

# Folksociology explains ethnic reasoning better than Folkbiology does Cristina Moya<sup>1</sup>, Joe Henrich<sup>2</sup> & Rob Boyd<sup>1</sup>

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# Did humans evolve psychological adaptations for reasoning about variation in ethnic group membership and other traits?

- Humans universally organize themselves into culturally evolved ethnic groups.
- Social learning has been critical in producing behavioral variation in humans.

# Folkbiological constraints or Folksociological adaptations?

- **Folkbiological constraints:** Ethnic groups share some structural similarities with biological species (i.e. category-based endogamy, descent-based membership). Therefore, humans coopted reasoning about biological species for reasoning about ethnic categories (Gil-White 2001). This results in overusing biological inheritance concepts for ethnic categories.
- **Folksociological adaptations:** Selection for reasoning about human groups has produced separate psychological mechanisms for reasoning about social kinds (Hirschfeld 1998), including ethnic categories.

# **Predictions** derived from a functionalist account of a well designed folksociological cognitive system:

#### **About Group Membership Inheritance**

- People will not expect social group membership to be acquired biologically.
- Social institutions that affect immigration, cultural assimilation, or acquiring the rights of group membership will affect perceptions of identity inheritance.

### **About Individual Variation in Other Traits**

- People should expect others to resemble kin along highly heritable dimensions...
- and expect beliefs to be transmitted through social channels.

## **Previous work** suggests that reasoning about the inheritance of social identity and traits evolved from folkbiology.

- Cross-cultural research suggests adults and children expect social group identity to be biologically inherited (Hirschfeld 1998, Gil-White 2001, but see Astuti et. al.).
- Adults in several cultures expect bodily traits are biologically inherited and beliefs are socially inherited (Solomon et. al. 1996, Mahalingham 1998, Bloch et. al. 2001).

### Method

- Participants in the US, Peru, and Fiji were told a story about a child whose parents die in infancy and is adopted by non-kin parents.
- They are then asked whether the child will be the same as the biological or adoptive parent along the following dimensions:
- 1) social category membership, 2) morphological traits, 3) personality, 4) skills, and 5) beliefs.

### Sites

### **Participants**

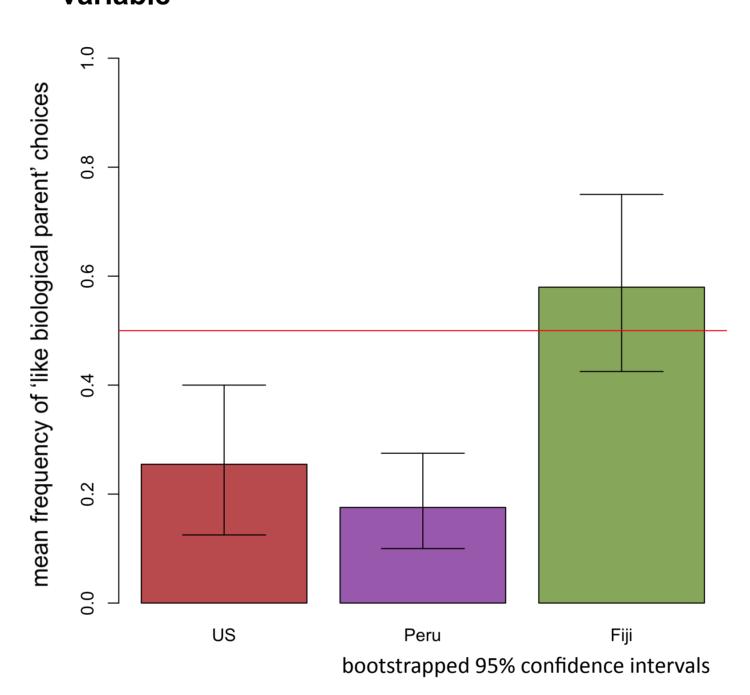
- US: 302 adult participants were recruited online.
- Peru: 42 adults were recruited in the agro-pastoralist town of Huatasani in the Titicaca Basin.
- This town is on the Quechua-Aymara linguistic border.
- Fiji: 141 adults were recruited in the fishing and horticultural village of Teci in the Yasawa Island chain.

### The social categories across which the child was adopted vary by site:

- **US:** fictitious regional categories
- **Peru:** random assignment to 1) regional (Lima vs. Huatasani) or 2) language (Quechua vs. Aymara) categories.
- Fiji: random assignment to 1) regional Native Fijian (Kadavu vs. Yasawa) or 2) Native Fijian vs. Indo-Fijian categories.

