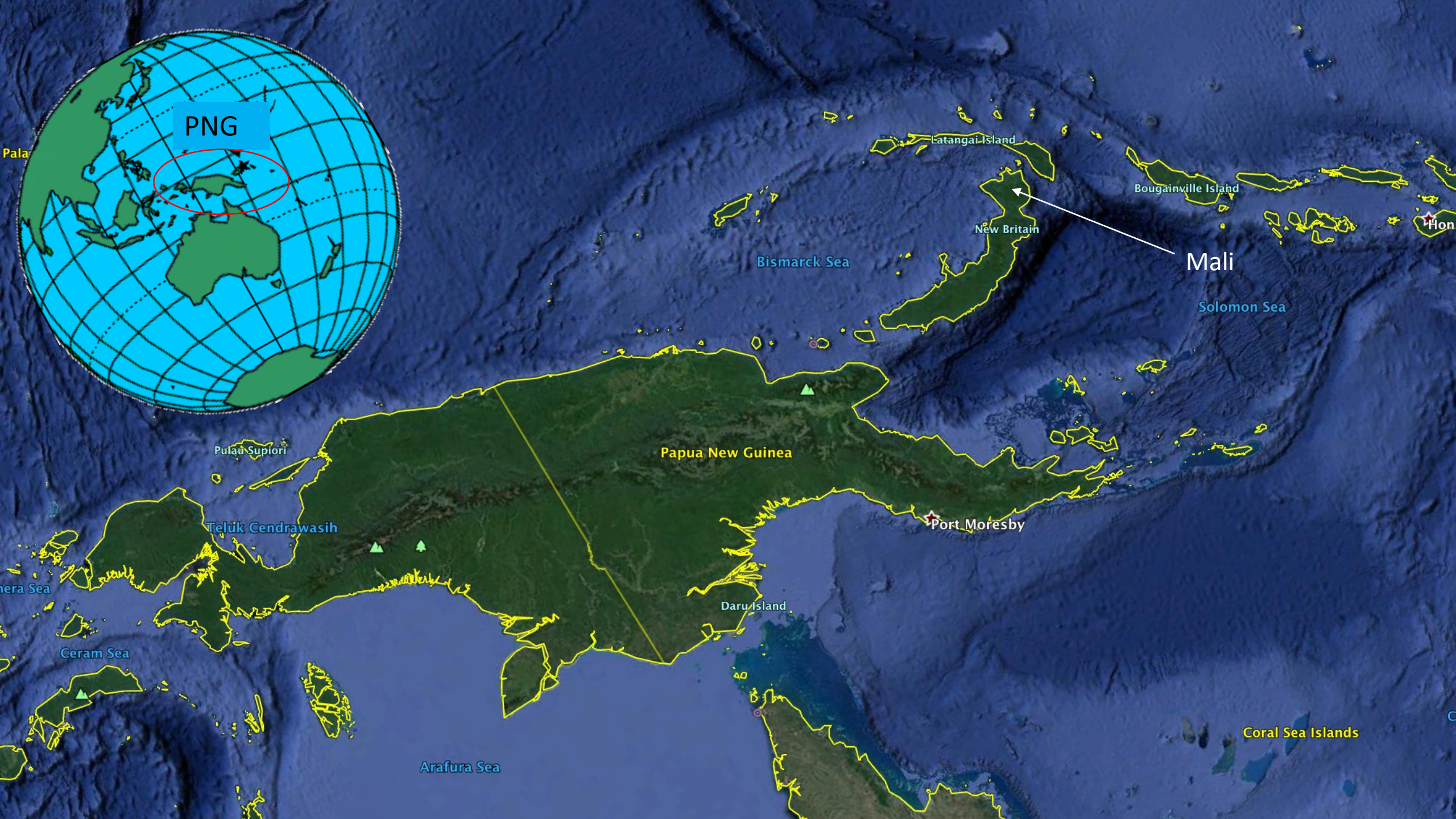


Social Glue and the Collective Brain

Harvey Whitehouse
University of Oxford





PNG

Latangai Island

Bougainville Island

Honiara

New Britain

Mali

Solomon Sea

Bismarck Sea

Papua New Guinea

Port Moresby

Daru Island

Coral Sea Islands

Arafura Sea

Ceram Sea

Teluk Cendrawasih

Pulau Supiori

hera Sea

Pala









TEN COMMANDMENTS

I

I AM THE LORD THY GOD, ...
THOU SHALT HAVE NO OTHER GODS BEFORE ME

II

THOU SHALT NOT MAKE UNTO THEE ANY GRAVEN IMAGES

III

THOU SHALT NOT TAKE THE NAME OF THE LORD THY GOD IN VAIN

IV

REMEMBER THE SABBATH DAY, TO KEEP IT HOLY

V

HONOR THY FATHER AND THY MOTHER

VI

THOU SHALT NOT KILL

VII

THOU SHALT NOT COMMIT ADULTERY

VIII

THOU SHALT NOT STEAL

IX

THOU SHALT NOT BEAR FALSE WITNESS AGAINST THY NEIGHBOR

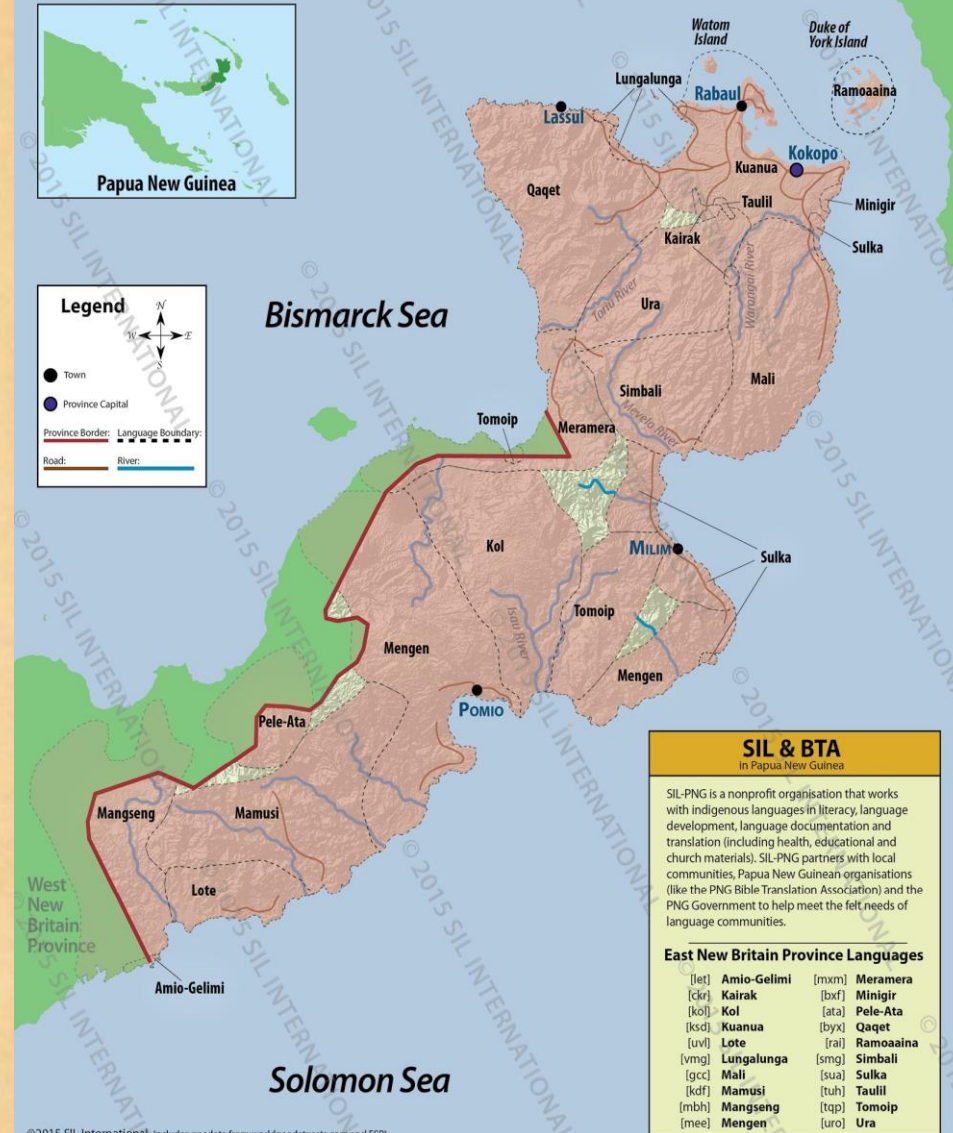
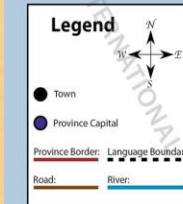
X

THOU SHALT NOT COVET THY NEIGHBOR'S GOODS

EXODUS 20:1-17



East New Britain Province Language Map



SIL & BTA In Papua New Guinea

SIL-PNG is a nonprofit organisation that works with indigenous languages in literacy, language development, language documentation and translation (including health, educational and church materials). SIL-PNG partners with local communities, Papua New Guinean organisations (like the PNG Bible Translation Association) and the PNG Government to help meet the felt needs of language communities.

East New Britain Province Languages

[let]	Amio-Gelimi	[mxm]	Meramera
[ckr]	Kairak	[bxf]	Minigir
[kol]	Kol	[ata]	Pele-Ata
[ksd]	Kuanua	[byx]	Qaet
[uvl]	Lote	[rai]	Ramoaaina
[vmg]	Lungalunga	[smg]	Simbali
[gcc]	Mali	[sua]	Sulka
[kdf]	Mamusi	[tuh]	Taulil
[mbh]	Mangseng	[tqp]	Tomoip
[mee]	Mengen	[uro]	Ura



