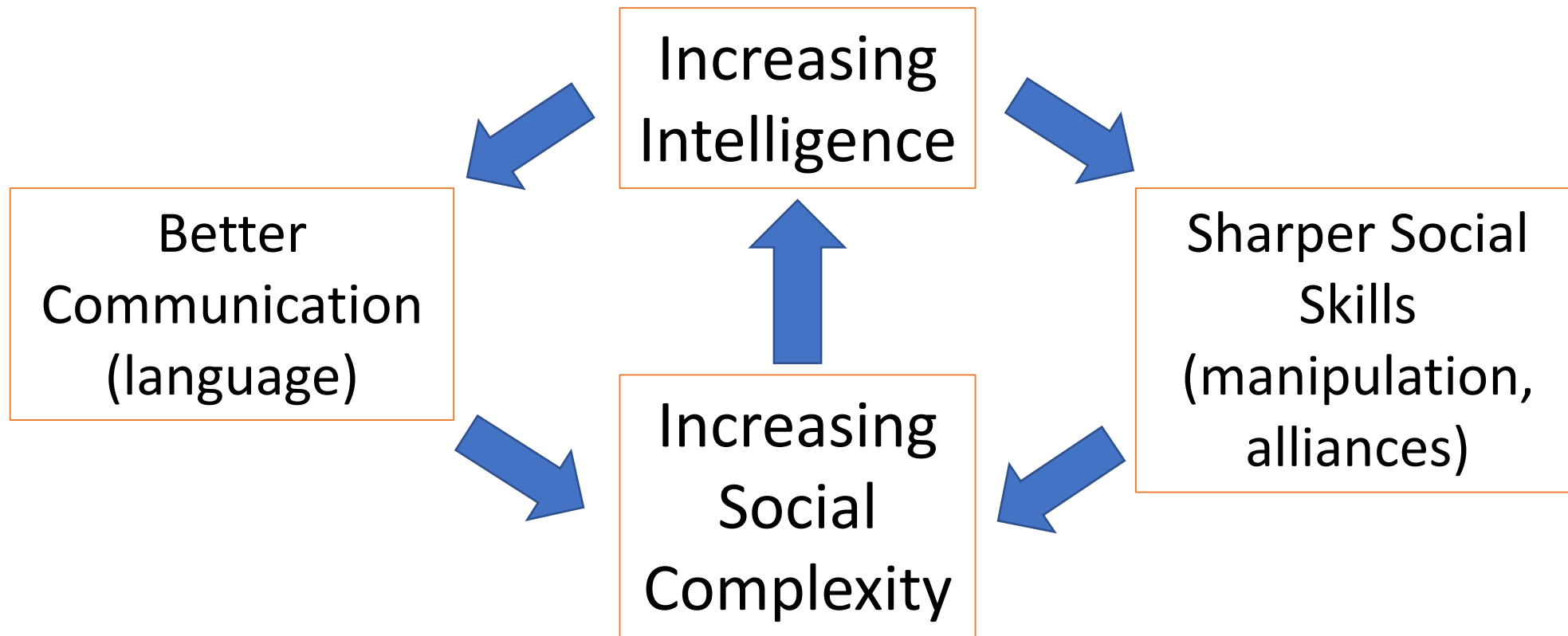
“primates need large brains because they live in unusually complex societies...

to be able to manipulate and manage information about the changing state of the social group”



Robin Dunbar

The Social Brain Hypothesis



The Social Brain Hypothesis

- Forming and keeping track of relationships in a complex social network
- Effective communication within large groups



Consequences of a Social Brain

Social information bias

(Mesoudi, Whiten & Dunbar, 2006)

- Disposed towards social info over equivalent non-social info
- Susceptible to content which ticks that cognitive box
- Also biased towards fictional social relationships