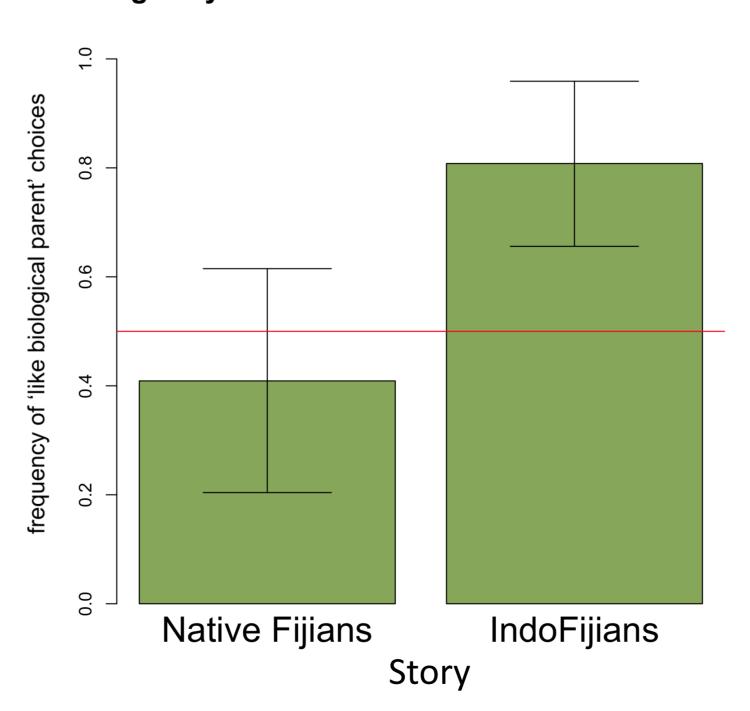
# Do people tend to believe identity is biologically inherited?

### Beliefs about the inheritance of identity are culturally variable



- Peruvians believe identity is less biologically transmitted than Americans do. (odds ratio= .1; p=.02)
- Fijians believe identity is more biologically transmitted than Americans do. (odds ratio= 4.3, p=.03)

### Fijians believe some social identities are more biologically transmitted than others.

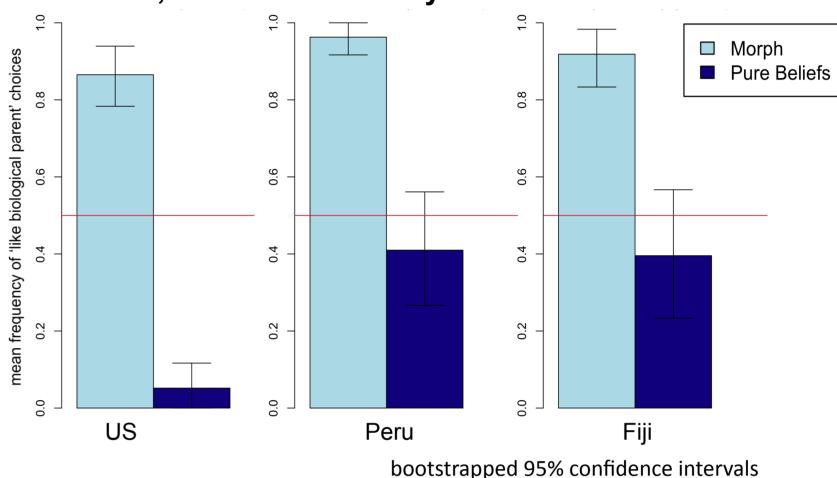


95% confidence intervals

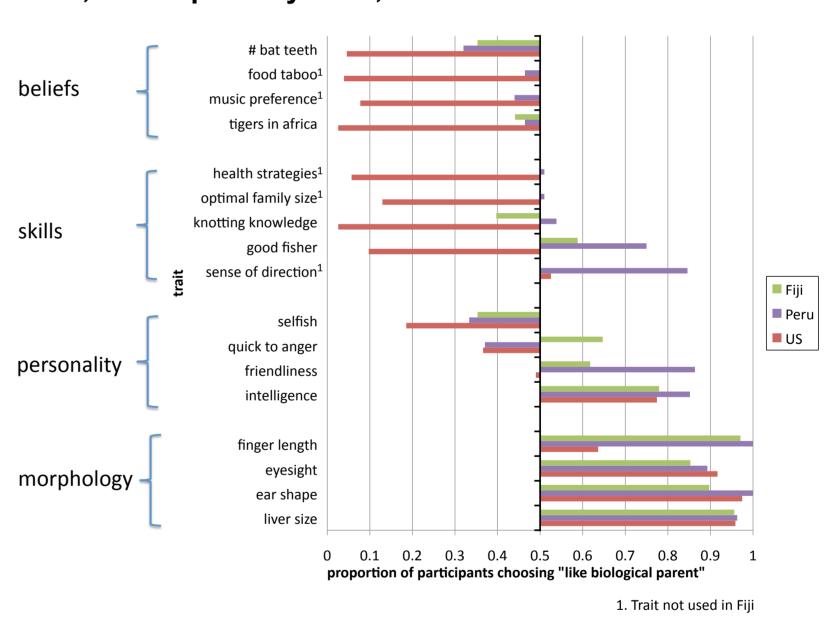
- In the adoption scenario Fijians believe IndoFijians are less likely to become Native Fijians and ...
- Native Fijians from Kadavu are relatively more likely to become Yasawan. (odds ratio= 6; p=.006)

# Do people reason differently about the genetic and social inheritance of traits?

### People believe: morphological traits are biologically inherited; beliefs are socially inherited



## Perceptions of morphological traits cluster more than, and separately from, belief traits



### **Conclusions**

The patterns described here are more consistent with a folksociological than a folkbiological model of humans' ethnic categorization and conspecific predictions.

### **Group Membership**

- There is cross-cultural variation in how identites are believed to be inherited.
- Intra-cultural variation in how different identities are perceived as inherited may reflect ease of migrating between different groups.

### Inheritance of other properties

- Despite differences in identity inheritance beliefs, people at all sites believe morphological traits are biologically transmitted and beliefs are socially transmitted.
- Participants in Fiji and Peru were more likely to respond that beliefs were biologically transmitted than participants in the US.

### References

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