- Collective fund
- Aid posts
- Cash crops
- Secession
- No new technology required
- Catalysts: ritual & decalogue



Small-scale group bonding still persists, continuing to motivate violent self-sacrifice in much smaller groups

Building framework to understand and manage these processes

Two kinds of collective brain

- Imagistic



- doctrinal



Imagistic

- Low-frequency/ high-arousal rituals
- Rituals are remembered for years afterwards:
 - Prompting reflection on meanings
 - Forming part of the essential personal self
- Sharing these experiences > intense cohesion with relational group
- Inefficient spread (localised/fragmented)
- Useful in high-risk pursuits (e.g. warfare, large game hunting)



Doctrinal

- High frequency rituals
 - deviations readily detected/suppressed
 - authoritative doctrine standardized
- Doctrines codified in oratory/text:
 - one-to-many transmission
 - rapid/efficient spread
 - orators rise above common herd



- ‘Imagined communities’:
 - Large anonymous groups
 - diffuse cohesion based on categorical ties
- Capacity to amass resources:
 - Small contributions to the collective pot can produce cumulatively large centralized funds

Human Relations Area Files

Cultural information for education and research



**The rituals
database:**
644 rituals
74 cultures

[Home](#)[eHRAF Databases »](#)[Resources »](#)[HRAF Research »](#)[Cross-Cultural Research »](#)[About HRAF »](#)

eHRAF World Cultures: The Pashtun

The Pashtun inhabit southern and eastern Afghanistan and western Pakistan. Their language is Pushto (Pashto), in the Iranian branch of the Indo-European language family. Except for a small minority, they are Sunni Muslims. Until recently,...

