



FRIENDS AND FAMILY: THE TIES THAT BIND US

ChatGPT: GOLD MINE
OR EXTINCTION THREAT?

HOW DO WE MAKE
FRIENDS?

SHOULD CHILDREN
GET THE VOTE?



In this ISSUE

Semestrial magazine
of the Institute for Advanced
Study in Toulouse

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OUR SCIENTIFIC VISION

The Institute for Advanced Study in
Toulouse is a unified scientific project
that aims to study human behavior.

Our ambition is to break down
artificial disciplinary boundaries to
unlock new ideas and address the
challenges of the 21st century. We
have a team of resident full-time
researchers in Toulouse, meeting
several times a week across all
social-science disciplines. IAST
researchers also work in partnership
with economists and mathematicians
at Toulouse School of Economics,
Toulouse Capitole University, INRAE
and CNRS. Our methods focus on
analytical and quantitative methods,
including case-study evidence. We
believe our work needs to spread
across the oceans and therefore, year
after year, we welcome some of the
world's best researchers, including a
network of visitors from 27 countries.

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THE TIES THAT BIND US

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Editorial

Let's share our family values

From terrorist attacks and warfare, to the wish to control others' bodies and minds, as well as ecocide, today's societies witness many incarnations of the darkest side of human nature. To inform the search for long-term solutions, IAST researchers are identifying the conditions in which humans work together to develop the social values, networks and institutions that underpin peaceful coexistence. In examining the evolutionary roots of our species' aggression, we also celebrate its unparalleled capacity for cooperation.

This issue of IAST magazine explores the family and friendship ties that bind us together. As we welcome a new generation of permanent faculty, Research Fellows and Visiting Fellows to the IAST family, we also look back on our success in promoting interdisciplinary excellence at the Friends of IAST conference in June and the PIREN retreat in October.

To mark the launch of our Family, Demography, and Health research team, we invite its leader **Piret Avila** to discuss how humans evolved to care for each other. Together with the other winners of the IAST multidisciplinary prize, she also presents a new project on the importance of child helpers in cooperative breeding.

Friendship is a particularly tricky research area, given its fluid group dynamics, but **Marion Hoffman** has developed ingenious statistical tools to understand our complex social networks. We also feature analysis by **Sylvie Borau** and co-authors on how marriage may have impacted Covid-19 deaths. Finally, our Crossing Channels podcast with **Karine Van der Straeten** and **David Runciman** (Cambridge University) offers an intriguing discussion about whether voting rights should be extended to children.

IAST research is wonderful evidence of the "better angels of our nature". It is the fruit of talent, open minds, hard work, and intense international collaboration across borders and disciplines, as well as between teams and institutions. We hope its findings – as well as its example – can inspire a future that brings everyone together.

With thanks to all our readers, friends and family.



INGELA
ALGER

IAST Director

CELEBRATING OUR FRIENDS

June 29-30, 2023

The Friends of IAST conference was the centerpiece of our academic year, bringing together so many of the people that sustain this community and its scientific endeavor. Talks ranged from animal welfare, to ChatGPT, vaccines and global politics, and showcased the full spectrum of methods employed in our multidisciplinary projects.

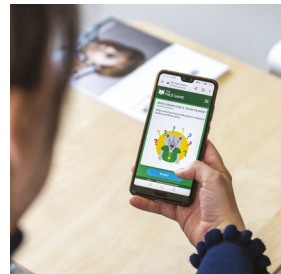
In her closing remarks, IAST Director Ingela Alger imagined the event as an intellectual *smorgasbord*. This Swedish word for a feast that mixes recipes and ingredients in wonderfully different ways, she added, was also a fitting metaphor for the IAST experience. If only there were more time for digesting!



ADAM SMITH AND THE LUMIÈRES

November 22, 2023

To mark the 300-year anniversary of the birth of the “Father of Economics”, IAST invited Samuel Fleischacker (University of Illinois) to present a Distinguished Lecture discussing Adam Smith’s contribution to the Enlightenment.

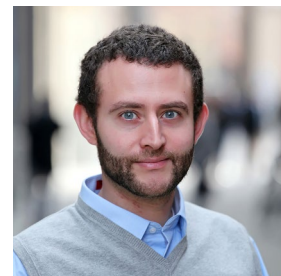


THE FACE GAME

Released on June 12, 2023

Designed by the creators of the Moral Machine, this project seeks to discover how AI may choose to appear in order to manipulate human responses. Read the interview with IAST’s Jean-François Bonnefon and play the game.

iast.fr/face-game-play-ai



PASSING ON THE BATON

March 1, 2023

Congratulations to Jonathan Stieglitz, who took over as IAST Scientific Director from Jean-François Bonnefon earlier this year.



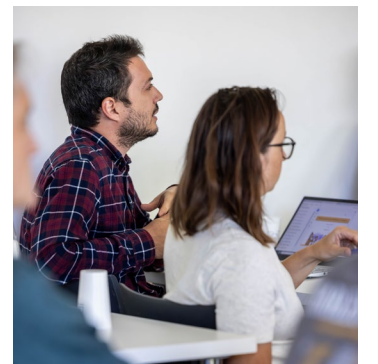
This year’s Pyrenean Interdisciplinary Research Event (PIREN) returned to Collioure’s Hotel du Golfe, which looks out on the sparkling French Mediterranean from the foothills of the majestic Pyrenees. This three-day retreat is one of the highlights of the IAST academic year, allowing researchers to gain more intimate understanding of each other’s research, methods, and disciplines. The setting encourages meandering conversations that can take unexpected turns and, most rewardingly, reveal the common approaches and questions that link and sustain our thriving community.

The program was unusually full, with 34 participants including several new IAST research fellows (see pages 8-11). Organizers Felix Dwinger and Sreemati Mitter invited speakers to give presentations that covered a huge range of topics – cooperation; life stages in evolution; mobility; AI; game theory; perception and cognition; social learning;

race, diversity and discrimination; violence and punishment; authoritarianism – and highlighted the interconnectedness of IAST research. A thought-provoking final session led by Paul Seabright sparked a wide-ranging discussion on the perils and promise of communicating “beyond” the academy.

