# Evoked Culture and Rethinking Conventional Wisdom

Tom Lawson
LEVYNA
Masaryk University

### Culture as a reified object

- In conventional talk about culture we often attribute causal properties to culture
- So we tend to describe specific forms of human behavior as being influenced by "culture"
- For example, we say that we speak a specific language because of the culture in which we grew up

### Folk and scientific perspectives

- For most purposes this way of talking is perfectly acceptable
- However, from a scientific point of view this conventional way of speaking can be very misleading
  - o Because it reifies culture
  - o Because it leaves the causal properties unexplained

### What is "Culture" anyway?

- So, what, upon reflection, do we normally mean by "culture"?
- OED definition: "The ideas, customs, and social behavior of a particular people or society"
- Notice: three different kinds of things
  - o Ideas (mental things)
  - o Customs (social things)
  - o Behavior (physical and biological things)

### WHAT TO DO

- Clearly, therefore, we need an explanation of how mental, social and physical/biological things do the job they are supposed to do
- In other words we need an account of the mechanisms involved
- This calls for a "big" decision
  - o Is culture a cause of these mental, social, and physical/biological?
  - Or is it an effect?
  - Or is it an effect that then becomes a cause?

- If you choose the first alternative the problem is showing how three different kinds of thing can do this!
- If you choose the second you are simply stating the obvious, namely, that ideas have consequences, that social arrangements provide context, and that behavior makes a difference in that context

If you choose the third, you have available both cognitive and evolutionary explanations of how those ideas are structured in a particular way, how social facts inform the content of the ideas, and how the bodily behavior, informed by the brain in its present form, got to be that way and why its specific behavior can be accounted for in evolutionary terms.

### Capacities

- Now you will remember that we have already developed the notion of capacities or dispositions
- The capacities of an organism need to be triggered in order to have an effect
- Triggers are specific features of our environment that activate these capacities
- This is where the specific context that activates the capacities makes a difference

### **AN EXAMPLE**

- Let's take an example: an organism develops in a variable climate with extremes of heat and cold
- From the view point of natural selection, those members of the species involved that grow enough fur to keep them from the cold and not so much that they die of heatstroke have a selective advantage
- But some of the members of this species find a short cut: The use the skins of furred animals to protect them in the cold weather and go naked in the hot weather
- So the idea "let's make clothing from skins", is evoked by the environmental conditions but becomes a cultural feature that gets transmitted from one generation to another

This leads to the social situation in which people not only wear clothing some of the time but could even develop rules about which skins are better, which look more beautiful, which are easier to obtain and so on and, va va voom, you are on your way to fashion!



### Selective Advantage

 Despite environmental differences the mechanisms that become activated by the environmental conditions, aided now by the cultural features that transmit information from one person to another and from one time period to another, remain the same because they provide a selective advantage.

### **CALIBRATION**

- A good way of explaining how the mechanism works is to see the same capacity as being calibrated by different environmental conditions in two ways
  - As the refining of the mechanism over evolutionary time to make it optimal
  - As the immediate response to specific conditions that make one alternative behavior which the mechanism has evolved to produce, more appropriate than another

### Natural selection and local conditions

 The first provides an account, via natural selection, of the development of the mechanism

 The second provides an account of the operation of the mechanism under local conditions

• Hence, an explanation for cultural variation!

 With these ideas in place we are now ready to apply them to specific problems

Such as the problem of "conventional wisdom"