eHRAF Highlights



Google Chrome



**HRAF's 2015 Year in
Review and 2016 Preview**
Happy 2016! Another year has flown
by here at HRAF....

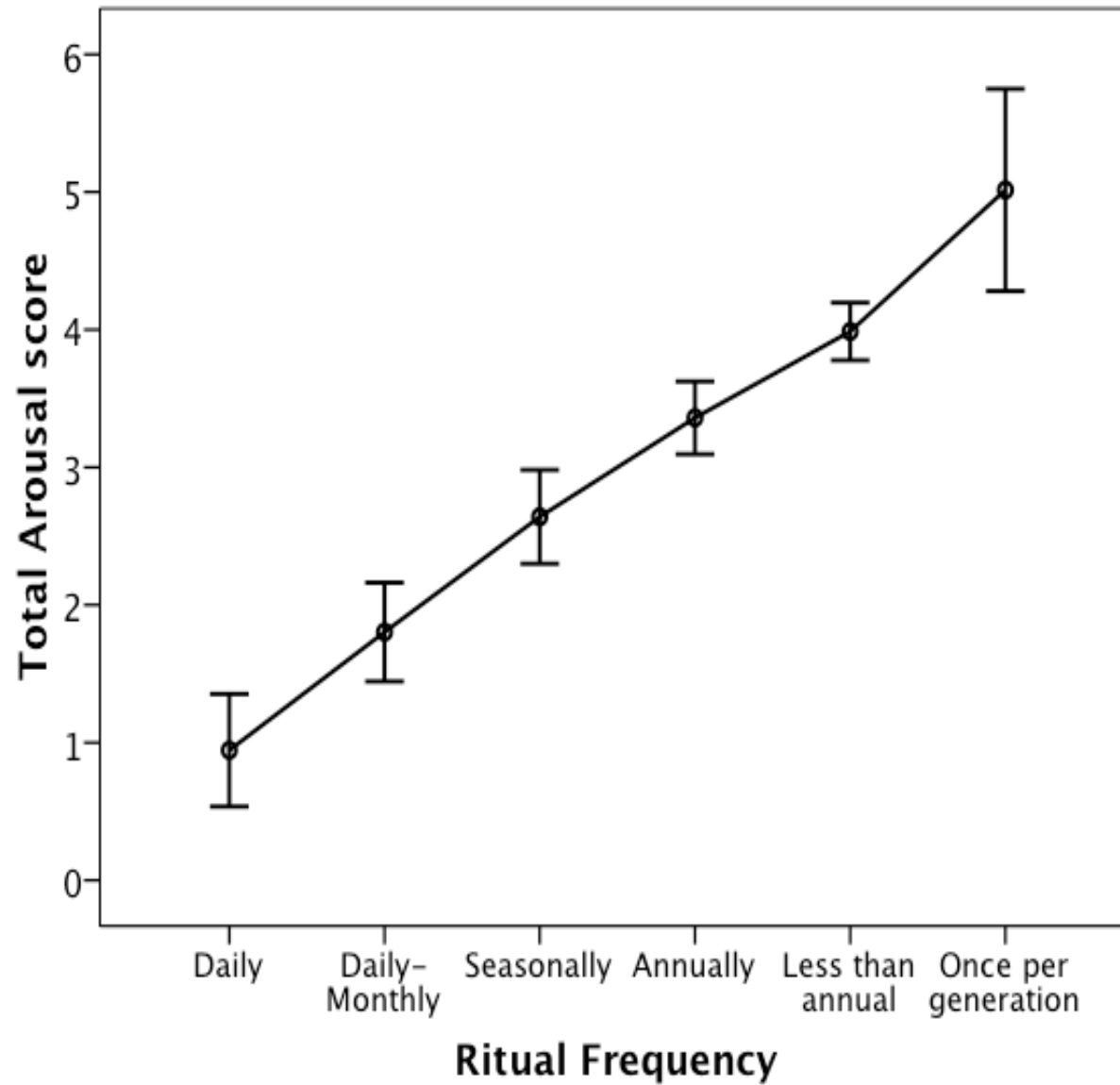
[Full Article →](#)

Welcome to HRAF

Founded in 1949 at Yale University, the Human Relations Area Files, Inc. (HRAF) is an internationally recognized organization in the field of cultural anthropology. HRAF's mission is to encourage and facilitate the cross-cultural study of human culture, society, and behavior in the past and present. HRAF produces two online databases: eHRAF World Cultures and eHRAF Archaeology, and other resources for teaching and research.

Find out what researchers and educators [have to say about using eHRAF](#).

[Access eHRAF Databases](#)



Atkinson, Quentin D. and Whitehouse, Harvey (2010). The cultural morphospace of ritual form: Examining modes of religiosity cross-culturally. *Evolution and Human Behavior*. Vol. 32, No.1: pp 50-62.

