

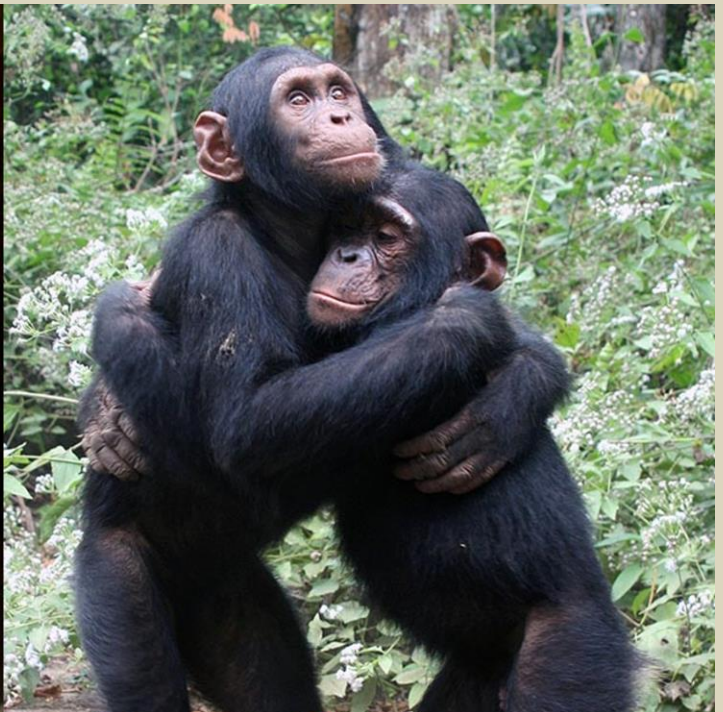
PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B

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Evolutionary ecology of inequality

A theme issue compiled and edited by Eric Alden Smith, Jennifer Elaine Smith
and Brian F Coddig

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About this issue

Institutionalized differences in wealth and power are pervasive in contemporary human societies, yet appear to have been minor or absent for most of the time our species has existed. Striking variation also exists across non-human animals in resource access and distribution, which influences development, health, and fertility. Papers in this issue demonstrate that inequality varies widely in human societies, and in mammalian species ranging from mole rats and hyenas to chimpanzees and bonobos. Researchers in anthropology, behavioural ecology, game theory, and economics consider the ecological and evolutionary factors shaping this variation, and how this knowledge might inform policies to address inequality.

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The Royal Society
6 – 9 Carlton House Terrace
London
SW1Y 5AG
T +44 20 7451 2500
E philtransb@royalsociety.org

Front image: Clockwise from top left: A woman from one of the Mosuo farming communities in southwest China. The Mosuo were participants in a groundbreaking study examining gender-based health disparities. Credit: Siobhan Mattison. Two chimpanzees hugging © Jane Goodall Foundation. A homeless person in Victoria, London. Credit: Nick Ansell/PA Wire. Two spotted hyenas fighting in the Serengeti. Credit: vndrpttn/iStock.

Introduction *Toward an evolutionary ecology of (in)equality*

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Mechanisms of equality and inequality in mammalian societies

Jennifer E Smith, Barbara Natterson-Horowitz, Maddison M Mueller and Michael E Alfaro

Conceptual and analytical approaches for modelling the developmental origins of inequality Anup Malani, Elizabeth A Archie and Stacy Rosenbaum

The social formation of fitness: lifetime consequences of prenatal nutrition and postnatal care in a wild mammal population Emma IK Vitikainen *et al.*

The best of both worlds: no apparent trade-off between immunity and reproduction in two group-living African mole-rat species

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Demographic turnover can be a leading driver of hierarchy dynamics, and social inheritance modifies its effects Eli D Strauss

Reproductive inequality among males in the genus Pan Maud Mouginit *et al.*

A biological employment model of reproductive inequality Samuel Bowles and Peter Hammerstein

The economics of early inequality Gregory K Dow and Clyde G Reed

Playing the political game: the coevolution of institutions with group size and political inequality Simon T Powers, Cedric Perret and Thomas E Currie

Modelling the role of environmental circumscription in the evolution of inequality Cedric Perret and Thomas E Currie

Why did foraging, horticulture and pastoralism persist after the Neolithic transition? The oasis theory of agricultural intensification Dithapelo Medupe, Seán G Roberts, Mary K Shenk and Luke Glowacki

Wealth inequality in the prehispanic northern US Southwest: from Malthus to Tyche Timothy A Kohler, Darcy Bird, R Kyle Bocinsky, Kelsey Reese and Andrew D Gillreath-Brown

Emergence of persistent institutionalized inequality at the Bridge River site, British Columbia: the roles of managerial mutualism and coercion Anna Marie Prentiss *et al.*

Identifying key socioecological factors influencing the expression of egalitarianism and inequality among foragers Kurt M Wilson, Kasey E Cole and Brian F Codding

Inheritance and inequality among nomads of South Siberia Paul L Hooper *et al.*

Gender disparities in material and educational resources differ by kinship system Siobhán M Mattison *et al.*

The interdependence of relational and material wealth inequality in Pemba, Zanzibar Daniel Redhead, Emmanuel Maliti, Jeffrey B Andrews and Monique Borgerhoff Mulder

Inequalities between Aboriginal and non-Aboriginal Australians seen through the lens of oral health: time to change focus Angela Durey, Nola Naylor and Linda Slack-Smith

The evolution of economic and political inequality: minding the gap Juliet E Carlisle and Thomas N Maloney