## Rethinking Conventional Wisdom

Dominance and Subordination of Potential

Danger Domains

Comparing UK and SA

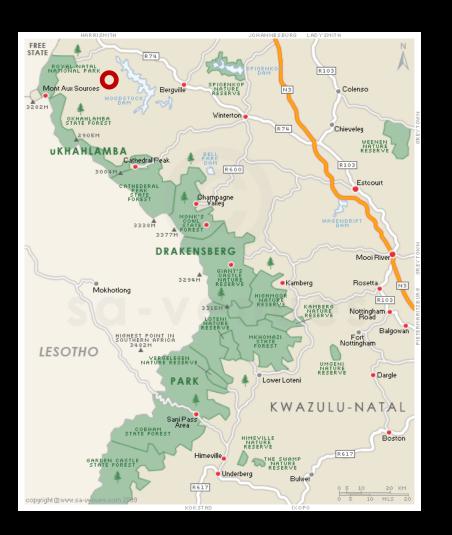
### THE TEAM

TOM LAWSON

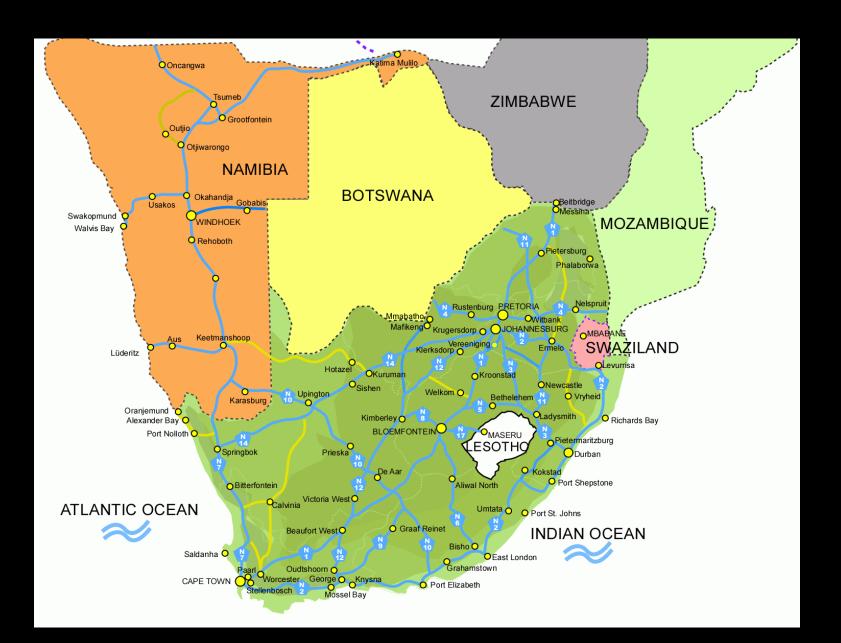
JOEL MORT

MICHAL FUX



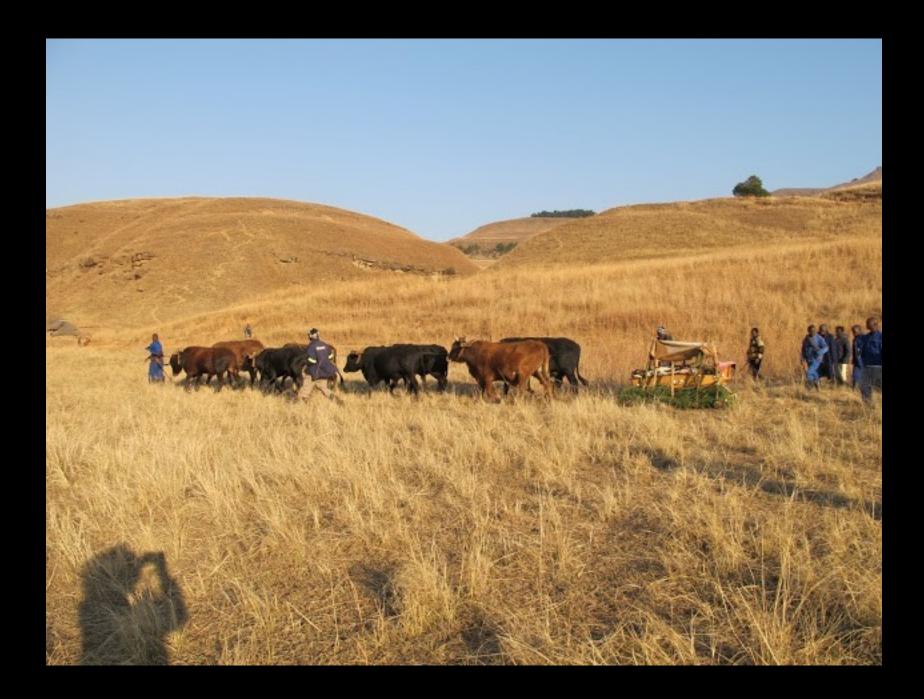






















Despite the frequent reliance on Conventional Wisdom about potential threats (and the level of preoccupation with them) in political, policy, intelligence, and other domains, until now there have been few empirical studies addressing the spread, common features, or differences of precautionary preoccupations across cultures, a fact that underscores the importance of adding to the current state of knowledge.

This presentation exhibits some of our initial investigations of any significant variation or subordination of dominant themes (e.g. contamination/contagion, social status threats, predation/assault, decline in resources) within and between populations and how these themes may be reflected in each target populations' collective precautionary behaviors (i.e. rituals, ideological proscriptions

We hypothesized that environmental triggers and specific cognitive capacities constrain the dominance of particular precautionary themes generally as well as their variability between distinct populations.

Our initial results supported these claims.

We further posit that in many populations there is significant continuity between

- 1. the degree of individual preoccupation with possible threats,
- 2. individual precautionary measures,
  - 3. collective religious rituals.

and

- We believe it is likely that collective rituals and prescribed ideological contexts provide an occasion at least for calibrating evolutionarily bequeathed cognitive precautionary mechanisms and the eliciting of particular precautionary themes. We have addressed these in subsequent studies.
- Keywords: conventional wisdom, precaution salience, threat detection, cultural variation, potential danger, cross-cultural universals, South Africa, UK

### **Summary**

- What is CW and why is it puzzling?
- Questions About and Importance of Precaution
- Our Project Aims
- Overview of All Studies
- Study One Likert Scale Instrument
- Analysis and Results