Ritual, agriculture, and the collective brain



agricultural
intensity

ritual
frequency

regional
homogeneity

social
differentiation

imagistic
rituals

Small
cohesive
groups

hunting

Hallan Cemi

Kortik

Cafer Hoyuk

Cayonu

Asikly hoyuk

Nevali Cori

Gritille

Gobekli Tepe

Tell Seker al-Aheimar

Tell 'Abr

Dja'dè

Tell Sabi Abyad

Tell el Halula

Tell Qaramel

Mureybet III

Mureybet IV

Abu Hureyra II

Tel el-Kerkh

PPNA

PPNB

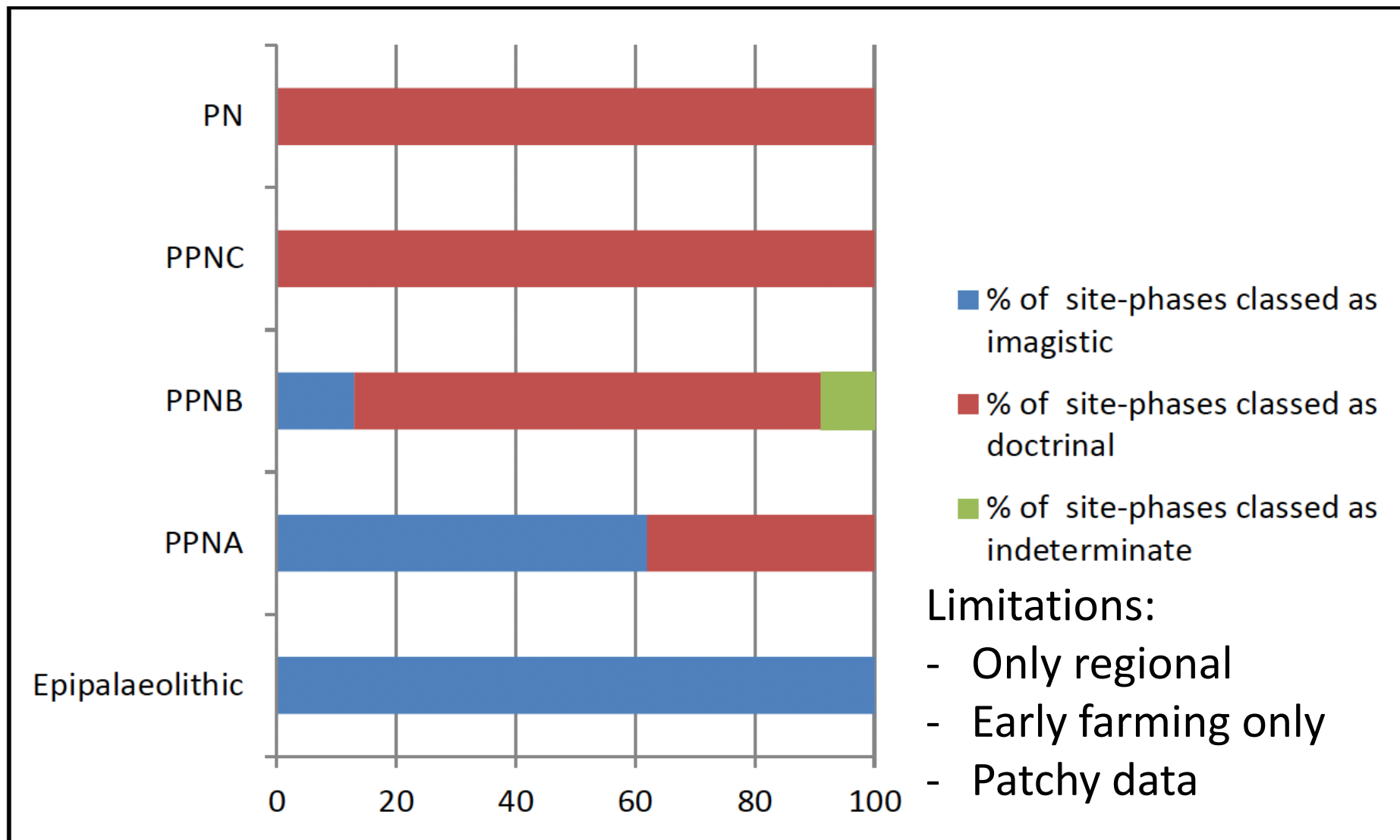
Catalhoyuk I-II

Canhassan III

Erbaba

Pinarbasi

Suberde



Gantley, Michael, Amy Bogaard, and Harvey Whitehouse (2018). Material Correlates Analysis (MCA): An Innovative way of Examining Questions in Archaeology Using Ethnographic Data. *Advances in Archaeological Practice*. 6(4): 328-341. DOI:1.1017/11p.2018.9

Latest Blog

Using Open Source Geographic Data to Model Ancient Resource Distributions



What is Seshat?

Seshat periodization: how it's done

By Edward Turner

February 6, 2018

Share:

 Facebook

 Twitter

 Google+

Advantages:

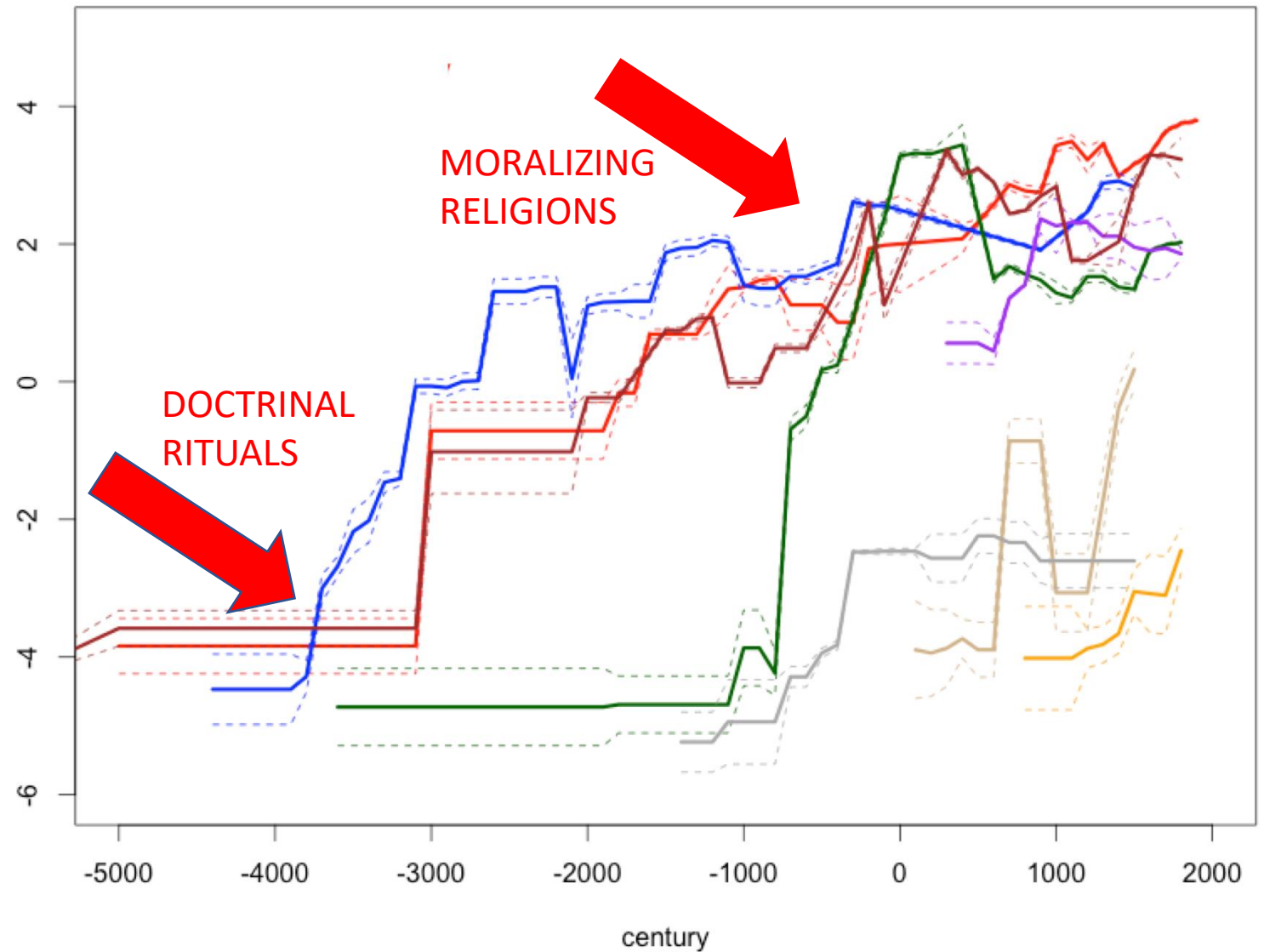
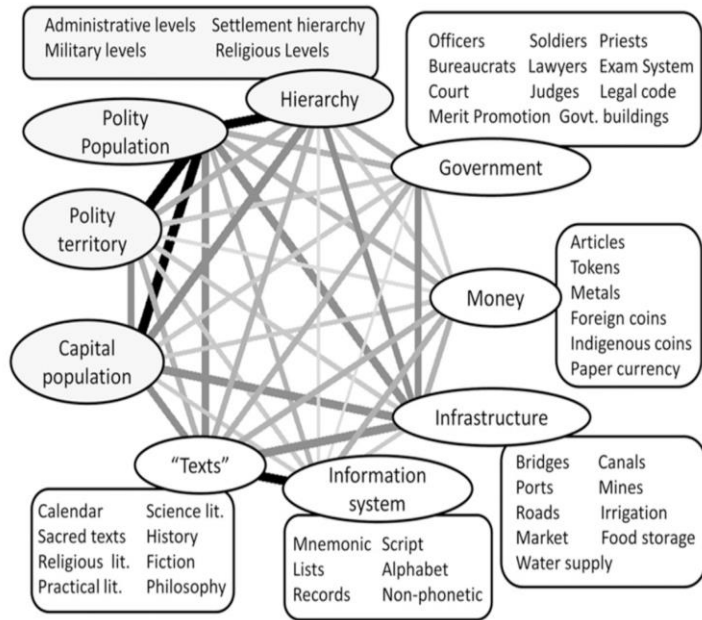
- Global and not just regional
- Covers the past 10,000 years