Despite the long days, busy schedule and some determined mosquitoes, we all enjoyed getting to know each other in the conference room, during quick post-session dips in the cold Mediterranean, and over anchovy-flavored lunches and wonderfully lingering, delicious dinners.

Written by Sreemati Mitter





ChatGPT: Gold mine or extinction threat?

The successful launch of ChatGPT has kicked off an arms race between rival developers of large language models (LLMs). How far should we explore this treacherous gold mine? How should institutions respond to such disruptive innovations? At the Friends of IAST conference, a panel of experts in psychology, computer science, political science and economics gave their perspectives on an AI-clouded future.



EMILIANO LORINI
IRIT, CNRS, TOULOUSE UNIVERSITY



PAUL SEABRIGHT
IAST



JEAN-FRANÇOIS BONNEFON
IAST



LAWRENCE ROTHENBERG
UNIVERSITY OF ROCHESTER

CHALLENGES FOR RESEARCHERS

Emiliano Lorini: ChatGPT is purely based on reinforcement learning: there is no logic, no symbolic representation of the norm or the psychological states of other agents. An LLM can probably learn very basic conventions like driving rules in the UK, but I'm not sure a theory of mind can be achieved with today's technologies based on machine learning.

The norms and values that actual AI systems follow are given in an explicit way. But how do we design the values? How should the values be implemented? We need hybrid AI systems that combine machine learning with game-theoretic and logic-based models. That's not just a technological problem, it's a scientific problem for the AI community and the cognitive science community.

Paul Seabright: Human beings, like all biological organisms, have evolved to extract signal from noise in their environment. If you have an improved technology (like LLMs) for doing this, then you can advance faster up the fitness gradient. But this gradient can itself be moving because of the actions of the other organisms. We may all be individually using AI to extract signal more efficiently but the overall ratio of nonsense to insight may be going up.

Jean-François Bonnefon: The whole idea of open science and open-source models is in question. ChatGPT comes with a lot of ethical safeguards, but you can very easily get an LLM you can retrain the way you want. Maybe we should not share the pretrained models, or the set of weights being used. We don't do open science with nuclear research.



IMPACT ON SOCIETY

Lawrence Rothenberg: In areas like behavioral economics, it's easy to think of advances, using AI tools to come up with optimal ways of moving people to good behaviors. AI could open incredible opportunities to do more experiments, new things, or reduce costs. Rather than a hammer, you can now do things very subtly and quickly.

There's going to be huge productivity gains in all sorts of areas, like healthcare. Imagine using LLMs to match organ donors with the right people in the most efficient way. But there's going to be massive disruption of labor markets: AI is going to reach into the white-collar world and get rid of a lot of employees.

AI also seems ready-made to induce chaos. Maybe Vladimir Putin would have listened to sensible AI advice to not invade Ukraine. But AI also gave him much better tools to disrupt elections, or to create what looks like legitimate data. Our ability to respond may not be quick enough.

PS: New technologies can make social outcomes better or worse. For example, the development of projectile weapons in prehistory probably led to greater equality between the physically weak and strong. Correspondingly, the development of agriculture almost certainly facilitated slavery. But we don't yet know whether AI is going to ease the task of the strong and repressive. The people who resist will need to use AI as enthusiastically and determinedly as the powerful assuredly will.



RESPONSE OF INSTITUTIONS

LR: This is a unique time for what government should, can and would do to regulate these things. People who are misusing AI to the detriment of others may be criminally responsible. But minimally, there has to be development of some liability law, assigning rights and obligations in dealing with AI.

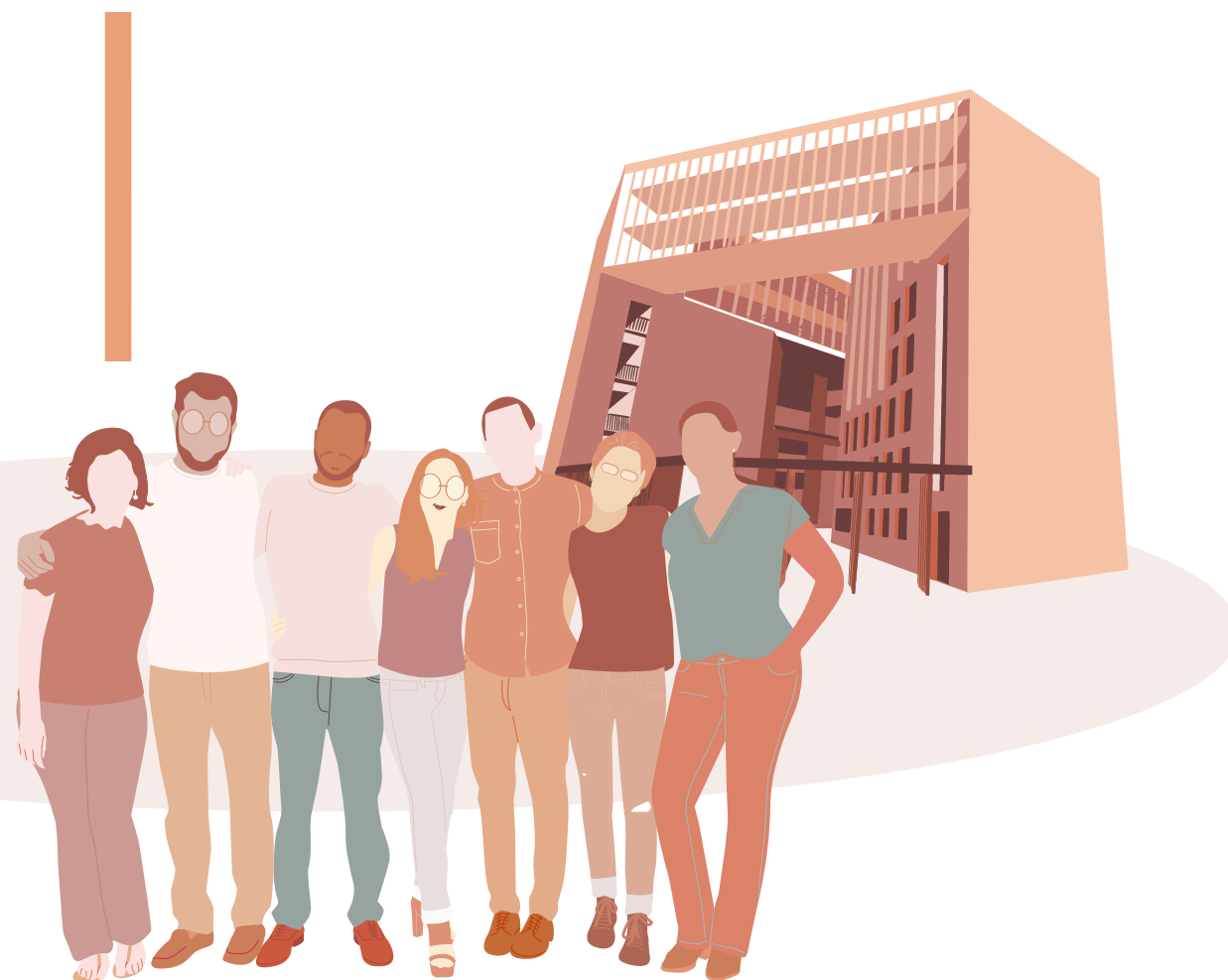
EL: We have a lot of misinformation – I can imagine beneficial uses of ChatGPT for factchecking. Regulation is an unsolved problem: the recent proposal to stop for six months is not useful at all. It should be for two years, to build and implement the regulation. What scares me is this bottom-up problem: I don't want ChatGPT to learn to be manipulative, or to spread fake news. It shouldn't be free to learn the norms. That's why we need institutional control and expert knowledge from lawyers, scientists, engineers to do top-down design.