- Discussion

### What do we mean by

### **Conventional Wisdom?**

...and why SHOULD it matter?

CW is constantly in the spotlight in the form of significant and generally accepted claims that directly (or indirectly) result in policy-making, explanations, and world descriptors.

### Why CW is puzzling & deserves scrutiny

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### **Eye Contact CW:**

In human beings, eye contact is a form of nonverbal communication and is thought to have a large influence on social behavior. Coined in the early to mid-1960s, the term has come in the U to often define the act as a meaningful and important sign of confidence and social communication.

#### F. S. Chen:

There is a lot of cultural lore about the power of eye contact as an influence tool but our findings show that direct eye contact makes skeptical listeners less likely to change their minds, not more, as previously believed. (2013)

# Why CW is puzzling & deserves scrutiny

# Gov Rick Perry:

...I know this — the world has never been as dangerous as it is today...

# Gen Martin Dempsey:

I will personally attest to the fact that [the world is] more dangerous than it has ever been.

### Steven Pinker:

Ours is the most peaceful time in history.

#### Mueller and Stewart:

The chances of an American dying in a bathtub are much higher than dying in a terror attack.

# Why CW is puzzling & deserves scrutiny

**3**3



# Why CW is puzzling & deserves scrutiny

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# Independent Online:

SA Whites Fear Mayhem After Mandela's Death

# Steve Hofmeyer:

A white farmer is being murdered every five days

# Lizette Lancaster:

Whites are far less likely to be murdered than their black or coloured counterparts

### Africa Check:

1.8% of SA murders are white victims

Nothing in all the world is more dangerous than sincere ignorance and conscientious stupidity.

- Martin Luther King Jr.

We aimed to provide some clarity, or at least more information, about the actual worries people around the world have about potential danger.

# **Main Question of Interest**

What is the nature of potential danger preoccupation and what role does it play in generating human behavior?