Core variables:

- Social complexity
- Warfare
- Ritual and religion
- Agriculture



Tracking the rise of the collective brain in world history



Peter Turchin, Thomas E. Currie, Harvey Whitehouse, et al. (2018). Quantitative Historical Analysis Uncovers a Single Dimension of Complexity that Structures Global Variation in Human Social Organization. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*. 115(2) E144-E151.

TWO

EXTRAORDINARY
RITUALS[Home](#) [Episodes](#) [Clips](#) [Minisodes](#) [Quiz](#) [Behind the scenes](#)

Behind the Extraordinary Rituals

**What is a ritual?**by Harvey Whitehouse:
Chief Consultant**The power of rituals**by Tuppence Stone:
Series Producer**A desert wedding with
armed guards**by Rob Sullivan:
Producer**Resurrection and
Facebook**by Claire Thompson:
Assistant Producer**A race against time**by Madalena Boto:
Researcher**Capturing a face in the
crowd**by Toby Strong: Director
of Photography**Ritual bloodshed and a
forgotten hat**

by Tom Mustill: Producer

**Losing your hair to save
your soul**by Usha Amin:
Researcher**Why would you do this?**by Harvey Whitehouse:
Chief Consultant

Rituals continue to
unite us

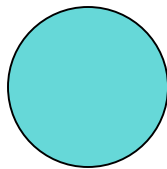
Studying
contemporary
groups means we
can investigate the
psychological
mechanisms using
surveys and
experiments

Social Identity Theory and the Collective Brain

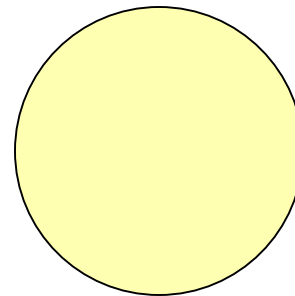
We all have two types of identities:

- Personal identities: refer to qualities that make us distinctive as individuals
- Group identities: align us with social groups