JFB: Religious institutions are also using AI: Japan has approved the use of robots for funeral ceremonies; robots can turn Buddhist prayer wheels. If you're wondering, 'What would Jesus do?', you can talk to the Jesus chatbot.

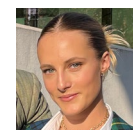
PS: Religious organizations and their members have developed sophisticated talents to cope with conflicting claims from false prophets and heretics. LLMs may reduce the costs of producing misleading communication, but the religious are far more practiced in trying to figure out signal from noise than many of us in the secular universe.

Welcome to the family

A new generation of talented young researchers joined IAST this fall, eager to burst through disciplinary boundaries and the frontiers of scientific knowledge. Here, we present a snapshot of their research interests and the big questions that guide their explorations. We look forward to featuring more in-depth analysis from this precocious cohort in future issues, as they develop their eclectic projects in Toulouse.



RESEARCH FELLOWS



OLYMPIA CAMPBELL
ANTHROPOLOGY

What drives gender-based violence?

- 📖 Human evolution, cousin marriage, mental health, and other complex behavioural phenomena
- 🌐 Cross-cultural analysis
- 🏠 University College London



HANEUL JANG
ANTHROPOLOGY

How have women's cooperation and social networks contributed to the ecological and demographic success of humans?

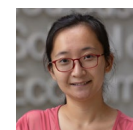
- 📖 Cooperative foraging, childcare, food sharing and mobility of BaYaka hunter-gatherers.
- 🌐 Ethnographic and anthropological data collection, Bayesian statistics
- 🏠 Max Planck Institute for Evolutionary Anthropology



BENJAMIN PITT
PSYCHOLOGY

How do language and culture shape the way we think?

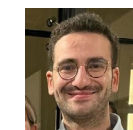
- 📖 Cognitive diversity, dynamics, and development
- 🌐 Cross-cultural and developmental studies, lab experiments, computational modeling
- 🏠 University of California, Berkeley



MINHUA YAN
ANTHROPOLOGY

How do social norms direct our behavior and how do they change?

- 📖 Social learning; cultural evolution; cooperation
- 🌐 Mathematical models, fieldwork, and online surveys
- 🏠 Arizona State University



LÉO FITOUCHI
PSYCHOLOGY

Why do our minds make moral judgments?

- 📖 Human cognition, moral norms, religious and punitive institutions
- 🌐 Integrating cross-cultural insights from cognitive, social and evolutionary sciences
- 🏠 Ecole Normale Supérieure Paris



GIACOMO LEMOLI
POLITICAL SCIENCE

How does society form political and ethnic identities?

- 📖 Comparative politics, ethnicity, nationalism, mass media, language, legacies of violence, institutions and development
- 🌐 Quantitative methods, historical data, surveys
- 🏠 New York University

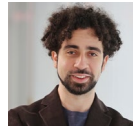


CÉCILE SARABIAN
COGNITIVE ECOLOGY

What are the origins of hygiene?

- 📖 Pathogen avoidance in different species. Using disgust in wildlife management and conservation.
- 🌐 Field and lab experiments/observations
- 🏠 Nagoya University

ASSISTANT PROFESSOR



AHMED EZZELDIN MOHAMED
POLITICAL SCIENCE

How does religion impact the political and economic development of Muslim societies?

- 📖 Political economy, religion and politics, social and gender norms
- 🔗 Web-scraping, machine learning, automated text analysis, causal inference, experiments, surveys, historical analysis, ethnography, fieldwork
- 🏠 Columbia University

ASSOCIATE PROFESSOR



KRISTIN MICHELITCH
POLITICAL SCIENCE

How can we improve government accountability and intergroup relations over public service delivery?

- 📖 Effects of political competition, media/information, and inequality on intergroup tensions and governance in delivery of public services
- 🔗 Field experiments, surveys, behavioral data analysis
- 🏠 Vanderbilt, New York University

POSTDOCTORAL RESEARCHER

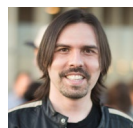


PAULA IBÁÑEZ DE ALDECOA
COGNITIVE ECOLOGY

How do ecology and cognition influence human and animal behaviour?