# First a Distinction...

# POTENTIAL DANGER

### **IMMINENT DANGER**

**Inferred Threats** 

**Manifest Threats** 

Require behavioral adjustments that may take time

Require a prompt response, the faster the better

May be countered by indirect measures like avoidance or probing

Reactions involve immediate interaction with source of danger

Information regarding presence and elimination of threats is asymmetrical

Information of presence and elimination of threats gained externally

# Why Focus on Precaution?

# Relevant Domains Are Broad

Psychological development, kin protection, disease avoidance, ritual performance, psychopathology, security motivation, trust and cooperation, violent terrorist motivation, coalitional identification, mate guarding, religious ideologies, etc

### **Aims**

Cross-cultural data

Account for variations and similarities

Employ multiple,
interdisciplinary
methodologies grounded in
evolutionary science

Compare results with CW

#### Seminal Literature:

Boyer, P. P., Liénard. (2006). Why ritualized behavior? Precaution systems and action parsing in developmental, pathological and cultural rituals. *Behavioral and Brain Sciences*, 29, 1-56.

Szechtman, H., & Woody, E. (2004).

Obsessive-compulsive disorder as a disturbance of security motivation.

Psychological Review, 111(1), 111-127.

Special Issue: "Threat-Detection and Precaution: Neuro-physiological, Behavioral, Cognitive and Psychiatric Aspects." Neuro & BioBeh Rev. 2011

### **Overview**

Populations: UK, South Africa





#### <u>Individual protocols</u>

- Likert Scale
- Thurstone Scale
- Ranking Scale
- Vignette Study
- Budget Allocation Protocol
- Video analysis
- Questionnaires

#### <u>Foci</u>

Potential danger Preoccupations

Salience in ritualized behavior

Structure of ritual action sequences

# **Study 1 - Likert Scale Instrument**

ltem #	Scale phrase (I worry about)	PDD	Answer
1	keeping my hands and body clean	CC	1234567
2	walking alone in the dark	PA	1234567
3	seeing a strange person walking towards me	PA	1234567
4	eating raw meat	CC	1234567
5	doing something embarrassing in public	SS	1234567
6	my co-workers disliking me	SS	1234567
7	not earning enough money	DR	1234567

- Likert Scale (1-7) Items
- 20 Items (5 per domain)
- Administered in random order

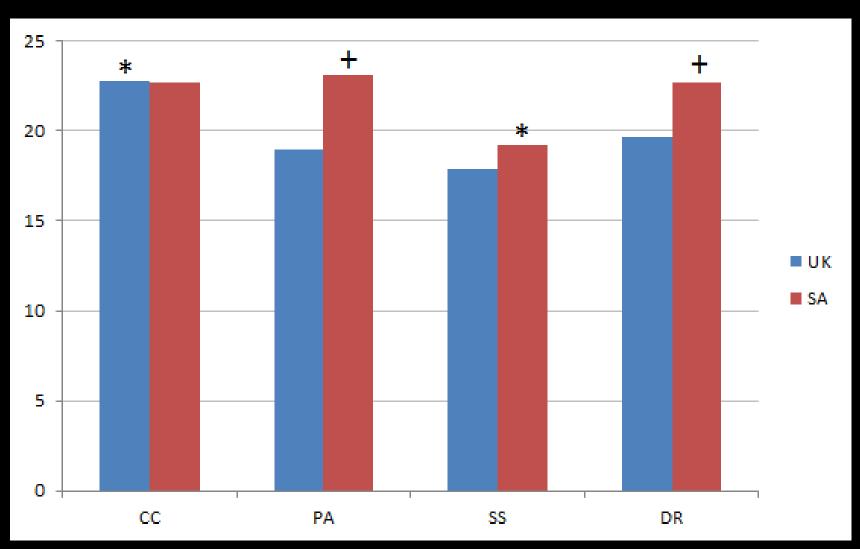
- No. of subjects
  - o UK 98
  - o SA 88
- Data collection: 2009-2012