Most people see their personal and social identities as somewhat separate

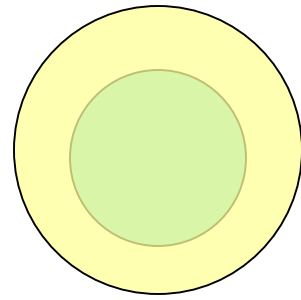


Personal identities

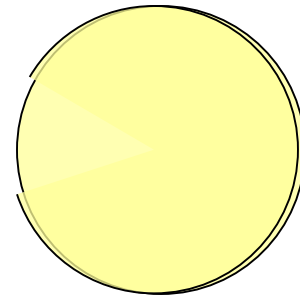


Group identity

Identification with groups is de-personalising

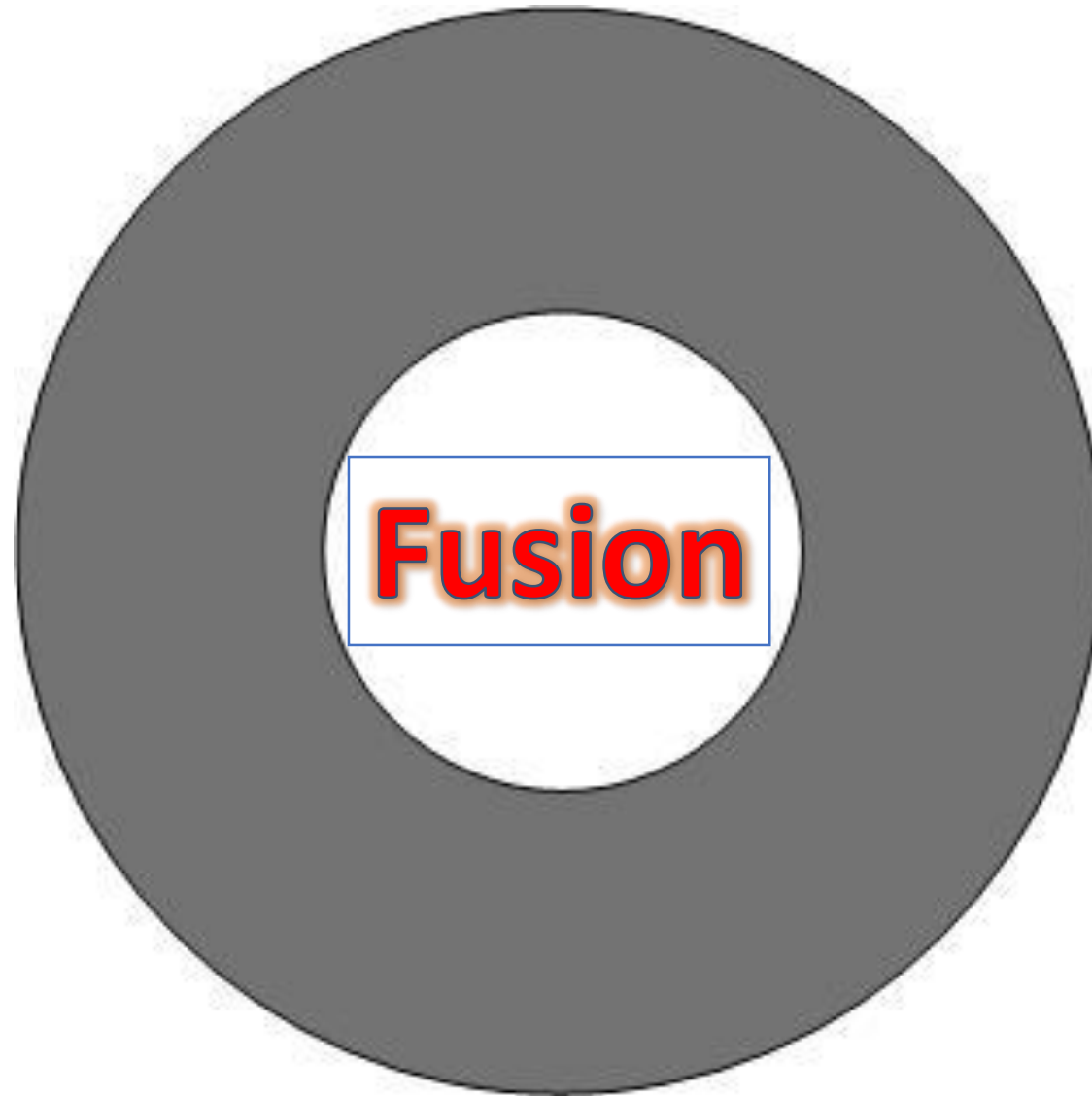


Personal self

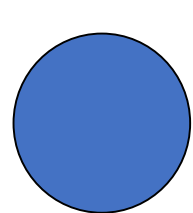


Group

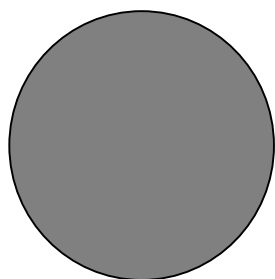
Hydraulic relationship of personal and group identity



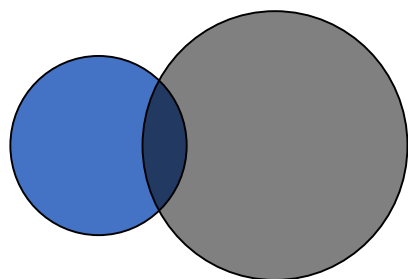
Swann, William B., Jolanda Jensen, Ángel Gómez, Harvey Whitehouse and Brock Bastian (2012). When Group Membership Gets Personal: A theory of identity fusion. *Psychological Review*, Vol. 119, No. 3, pp 441–456.



Self

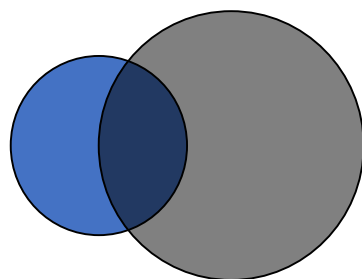


Group



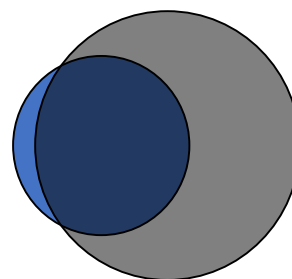
Self

Group



Self

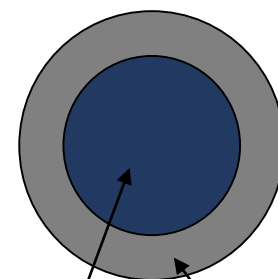
Group



Self

Group

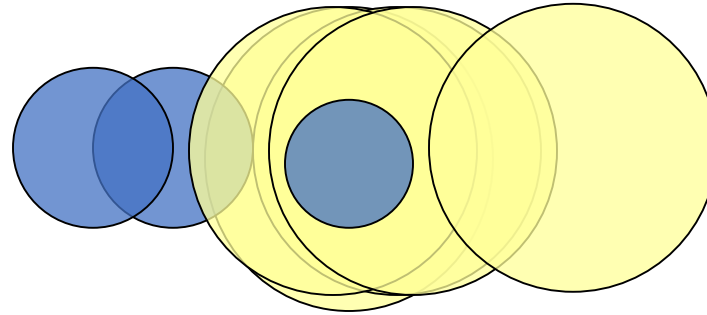
Fused



Self

Group

Identity fusion: Involves the union of personal and social identity



Personal Identity Fusion Group



If fused, any attack on the group feels personal

Expressed willingness to fight and die for the group



But does fusion motivate *actual* self-sacrifice?