- 📖 Innovation, creativity, learning, problem-solving, and tool use
- 🔗 Lab and field experiments, science communication
- 🏠 University of Vienna

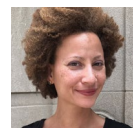
FULL-YEAR VISITORS



CÉSAR A. HIDALGO
PHYSICS

What are the laws of knowledge?

- 📖 Economic complexity, digital democracy, collective memory, laws of knowledge
- 🔗 Data visualization, machine learning, and applied AI
- 🏠 Artificial and Natural Intelligence Institute, Toulouse



JORDANNA MATLON
SOCIOLOGY

What is colonial about the Anthropocene?

- 📖 Racial capitalism, Blackness, and climate catastrophe
- 🔗 Ethnography, interviews, and visual analysis
- 🏠 American University

RESEARCH FELLOW



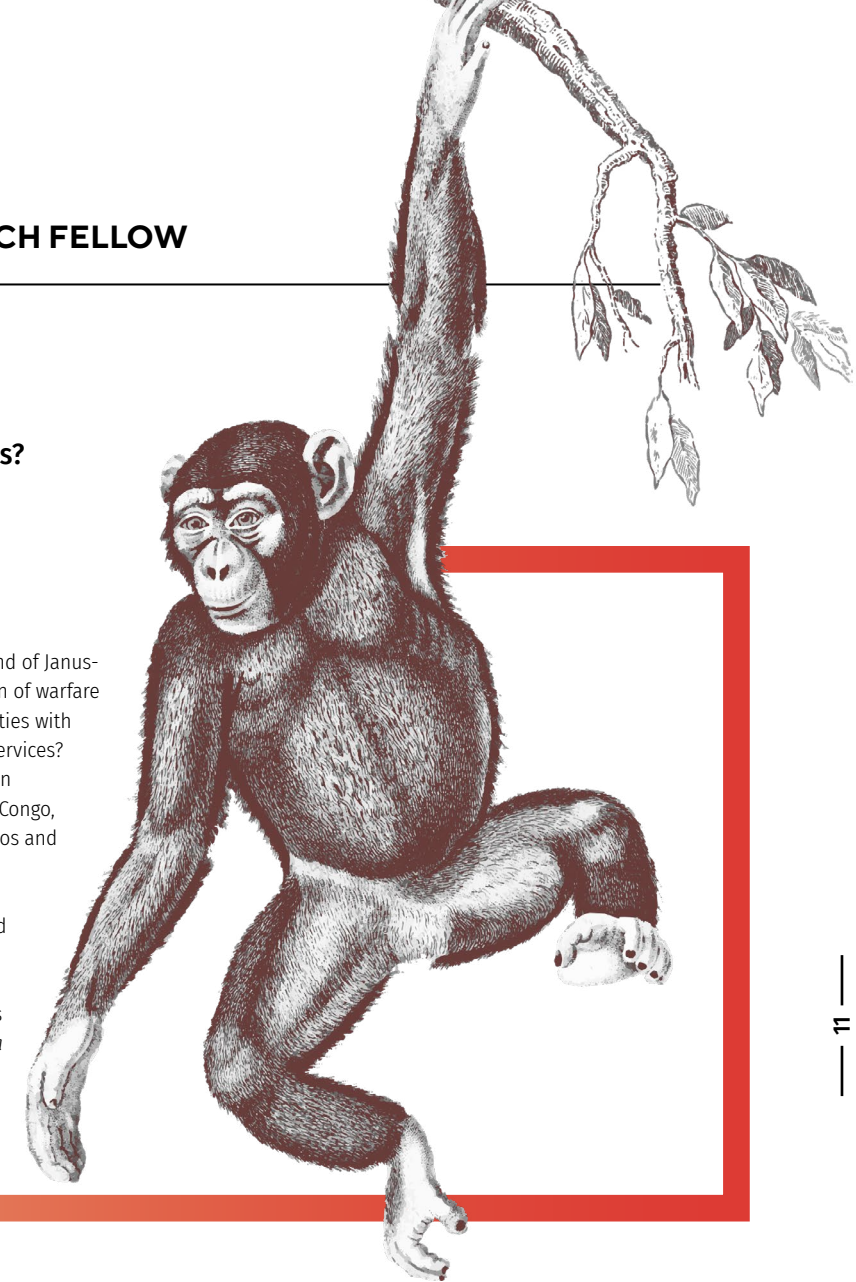
MAUD MOUGINOT
ANTHROPOLOGY

Do we act like our cousins?

- 📖 Aggression and cooperation
- 🔗 Behavioral and forensic data analysis
- 🏠 University of Minnesota

Maud is fascinated by human behavior. What kind of Janus-faced species engages in the wanton destruction of warfare but also lives peacefully in highly tolerant societies with millions of inhabitants exchanging goods and services? Her PhD thesis explored this conflict-cooperation puzzle in the jungles of Democratic Republic of Congo, comparing the reproductive strategies of bonobos and chimpanzees.

Maud plans to build on this research at IAST and is now working with the Omo Valley Project in Ethiopia to study the influence of women on cooperation and conflict between groups. She is also the author of two science-fiction novels (*La veilleuse d'âmes* series, under Alexis Demey, in French) that she hopes can extend the reach of anthropology.



FIND OUT MORE

Maud's research with Michael Wilson featured in Issue 16 of IAST magazine. Her paper on reproductive inequality was recently published by The Royal Society.



Friends and family: the ties that bind us

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Piret Avila

Why do mothers need help from children? | 16
Piret Avila, Lauren Bader & Ilaria Pretelli

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Marion Hoffman

Why does marriage reduce the risk of Covid-19? | 20
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Should children get the vote? | 22
Karine Van der Straeten & David Runciman



PIRET AVILA

CARING FOR KIN

How did families support our evolution?

Family and friendship ties are cornerstones for all human societies. Piret Avila is a theoretical biologist exploring how social behavior within these networks evolved in tandem with unique aspects of our life history, such as short intervals between births, long childhoods and lifespans. As the leader of the IAST Family, Demography and Health research team, she talks to us about how human families are different from other primates, and whether doting grandmothers or large brains are linked to the evolution of menopause.

