

# Ritual and social networks: Measuring the costs and benefits of religious ritual in Mauritius

## INTRODUCTION

For more than a century, anthropologists have been trying to explain various aspects of human behaviour and social life. Since the dawn of this academic discipline, religion has been a prominent theme in anthropological research. The one aspect of religion that I will do research on is ritual. Rituals and religious rituals in particular, have puzzled scientists for some time now because they require considerable investments in terms of time, energy and resources despite their seemingly non-functional character. There are other cultural domains, like art, that resemble rituals in this way, yet the amount of costs that some rituals demand can't be matched with. So what is it about rituals that makes them so attractive and widespread? More specifically, are there any benefits to ritual participation?

## THEORY

In **human behavioral ecology**, rituals are seen as costly signals, an idea originating in evolutionary biology (though similar ideas have been expressed in social sciences too). With the help of **costly signaling theory** evolutionary biologist have been trying to explain some puzzling aspects of animals' phenotypes. Amots Zahaavi (1975) considered costly phenotypic traits as handicaps that make surviving much more difficult for the bearer. Hence, he predicted, only fit individuals could afford such traits. Consequently, these traits can be understood as costly signals of underlying genetic fitness of the signaler. Importantly, because of the costliness involved, these signals are hard to fake for low quality (unfit) individuals and thus can be stable enough to be selected for in various forms of natural and sexual selection.

Similarly, participation in religious rituals could be a signal of group commitment, the degree of which should be positively correlated with the signal intensity. Selecting devoted members could therefore be one of the ultimate functions of rituals that enhances survival of participants. Survival can be secured via the benefits the signalers can obtain from other group members and can span from cooperation and social and material support to access to mates, depending on the surrounding ecological and social niche. However, the benefits are not always immediately accessible and usually have a life-long accumulative character (Shaver & Sosis, 2005; Soler, 2012).

**Life history theory** (Hill & Kaplan, 1999) makes accurate predictions about the timing of ritual investments in accordance with an organisms momental life situation and reproductive strategy. The distribution of costs and benefits of ritual participation is not even and depends on the **structure of the social network**. More central individuals have access to greater benefits at lower ritual costs than marginal individuals (Christakis & Fowler, 2009).

## REFERENCES

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## FIELD SIDE - MAURITIUS

Mauritius is a relatively small volcanic island (2000km<sup>2</sup>) east of Madagascar. Originally a Dutch and later French colony, it served mainly as a trading port. After the British took it over it became the world's leading sugar cane producer. There were no indigenous populations in Mauritius prior to European colonization. The current population is build up of the descendants of African slaves, European colonizers, Indian indentured laborers and Chinese merchants. The predominant religions is Hinduism (49%), followed by Christianity (32%), and Islam.(17%). Official languages of the country are French and English, however French Kreol, Hindi and Bhojpuri are most commonly used (Eriksen, 1998). My target population will be a Hindu **Marathi community** located on the south-western coast of the island. I will be interested in the ritual cycle of the community that peaks annually in the **Ganesh Chaturthi festival** in early September.

## RESEARCH QUESTIONS & HYPOTHESES

**RQ:** What is the relationship between social network positioning and participation in religious rituals?

More specifically: What are the costs and benefits of ritual participation in relation to social network positioning?

**H1:** My prediction is that people at the social periphery will invest more in religious rituals in efforts to better their social position.

**H2:** Conversely, people who already occupy more central positions in the network will be less motivated and expend less energy in rituals.

The hypotheses rest on the assumption that lower quality signalers (people on margins of the network) have to invest more in ritual behaviors than high quality signalers (people in more central **positions in the network**) to receive the same benefits. This assumption presents the fourth attribute of an **evolutionary stable costly signal** (Bliege Bird & Smith, 2005)

## PROCEDURES

One of the main tasks of my fieldwork will be to calculate costs and benefits of ritual participation. Specifically, I will try to get as precise measurements of costs as possible – temporal, financial and physiological costs. I will measure social position with embodied capital indicators and also via people's testimonies about others. My goal will be to create a social network map which will show family, friendship and professional relations among people. Crucially, I will attempt to examine how the network is shaped and the kinds of information that is delivered through the various network nodes. Finally, I will **compare ritual investments and social network positioning**.