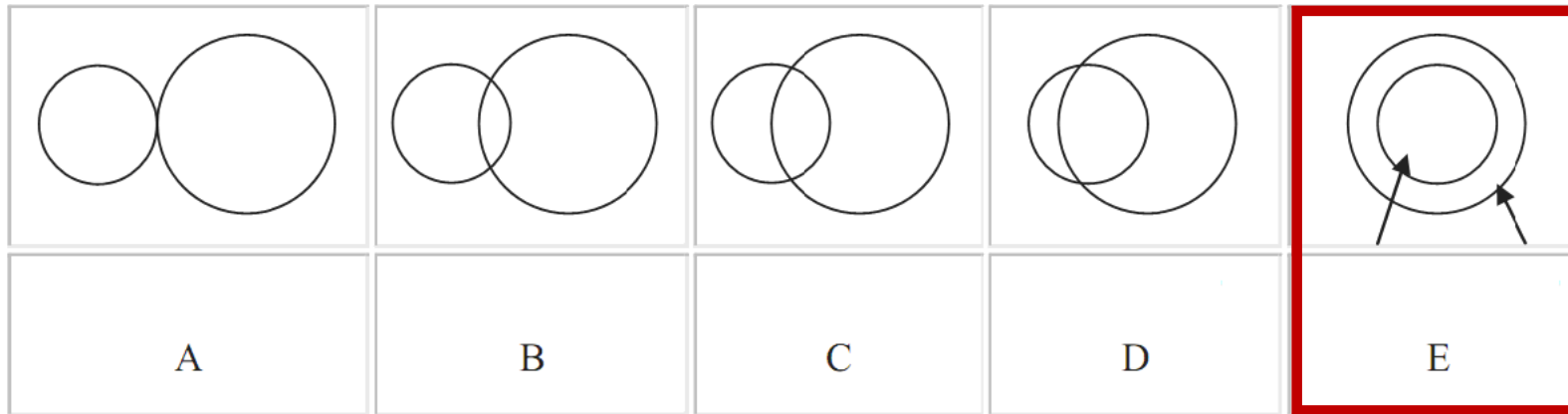






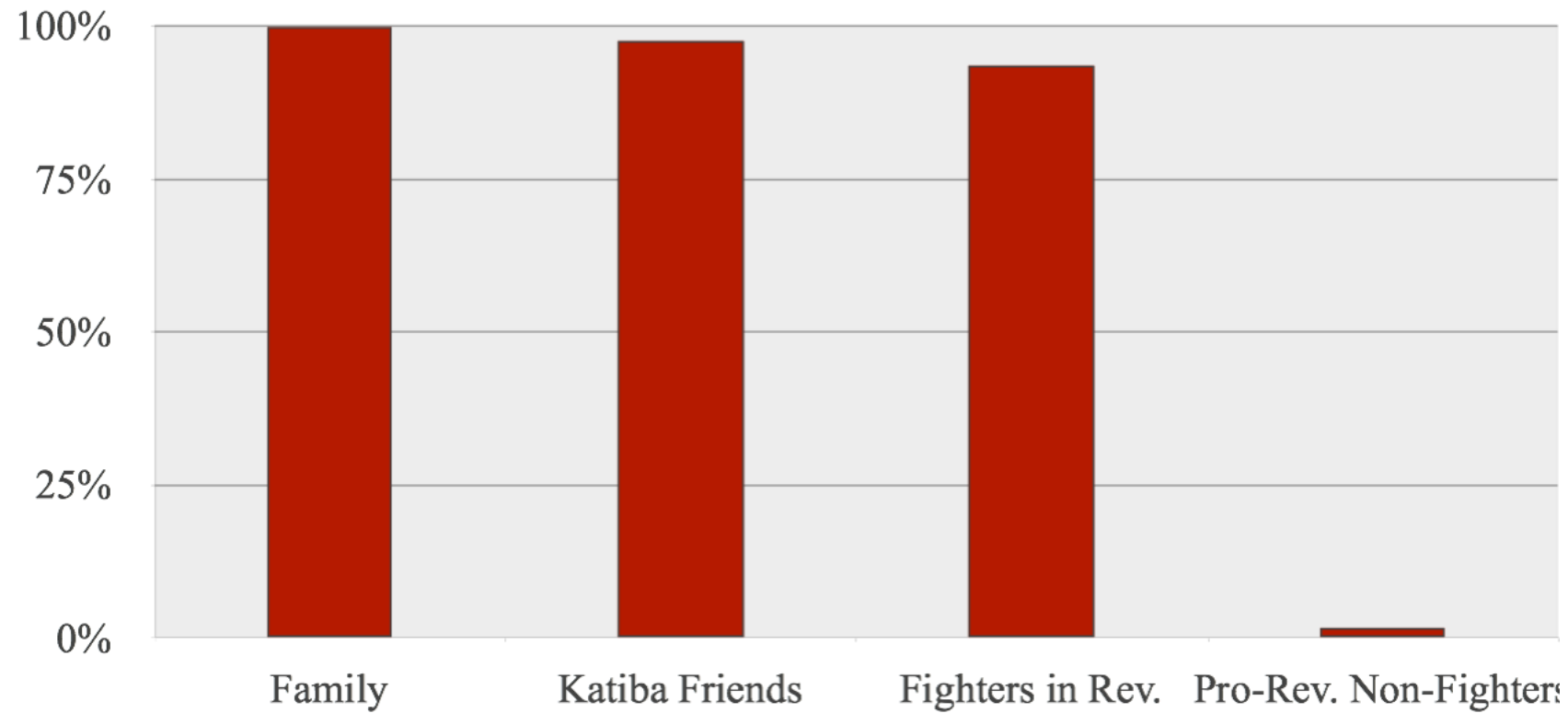
Which of the following pictures best represents your relationship with____?

- your family?
- closest friends in your katiba?
- people [you] never met from other katibas who fought in the revolution?
- pro-revolutionary men in Libya who didn't fight?