Social information bias in stories

Stubbersfield, Tehrani & Flynn 2015

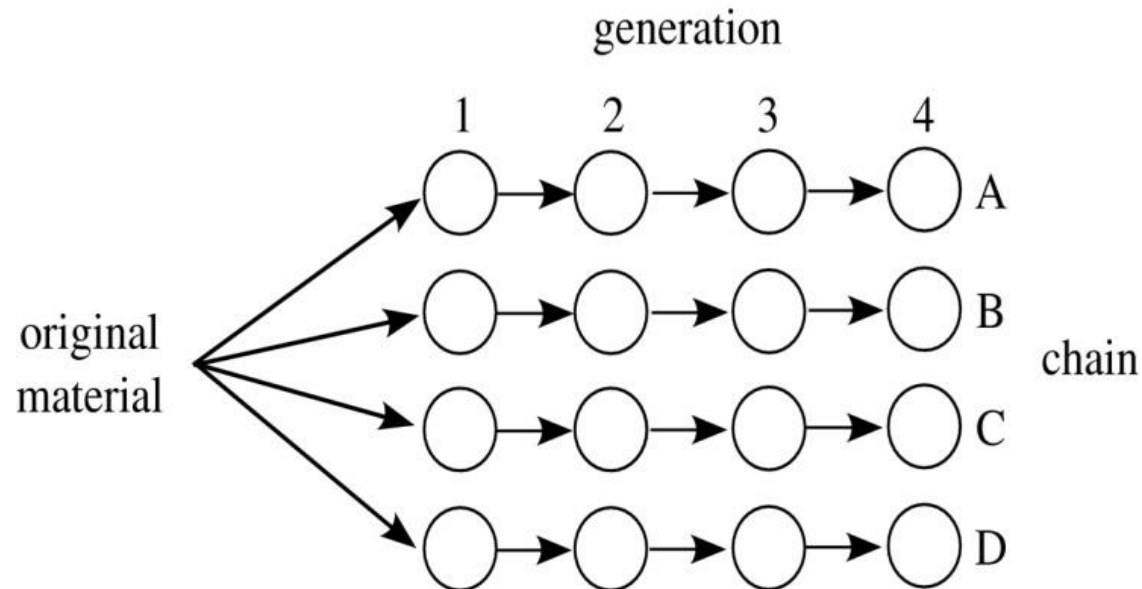
- Tested for social information bias in cultural transmission of urban legends



Social information bias in stories

Stubbersfield, Tehrani & Flynn 2015

- Urban legends containing social information, survival information or a combination passed along transmission chains



Social information bias in stories

Survival legend

When beehive hair styles were in fashion it was almost a competition to see which girl could get her hair the highest. There was one girl who got her hair so high, and put so much hair spray on it, that she never took it down, combed it or washed it. One day she suddenly fell ill and died. They found out that a deadly spider had nested in her hair and laid eggs. When the eggs hatched the baby spiders bit into her scalp and poisoned her.

Social information bias in stories

Social legend

The boss of a small company took his attractive secretary out for a long lunch on his birthday and they enjoyed some drinks together. Afterwards, the secretary invited the boss up to her apartment for a few more drinks and which he readily agreed to. At her apartment she left the room to 'slip into something more comfortable'. When she returned a few minutes later with a birthday cake, surrounded by the man's friends, family, and his wife, they found the surprised man waiting in nothing but his socks!