# **Analyses and Results (highlights)**

- Participants from South Africa reported significantly higher scores for the Depletion of Resources (DR) and Predation/Assault (PA) domains compared with the UK participants
- Female participants scored significantly higher on the Predation/Assault (PA) domain both in the UK and SA populations
- In the SA population, non-whites scored significantly higher on ALL threat domains

# **Analyses and Results (overall)**

SA vs UK overall



+ Significance between populations, \* Significance within population

# **Analyses and Results (overall)**

#### SA vs UK overall

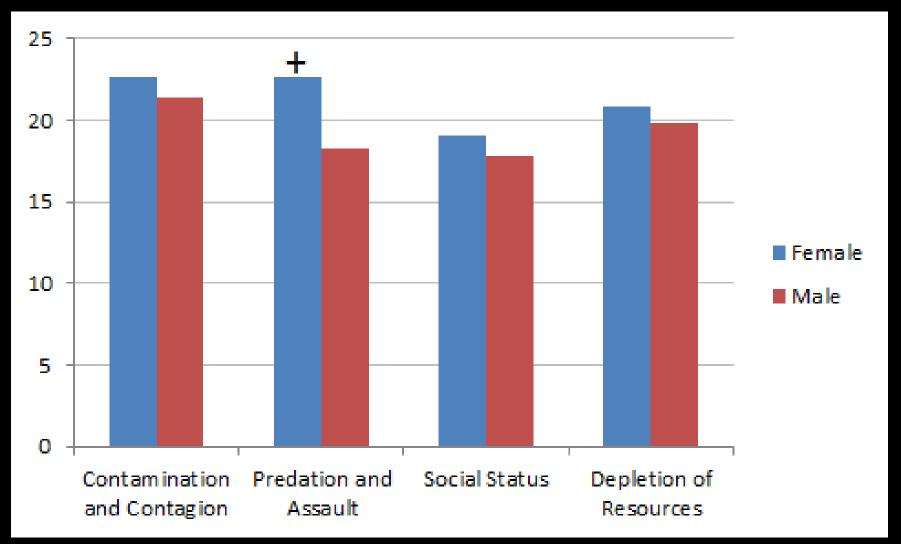
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	UK	SA			Group
	M(SD)	M(SD)	F (1,186)	${\eta_p}^2$	Comparisons
Contamination/Contagion	22.81 (6.29)	22.66 (6.26)	0.025	.000	
Predation/Assault	18.95 (5.46)	23.08 (5.97)	24.279***	.117	b>a
Social Status	17.87 (5.49)	19.22 (6.03)	2.548	.014	
Depletion of Resources	19.62 (6.25)	22.72 (5.35)	12.998***	.066	b>a

Notes: a = UK; b = SA \* = p< .05; \*\* = p< .01; \*\*\* = p< .001

# **Analyses and Results (gender)**

Gender (UK and SA overall)