HOW DO SOCIAL RELATIONSHIPS VARY ACROSS CULTURES, ECOLOGICAL CONTEXTS, AND TIME?

Subsistence ecology is one key element in understanding the variation of our social structures. The high level of interdependence in hunter-gatherer societies comes from the continual uncertainty of obtaining food. Agriculture led to the formation of larger groups sharing closer kinship ties. In patrilineal

societies, which some evidence suggests are linked to more abundant defensible resources, men tend to have multiple wives. In matrilineal societies, which are associated with increased uncertainty around paternity, maternal uncles can have a larger role in raising children than fathers. However, these patterns are not always clear cut.

Demographic changes can also dramatically alter kinship and other relationship structures, with profound social and economic consequences. This phenomenon is especially stark in China, for example, while many other modern societies can expect a sharp rise in the vulnerability of their elderly, stripped of any close living kin. Technological advances, like communication and transport systems, also play a crucial role in shaping human networks.

HOW DOES OUR RELIANCE ON FAMILIES COMPARE WITH OTHER SPECIES?

Human mothers often rely on others to share the task of looking after their young, unlike other Great Apes. Female chimpanzees, for example, usually

Gamo grandmother with her grandchild. Gamo highlands - Southern Nations, Nationalities, and People's Region, Ethiopia.

Photo by Lauren Bader.



Pemba grandmother with her grandchild. Pemba island, Zanzibar, Tanzania.

Photo by Ilaria Pretelli.

leave their birth groups to spend their adult lives among other groups full of unrelated individuals who may often harm or kill their infants. Unsurprisingly, chimp mothers are extremely protective and seldom entrust their offspring to the care of others.

Cooperative care in humans is unusual compared to Great Apes, but it is found in some form in about half of all primate species, as well as insects, birds, and other mammals. In all of these cases, kin relationships are crucial. For instance, cooperative care in marmosets is associated with the fact that their babies are often genetic hybrids and can have multiple fathers. In social insects like bees, wasps, or ants, helpers (the queen's daughters) are more closely related to their sisters than their mothers are to their own offspring, due to relatedness asymmetries that can lead to helpers feeding their brothers to their sisters. My PhD research centered on studying such conflicts.

WHAT CAUSED COOPERATIVE CARE IN HUMANS TO EXTEND BEYOND MOTHERS?

It has been suggested that coevolution of larger brains and cooperative breeding may offer an explanation. The expansion of the neocortex potentially enhanced humans' ability to weigh the costs and benefits of their actions. Importantly, it allowed humans to trace lineage, strengthening relationships with the

FIND OUT MORE

For research by Piret and the Family, Demography and Health team, see www.iast.fr

HOW DO THESE EVOLUTIONARY STRATEGIES INFLUENCE US TODAY?

Other primates possess a rudimentary ability to identify with others and to imitate, but have not developed a sophisticated theory of mind. It has been suggested that cooperative breeding may have increased selection pressures that triggered a revolution in human social cognition around 200,000 years ago. The capacity to share mental states with others, and to perceive them as intentional agents, coevolved with language, symbolic thinking, cultural transmission, and artistic expression. With a keen ability to intuit others' desires and a strong inclination to understand their motivations, modern humans are naturally predisposed to share with others and offer help.

Currently, I'm focused on understanding why women spend nearly half their lives in permanent sterility. Menopause is exceedingly rare; besides humans, it is found only in Asian elephants and four species of whales. One prevailing hypothesis suggests that menopause turns older women into doting grandmothers. Much like worker ants, grandmothers can indirectly propagate their genes by helping to rear offspring of their family members. However, this hypothesis faces some challenges, including the various health issues associated with menopause. An alternative hypothesis is that menopause is a price to pay for having large brains. Large brains necessitate high-quality mitochondria. Since these are only inherited maternally, they can accumulate harmful mutations more easily than nuclear DNA. A stringent screening process is therefore essential, possibly leading to early sterility in women. I am drawing on evolutionary ecology, evolutionary anthropology, and physiology to examine these competing hypotheses.

kin of both parents. With the capacity to recognize paternal kin, humans could avoid inbreeding without needing to face the perils of gender-biased dispersal.



PIRET AVILA, LAUREN BADER & ILARIA PRETELLI

IAST PRIZE

Why do mothers need help from children?

“Late Pleistocene, a girl walks in the mud, carrying a younger child. She puts him down while observing a mammoth moving slowly ahead of her. After ensuring the beast is gone, she heads towards camp, the infant safe in her arms. She’ll leave him there before retracing her steps.” Revealed by fossilized footprints at White Sand National Park, New Mexico, this touching vignette inspired the winners of this year’s IAST Multidisciplinary Grant and their project to study how child helpers have shaped who we are today.

Humans evolved as cooperative breeders, with parents requiring help from others to raise offspring successfully. These ‘allocarers’ enable parents to raise multiple dependent offspring, underpinning our species’ demographic success. Historically recent transitions to low-fertility populations have reduced the number of helpers, potentially increasing the risk of postnatal depression.

Reflecting the perspective of Western societies, research in psychology, demography, and public health has focused on parents. While evolutionary anthropology kept a wider interest in grandmothers, the contribution of children has been largely overlooked. But ethnographic accounts of

high-fertility, subsistence populations observe that children often support with childcare and household work.

To examine the impact of child helpers, IAST’s **Piret Avila**, **Lauren Bader** and **Ilaria Pretelli** will work closely with experts based in Toulouse, Germany and the UK. Trained in evolutionary biology, anthropology, demography and developmental psychology, they will develop theoretical models and explorative analyses using cross-cultural data. Comparing behavior across subsistence strategies and ecological settings, this project promises to shed new light on the importance of diverse helpers for all human families.

RESEARCH PATHS

HOW CAN SOCIAL BEHAVIOR AND LIFE HISTORY COMBINE TO BENEFIT THE YOUNG?