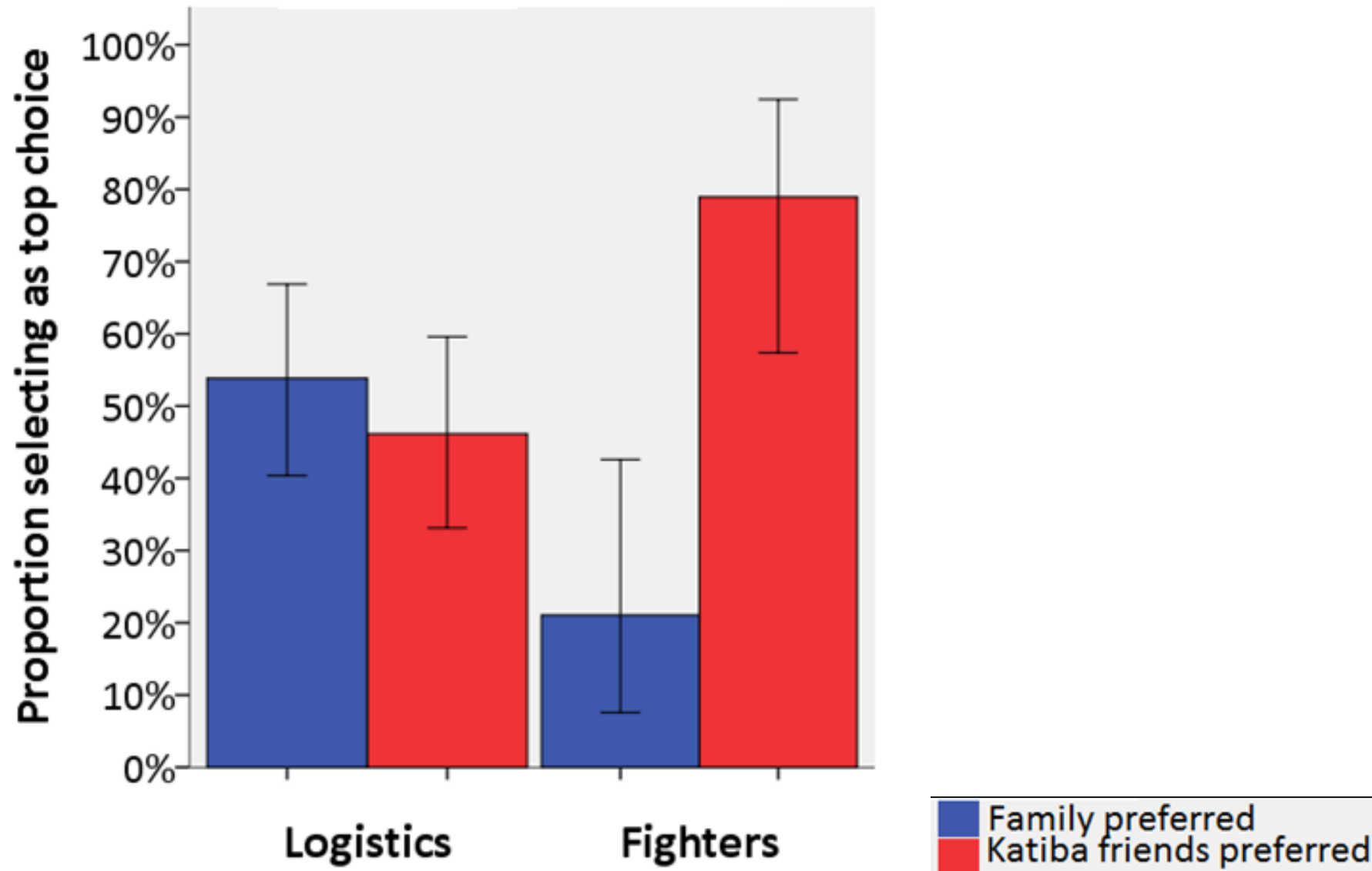


Fused

Fusion with Family, Friends, Fighters, and Non-Fighters



No shared dysphoria



Whitehouse, Harvey, Brian McQuinn, Michael Buhrmester, and William B. Swann (2014). Brothers in Arms: Libyan revolutionaries bond like Family. *Proceedings of the National Academy of Sciences*.

Exploring practical applications...



| **TWINNING** |
| **PROJECT** |



We may want our armed forces to stand by each other to the bitter end but what about street gangs or terrorist cells?
How do we want to use our collective brains?

Can violent groups be de-fused?

Re-framing autobiographical memories

Weakening the conviction of shared experience



Can fusion be harnessed to tackle crime?

Many football fans are fused to club

If clubs promoted law-abiding values, could this help criminals to 'go straight'?

David Dein (Arsenal FC and the FA) thinks so...

HOME	MEDIA	ABOUT
------	-------	-------

**TWINNING
PROJECT**

**WE ALL MAKE
MISTAKES.
DON'T LET THAT
BE THE REASON
YOU GIVE UP ON
SOMEBODY**



Can fusion in religion be harnessed to save the planet?

How can we use the collective brain to do this?



- 7 billion believers vs only 500 million atheists
- All world religions provide scriptural support for stewardship of the planet
- Example: Sikh tree-planting

Are we making the most of our collective brain?



Super-cooperators

- Dark side: Cooperation can be used to build industries that pollute the planet and deplete resources or to wage ever more destructive wars
- But cooperation can also be used to make the world more peaceful and prosperous

Are there any moral rules we can all agree on?

- 60 societies
- 600 sources
- 600,000 words



The universal moral compass

- help your group
- help your family
- return favours
- be brave
- defer to superiors
- divide resources fairly
- respect others' property



Can we harness global morality to address global problems?

How about conservation?

Oliver Scott Curry, Daniel Austin Mullins, Harvey Whitehouse. Is It Good to Cooperate? Testing the Theory of Morality-as-Cooperation in 60 Societies. *Current Anthropology*, 2019; 60 (1): 47 DOI: [10.1086/701478](https://doi.org/10.1086/701478)

How universal morality and our collective brain can support conservation

- Group: e.g. harnessing fusion in religion
- Family: e.g. protecting the futures of our children and grandchildren
- Heroism: e.g. let's wage war against climate change
- Deference: e.g. respect for religious leaders and teachings
- Fairness: e.g. we have to share the earth with millions of other species
- Property: e.g. humans evolved recently – other species have prior possession

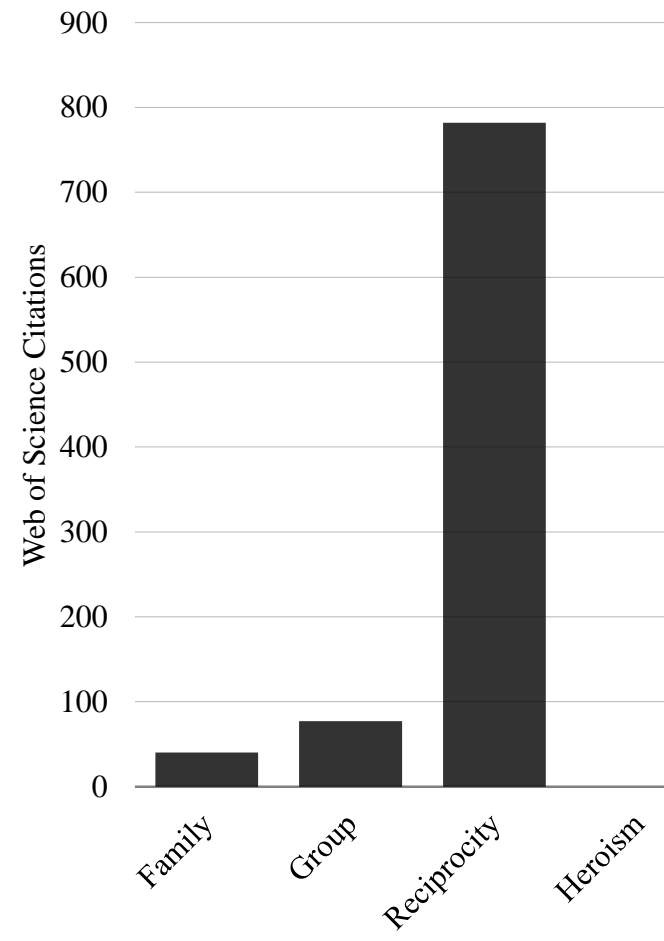
How well are we doing at applying these moral arguments?

Web of Science

The world's largest publisher-neutral citation index and research intelligence platform

- We combed through the academic literature on cooperative conservation
- We found 910 citations in Web of Science

Curry, O., Hare, D., Hepburn, C. Johnson, D.P., Buhrmester, M. D. Whitehouse, H, & Macdonald, D. W., (In Press). Cooperative Conservation: Seven Ways to Save the World. *Conservation Science and Practice*



Take home:
We need to work harder to harness our cooperative instincts and to build a fully functional collective brain, one that values peace and prosperity over conflict and violence

THANKS TO MY STUDENTS, STAFF, COLLABORATORS & FUNDERS



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