Social information bias in stories

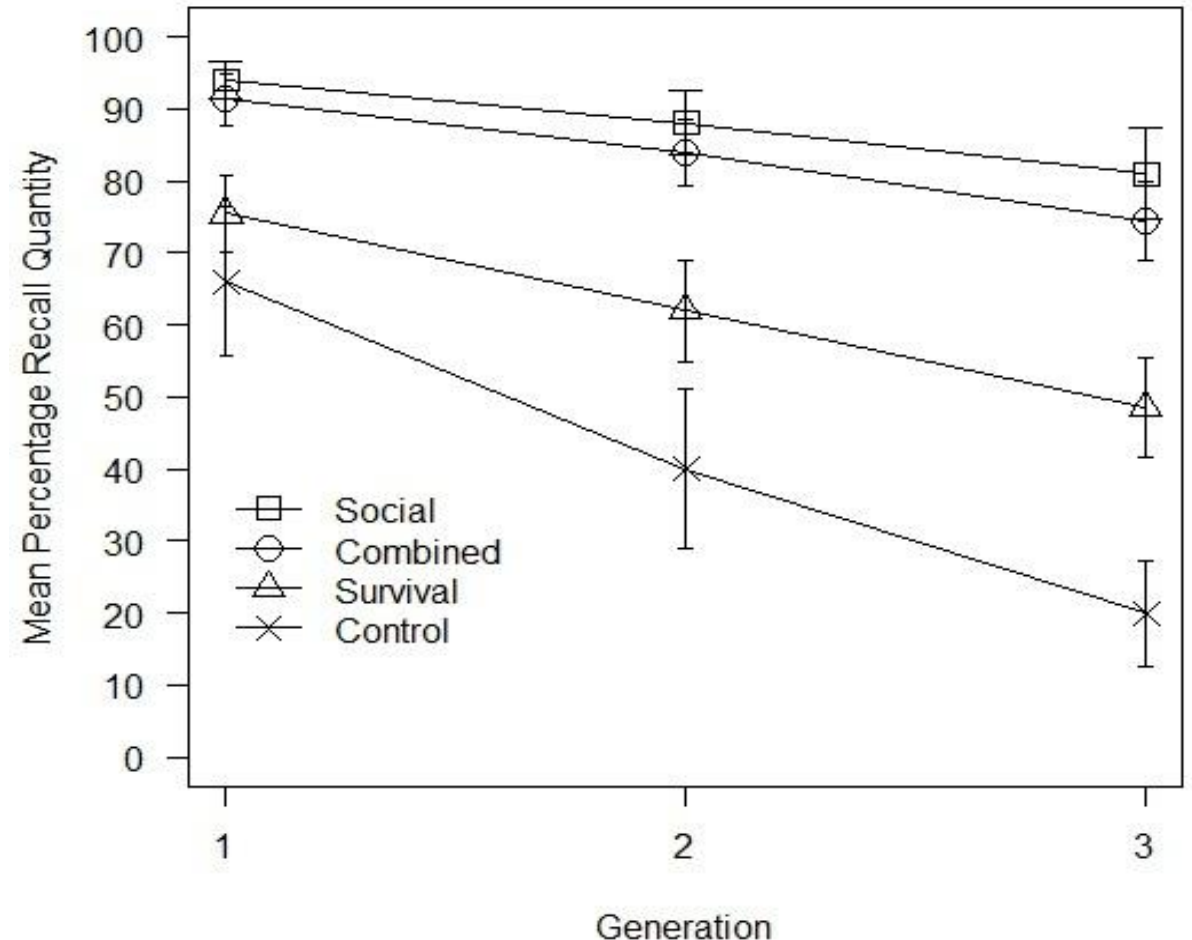
Combined legend

One night a woman heard a baby crying outside her door. She rang the police because it was late and she thought it was weird. The police told her “whatever you do, do NOT open the door.” The woman said that she was worried that the baby would crawl into the street and get run over but the police then told her that a serial killer has a baby’s cry recorded and has been using it to coax women out of their homes so he can kill them.

Social information bias in stories

Stubbersfield, Tehrani & Flynn 2015

- Urban legends containing social info were most faithfully transmitted
- Higher than survival information and control



Social information bias in stories

Stubbersfield, Flynn & Tehrani 2017

- Content analysis of 254 urban legends
- Coded for presence of content bias related content

Bias	Frequency	Percentage of total (%)
Emotional	198	78
Social	195	77
Survival	69	27
Stereotype Consistent	58	23
MCI	14	6
Stereotype Inconsistent	0	0

Conclusions

- Social brain hypothesis proposes that human intelligence evolved in response to demands of complex social groups and relationships
- This leads to social content bias – a preference for socially related content and information
- Stories which appeal to this bias will be culturally successful

