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INSTITUTE FOR ADVANCED STUDY

ARBEITSVORHABEN DER FELLOWS
FELLOWS' PROJECTS 2021/2022

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VORWORT

In dieser Broschüre werden die Fellows des Wissenschaftskollegs im akademischen Jahr 2021/2022 vorgestellt. Im Zentrum steht die Beschreibung der Arbeitsvorhaben, denen sie sich während ihres Aufenthaltes am Wissenschaftskolleg widmen wollen. Dazu kommen bibliografische Empfehlungen mit den Titeln einiger Aufsätze oder Bücher, die sie Interessierten zur Lektüre empfehlen, sowie kurze biografische Angaben.

Die meisten Fellows kommen für ein volles akademisches Jahr. Eine kürzere Aufenthaltsdauer ist jeweils vermerkt.

In der Zeit zwischen dem Redaktionsschluss dieser Broschüre und dem Beginn des akademischen Jahres am 1. September 2021 können sich noch leichte Änderungen ergeben. Aktualisierte Informationen zu den Fellows und ihren Arbeitsvorhaben sowie zu Veranstaltungen mit Fellows und zum Wissenschaftskolleg insgesamt stehen auf der Internetseite des Wissenschaftskollegs – www.wiko-berlin.de – zur Verfügung.

Berlin, im Juli 2021

Wenn nicht anders angegeben, erstrecken sich die Fellowships vom 1. September 2021 bis zum 30. Juni 2022.

PREFACE

This brochure presents the Fellows of the academic year 2021/2022. Each Fellow provides a short description of the work he or she plans to pursue during the stay at the Wissenschaftskolleg. Also listed are brief biographical notes as well as recommended reading.

The majority of the Fellows come for an entire academic year. A shorter planned stay is noted for each Fellow, where applicable.

Between the submission deadline to this brochure and the beginning of the academic year on September 1, 2021, some minor changes may arise. Up-to-date information on the Fellows, their projects, Fellows' events and the Wissenschaftskolleg in general is available on the Wissenschaftskolleg's website www.wiko-berlin.de.

Berlin, July 2021

If not otherwise indicated, the fellowships extend from September 1, 2021 to June 30, 2022.

GABRIEL ABEND
Ph.D., Professor of Sociology
University of Lucerne

Born in Montevideo, Uruguay
Studied Political Science and History at the Universidad de la República and
Sociology at Northwestern University

MORAL AI DECISIONS?

Concepts of choice, decision, and decision-making are ubiquitous. Look around you. People are often represented as decision-makers: they make lifestyle choices, health choices, love choices, and procreation choices. Soccer players, jazz musicians, drug addicts, brains and neurons, and nonhuman animals are depicted as making decisions, too. That “every day we make thousands of conscious and unconscious decisions” is a widespread idea, even a cliché. Look around you. Isn’t choice a wonderful thing? It means freedom and autonomy. You’re lucky you’re free to choose. Always choose to be free to choose (to be free)! Above all, success is due to good decisions; failure is due to bad ones.

As a sociologist, I’m interested in the social lives of concepts of choice and decision: what societies, organizations, and people do with them; what roles they play in institutions, practices, laws, and technologies; what their effects are; to whose advantage. I’m particularly interested in how AIs (artificial intelligence systems, robots, machines, algorithms) might be understood and represented as decision-makers, where the decisions at stake have to do with morality. Do contemporary societies attribute decision-making capacities to driverless cars and social robots? *Moral* decision-making capacities? Are machine-learning algorithms taken to make choices, morally unfair and biased choices, which discriminate against women and ethnic minorities? These are empirical questions for social science research. They also raise tough normative questions, whose legal and political ramifications require immediate attention. Should AIs be represented as agents that (or who) make choices? If they aren’t autonomous deci-

sion-makers, who's morally, legally, and financially responsible for the consequences of their doings?

I don't know that my research will be able to answer these questions, though, in which case I'll just ask Alexa, Eliza, Sophia, or Ashley Too. They'll surely know.

Recommended Reading

Abend, Gabriel. *The Moral Background*. Princeton, NJ: Princeton University Press, 2014.