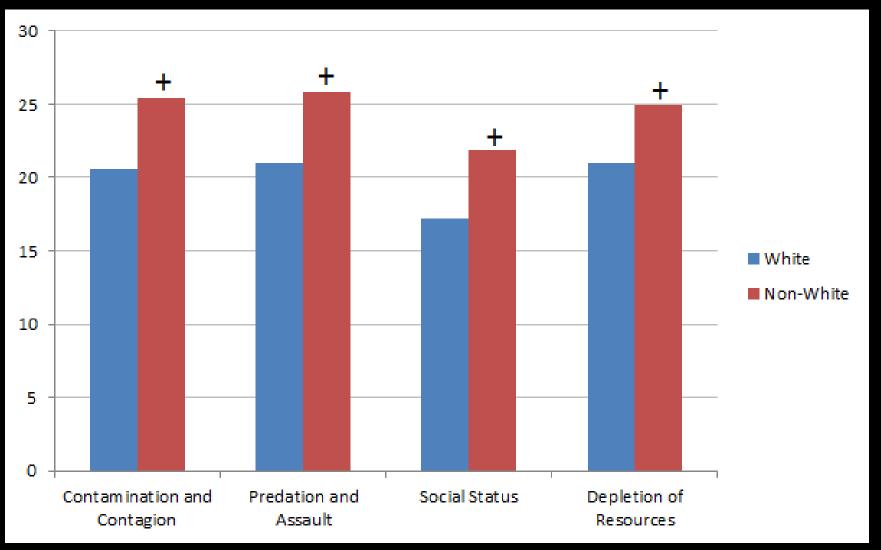
# **Analyses and Results (gender)**

### Gender (UK and SA overall)

	Female	Male		
	M (SD)	M (SD)	F (1,226)	$\eta_{p}^{\;2}$
Contamination and Contagion	22.66 (6.45)	21.44 (6.88)	1.868	.008
Predation and Assault	22.59 (6.07)	18.31 (6.44)	26.424***	.106
ocial Status	19.01 (6.55)	17.83 (5.73)	2.061	.009
Depletion of Resources	20.79 (6.67)	19.82 (6.44)	1.250	.006

# **Analyses and Results (ethnicity)**

White vs Non-white (SA only)



+ Significance between white and non-white

# **Analyses and Results (ethnicity)**

White vs Non-white (SA only)

Table 3 Univariate	ANOVA for	SA ethnicity	groupings
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	White	Non-White		
	M (SD)	M (SD)	F (1,88)	$\eta_{p}{}^{2}$
Contamination and Contagion	20.56 (6.041)	25.42 (5.480)	15.132***	.150
Predation and Assault	21.00 (5.750)	25.82 (5.151)	16.552***	.161
Social Status	17.20 (5.253)	21.87 (6.019)	15.031***	.149
Depletion of Resources	21.02 (5.293)	24.95 (4.609)	13.266***	.134

<sup>\* =</sup> p< .05; \*\* = p< .01; \*\*\* = p< .001.

[Compare with CW points]

Like the Israeli National Resiliency Survey, our results do not match anecdotal and intuitive CW about actual potential danger preoccupations; in this case of white vs non-white South Africans.

[Universality and Variability]

Our gender and ethnicity analyses support the notion that the outputs of precautions systems are both universal in some respects and variable as a result of developmental calibration or social learning.

#### [Next Scale Data to be Analyzed: Thurstone]

#### SURVEY B

Thurstone Scale (24 items)

I will now read you a series of questions. I will read each question twice. Please answer "yes or no" to each question. (Investigator will read as "Is [A] more worrying than [B]?"

#### Example

Is driving a car to Johannesburg more comfortable than taking the bus. Y or N?

#	Scale questions ([A] / [B])	Cond.	Answer
1	Eating raw meat / Walking alone at night	CC/PA	Y or N
2	Touching a dead cat / Seeing someone with a gun	CC/PA	Y or N
3	Walking alone at night / Eating raw meat	PA/CC	Y or N
4	Cooling company with a gun / Tauching a dood got	DAJCC	VarN

[Future Directions]

Continue data analysis of economic and behavioral (video) protocols.

- Delineate unambiguous precaution domains
- Biobehavioral protocols
- Clarify evolutionary framework
- Integrate evidence from other studies and disciplines (De Dreu 2010)

[Conclusions]

#### One stands out:

The tenets, theories, and interdisciplinary methods of evolutionary science (especially psychology) are crucial, and heretofore neglected, tools for understanding human behavior AND informing policy decisionmaking.

### **End**

Questions?

Prof E. Thomas Lawson

**Visiting Professor** 

Masaryk University

tomlawson1931@gmail.com

**Dr Joel Mort** 

**Social Scientist** 

US Air Force Research Laboratory

joel.mort@wpafb.af.mil

Dr Michal Fux

Postdoctoral Fellow

University of South Africa

fux.michal@gmail.com