“Cooperative breeding has long been associated with our slow life history, with its long childhoods and lifespans. We hope to improve theoretical understanding of this joint evolution”

– **Piret Avila**

DO FAMILIES MOVE CHILDREN ACROSS HOUSEHOLDS TO OPTIMIZE LABOR POOLS?

“Transferring children can lighten the family burden by removing a cost or providing labor. In a house full of toddlers, a teenage girl can be a precious supplier of childcare. Do humans strategically manipulate household composition?”

– **Ilaria Pretelli**

DO CHILD HELPERS IMPACT THE DEVELOPMENT OF THEIR SIBLINGS?

“Research in Western contexts shows that secure attachments benefit infants’ social-emotional development and physical health. We will investigate help and maternal well-being as predictors of health in a much broader range of societies”

– **Marie Bourjade** (UT2)

HOW DO HELPERS CREATE FERTILITY THRESHOLDS?

“As the number of helpers influences fertility, it also influences the number of helpers in the next generation. If this is below a certain threshold, fertility rates may limit growth. Such feedback mechanisms can help explain modern demographic transitions”

– **Sarah Myers** (University of Bristol)

DO CHILD HELPERS IMPROVE MOTHERS’ MENTAL HEALTH?

“The postnatal period is a vulnerable time when mothers require a lot of support. We will explore the links between a mother’s childcare network and her mental well-being, and whether allocare by children has a protective effect”





– **Lauren Bader**



Mapping childcare networks

“We will compare childcare networks among four contemporary societies to investigate how cooperative childcare is impacted by different socio-cultural, ecological and economic factors, such as subsistence styles, post-marital residence, market integration and children school attendance”

Haneul Jang

	HUNTER-GATHERER <small>CONGO</small> The BaYaka are forest hunter-gatherers who also practice small-scale crop cultivation. Food and childcare are shared extensively within a community.
	PASTORALIST <small>KENYA</small> The Maasai are patriarchal pastoralists. Many women belong to a cooperative that provides extra income by selling aloe and honey.
	INDUSTRIAL <small>UK/GERMANY</small> The United Kingdom is a high-income country with a current fertility rate of 1.6.
	AGRICULTURAL <small>BRAZIL</small> Inhabitants of a Quilombo in the Brazilian Cerrado, the Kalunga subsist largely on agricultural products and revenues from tourism.



MARION HOFFMAN

SOCIAL NETWORKS

How do we make friends?

Friends have an enormous impact on human lives, providing support and resources as well as influencing our opinions and behaviors. But friendship means different things to different people, says social network scientist Marion Hoffman. Our attitudes toward friendship are also constantly shifting as we move from office to parties, schools and summer camp. Undaunted by such complexities, she is developing statistical tools to map the formation and dissolution of social relationships. This research has already helped to identify strategies for combating depression, teenage segregation, and the spread of Covid-19.

WHY IS FRIENDSHIP SUCH A SLIPPERY CONCEPT?

Friendship is a “folk concept” that varies across individuals and cultures. For example, girls tend to associate friendship with intimacy and personal discussions, while boys tend to define a friend as someone with whom they share activities. Age, social class, ethnicity, culture and language also greatly affect how individuals define friendship. In the US, it may be used for a large set of relationships, while we French often distinguish between “ami”, “copain”, and “pote”.

HOW DO HUMANS MAKE FRIENDS?

Humans make friends following a “meeting and mating” process. “Meeting” occurs in different contexts, such as school, bars, or offices, that are often segregated, so we are more likely to meet individuals like us. “Mating” occurs when individuals decide to bond. This is more likely if they share attributes (e.g., language, values), relationships (e.g., your friend is my friend), and affiliations (e.g., a sports club, a political party).

There are also personal nuances. For example, individuals with depressive symptoms generally seek fewer interactions. The distinction between “meeting” and “mating” is useful to disentangle external constraints and personal choices. For

example, our friends may have similar political ideas because we mostly meet like-minded individuals, because we care about shared values, or both.

Context determines who we interact with, but also how we interact. For example, politics will matter more over dinner than at football training. In different situations, the way we value a particular attribute may vary greatly. Studying office relationships, I found that interactions were mostly one-to-one and driven by organizational roles; in a summer camp, group interactions dominated and were mostly driven by gender.

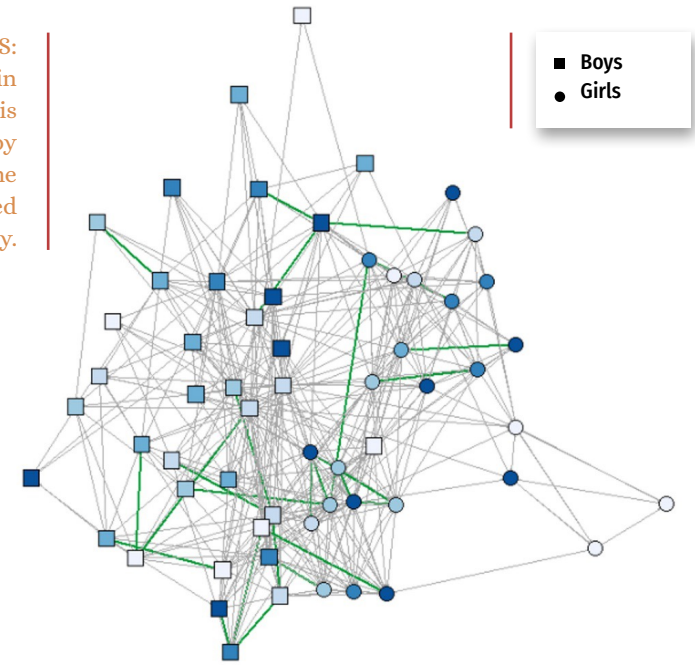
WHY ARE THESE FRIENDSHIPS SO IMPORTANT?

When individuals form close and stable relationships, we often refer to these as “strong ties”. Individuals typically invest a lot of time and effort in these relations, receiving a dependable source of intimacy, trust, and social support that can prevent loneliness and mental health problems. Less intimate relationships, or “weak ties”, may be less stable but are also important as they provide access to wider resources, such as information about a new job or the chance to enjoy an unusual hobby.

WHAT ARE THE CHALLENGES OF STUDYING COMPLEX GROUP INTERACTIONS?

Classic statistical tools are designed for sampled, independent observations, but relationships are anything but independent.

DIVERSE TIES:
A friendship network among adolescents in a summer camp from Marion’s research. It is strongly segregated by gender but integrated by socioeconomic status (as shown by colors). Some individuals are very popular, others are pushed to the periphery.



The fact that Alice says Bob is her friend depends on whether Bob identifies Alice as a friend, and perhaps on whether Carol is a mutual friend. Group relations are even more difficult to model because we want to understand not only which partners are likely to be chosen, but which distribution of partners are favored. In my summer camp study, participants interacted in gender-mixed groups rarely, and only if the gender distribution was balanced. The main focus of my research is to design and develop models to understand why individuals join and leave group relationships, and, for example in the case of the summer camp, infer whether there is a real preference for same-gender groups or whether the homogeneity is due to randomness or other factors.

DO YOU HAVE ANY ADVICE ABOUT FRIENDSHIP?

An “effective” network should contain a few “strong ties” and a large set of “weak ties” that is as diverse as possible. Resilience is also key: we must maintain a functional network even when certain relationships break down. Many of us end up in homogeneous bubbles to escape the cognitive dissonance of having friends who are different from us. A good strategy is to diversify the contexts for socializing. Making friends with a colleague holding different political views may be difficult to do if politics are a recurring topic during coffee breaks. However, you could enjoy a pleasant relationship with this person if you started playing squash together. We can all occasionally break out from our bubbles, by picking up new hobbies or visiting new places, to enjoy the company of others who may be a bit different from us. Policymakers and organizations must strive to improve the diversity of our relationships. In schools, mixing socioeconomic backgrounds may provide important benefits to children from disadvantaged communities. In my research, we found that children were perfectly able to mix in summer camps, but seem to segregate more in schools. The question should not be whether diversity is good, but which contexts make diversity possible.



FIND OUT MORE

See Marion’s research, CV and a short video presentation at www.iast.fr



SYLVIE BORAU, H EL ENE COUPRIE & ASTRID HOPFENSITZ

PROSOCIALITY

Why does marriage reduce the risk of Covid-19?

Single people, and especially single men, are more likely to die from Covid-19. A new study by IAST affiliate Sylvie Borau (TBS Education), H el ene Couprie (Aix-Marseille University) and former IAST member Astrid Hopfensitz (emlyon Business School) suggests this may be because married people are more likely to comply with protective health restrictions, such as rules on hygiene and reduced social contacts. Their findings can help to control the spread of the virus and protect vulnerable citizens in future pandemics.

Using data collected from 46,450 respondents in 67 countries, this research offers powerful evidence that marriage increases compliance with Covid-19 measures. Although men are less likely to follow the rules than women, married men are (about 5%) more likely to comply than single men, and this gap is bigger than that between married and single women (about 2%).

These results help explain, at least in part, the higher Covid-19 mortality of single men. International public health campaigns should recognize that targeting single men, who are the least likely to comply with protective measures, may offer the greatest gains. Marital status is a variable that can be easily targeted by policymakers, and it raises less ethical concerns than other variables such as political orientation.

Compliance is beneficial to individuals, by reducing individual risk of exposure to Covid-19; and to social groups, by limiting the spread of disease. Marriage could increase compliance because other studies have observed a link to other types of prosocial behaviors: for example, charitable donations. Similarly, parenthood is an important life event that might induce shifts in social values. However, while the researchers observe an effect of marriage, they find no evidence that parenthood increases compliance.

The study highlights the role of prosocial traits linked to

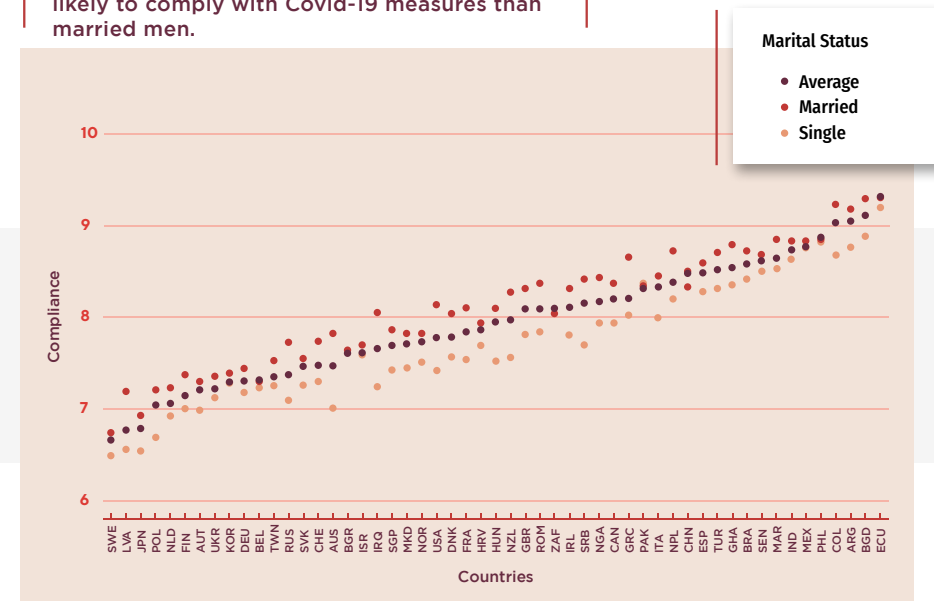
morality and social belonging: these explain more than 38% of the marital gap. In contrast, individual risk perceptions play only a minor role. Public health campaigns focused on the social benefits of compliance could therefore be effective, but might also widen gender and marital gaps, because people with stronger prosocial traits (i.e., women and married people) are more likely to react positively. Information campaigns about the risk of contagion may be better able to influence people regardless of gender or marital status.

Social belonging and moral identity explain 45% of the marital compliance gap for men; social belonging explains 38% of the gap for women.

Importantly, the findings are independent of cultural differences, political values, or infection rates. However, the study is unable to find out what is driving the effect of marriage. The effect may arise because prosocial people are more attractive partners or more interested in marrying. It also might stem from specific experiences of marriage, bargaining between partners, better general health of married people, or incentives to protect marriage partners and children.

In addition, this study does not control for the number or type of individual social interactions, which may vary by gender, marital status, occupation and living conditions. For instance, women tend to have fewer but stronger social ties. It also focuses on non-pharmaceutical interventions, but responses to different protective policies may vary. For example, while men comply less with non-pharmaceutical measures, they tend to be more willing to get vaccinated.

MARITAL GAP: Single men are (about 5%) less likely to comply with Covid-19 measures than married men.



The compliance score aggregates the ratings given, on a scale of 0-10, when respondents were asked if they agreed with Covid-19 protective measures related to physical distancing (e.g., “I have been staying home as much as practically possible”), hygiene (e.g., “I have been washing my hands longer than usual”), and public policy (e.g., “I have been in favor of closing all schools and universities”).

KEY TAKEAWAYS

- Single people, especially unmarried men, are less likely to follow protective rules.
- The main drivers of this marital gap are feelings of social belonging and morality, rather than perceptions of risk.
- Health campaigns focused on social values are likely to be more effective among married people.
- To protect the most vulnerable, campaigns should target single men by fostering their prosociality.

FIND OUT MORE

‘The prosociality of married people’ and other papers by these researchers are available to view at www.iast.fr





KARINE VAN DER STRAETEN & DAVID RUNCIMAN

Should children get the vote?

In recent years, several countries have lowered their voting age, allowing 16-year-olds to cast ballots. Why not go further? As part of our Crossing Channels podcast series, Karine Van der Straeten (IAST) joined David Runciman (University of Cambridge) to discuss his radical proposal to extend the franchise to six-year-olds.

Why choose six as the voting age? “The pragmatic answer is that six is shorter than 16,” says David, arguing that the main criteria should be the ability to go to school, and to mark a ballot. After all, we don’t worry about the competence of all sorts of adults, including many older voters. “It’s not about competence. It’s about an ability to have your voice heard.”

David dismisses more radical ideas about voting rights from birth: “That gets incredibly complicated. Babies lack the manual ability, so their parents would have to do it for them.” He also draws a line at the “nightmarish” idea of six-year-old politicians.

VOTE FOR SCHOOLS

Karine stresses the power of schools to foster democratic engagement, citing Mark Franklin’s findings that our first election tends to impact participation for the rest of our life: “If you turn up the first time, you’re more likely to keep doing so. For the first vote, 18 may not be a good age as people are leaving home and their community links are not as strong. At 15 or 16, teenagers are in a better position to get involved

in politics because they have a more stable position.”

Democracy is not just about having the right to vote, she observes: “The most important thing is how people use this right, whether they get involved. We see a huge problem with young people: in France, they turn out maybe half as much as people in their 50s or 60s. Getting young people politically active is very important, and schools are probably the best place to do that.”

Schools also offer an environment where children are protected from misinformation. “It’s the one setting in our lives,” David adds, “where there are well-established rules and expectations about the sanctity of knowledge.”

REJUVENATION

Child voting would not be a plunge into political chaos, says David. “Before enfranchisement happens, there’s always a lot of panic. That dies away because the same people get elected. But once a group has been enfranchised, they never want to give it back. Children would value it enormously: it is a citizenship right.” Lowering the voting age would instead revitalize our aging, moribund democracies: “Politicians would have to listen to voices they hadn’t ever heard.”

There is a need for much more empirical research, but Karine is encouraged by existing data on school-age voting in South American countries. “There is no evidence that anybody was hurt. People who get the vote at 16 turn out more than those who get the right at 18. There is suggestive evidence that it improved civic attitudes and feelings of being part of the community, or having a say.”

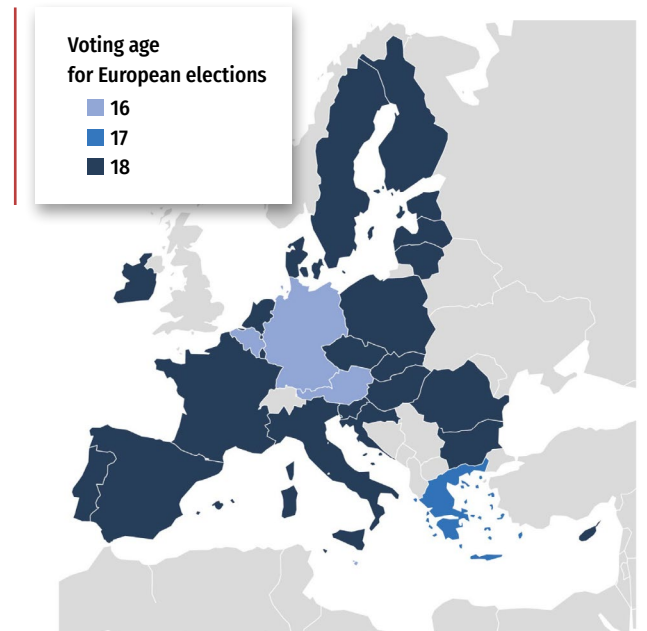
FUTURE OF POLITICS

Lower voting ages could also improve fairness. “Many decisions have long-term impact,” says Karine. “Brexit or climate-change policies are going to impact younger people much more, because they’re going to live with these policies.”

David accepts that his proposal for six-year-old voting is a quixotic mission that will meet fierce resistance. But Karine suggests the extension of voting rights is likely to continue as we change our views about what it means to be an active citizen. Both panelists hope the debate will ignite vital discussions and encourage research on democratic reform, exploring innovative ways to ensure every citizen’s voice is heard.

Voting age in the EU member states

Source: Compiled by EPRS, May 2023



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WHY IS RESEARCH KEPT IN SILOS?

Ingela Alger (IAST) and Flavio Toxvaerd (University of Cambridge) explain why interdisciplinarity offers crucial advantages in tackling today’s global challenges.



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