—. "The Limits of Decision and Choice." *Theory and Society* 47 (2018): 805–841. <https://doi.org/10.1007/s11186-018-09333-1>.

—. "The Love of Neuroscience: A Sociological Account." *Sociological Theory* 36 (2018): 88–116. <https://doi.org/10.1177/0735275118759697>.

MOHAMMAD AL ATTAR

Writer, playwright

Berlin

Born in 1980 in Damascus

Studied English Literature at Damascus University, Theatrical Studies at the Higher Institute of Dramatic Arts, Damascus, and Applied Drama at Goldsmiths, University of London

IF THE DEAD COULD SPEAK

A theater piece that traces the long struggle of a group of Syrians for justice. And what is the meaning of justice for them today?

In recent years, several criminal complaints have been filed in Europe against senior officials within the Assad regime. In November 2017, nine Syrians filed a criminal complaint alleging crimes against humanity and war crimes with the German Federal Public Prosecutor General. The complaint is directed against ten high-ranking officials of the National Security Office and Air Force Intelligence. The crimes alleged – killing, persecution, torture, and sexual violence – were committed between September 2011 and June 2014 in five Air Force Intelligence branches in Damascus and Aleppo. In addition, more cases have been filed or are about to be filed in France, Sweden, Spain, and Austria. By seeking legal accountability, these prosecutors are trying to overcome the sense of helplessness and abandonment that is pervasive among exiled Syrians who are scattered across the globe today.

The play is an attempt to explore the relevance of art and theater in contributing to urgent political and legal discussions. Furthermore, it will ask about the meaning of justice today for those who survived the war but now see war criminals still in power in Syria with even more impunity than before. Russia has declared the Syrian regime victorious over the ruins of Syria. On the other hand, none of the other international and regional powers who are actively involved in the proxy war in Syria seem to object, as long as their own interests are protect-

ed. So how will Syrians who survived the horrors of oppression and war cope with this harsh reality? Is seeking justice via universal jurisdiction the answer? Or will it only expose the gap between symbolic legal prosecution and political decisions on the ground? And what are the borderlines between the personal and the political for the survivors who filed the complaint? What are their real motivations behind it?

The journey of making the play will include reaching out to some of the victims who filed these legal cases. But it will also include conversations with lawyers and legal organizations that have been working closely together with the complainants.

Recommended Plays

Al Attar, Mohammad. "Aleppo: A Portrait of Absence." Premiered September 21–23, 2017 at the Haus der Kulturen der Welt, Berlin.
https://www.hkw.de/en/programm/projekte/2017/why_are_we_here_now/why_are_we_here_now_mohammad_al_attar/aleppo_a_portrait_of_absence_mohammad_al_attar.php.

Al Attar, Mohammad, and Omar Abusaada. "Iphigenie." Premiered September 30, 2017 at the Volksbühne Berlin.
<https://www.volksbuehne.berlin/en/programm/27/iphigenie>.

Al Attar, Mohammad, and Omar Abusaada. "The Factory." Premiered August 11–18, 2018 at PACT Zollverein, Essen. Coproduction with the Volksbühne Berlin. <https://www.volksbuehne.berlin/en/programm/4935/the-factory>.

GREGORY ALBERY

from January to June 2022

Fellow of the College for Life Sciences

PhD, Evolutionary Biology

Georgetown University, Washington, DC

Born in 1994 in Taunton, United Kingdom

Studied Biological Sciences at the University of Oxford and Evolutionary

Biology at the University of Edinburgh

DENSITY DEPENDENCE AND DISEASE DYNAMICS: A CROSS-SYSTEM SYNTHESIS

A fundamental paradigm in disease ecology states that individuals inhabiting high-density areas should have greater disease burdens because they have more social contacts, so they are more often exposed to pathogens. This assumption is often baked into epidemiological models or leveraged for disease control interventions, as in the recent “social distancing” measures used to curb the spread of SARS-CoV-2. Understanding this process is therefore vital for understanding the societal distribution of disease and the consequences of environmental change. Surprisingly, the evidence for density effects is relatively scarce and is often based on social behaviours, while spatial behaviours are generally neglected. Consequently, despite being fundamental to disease ecology, it is unclear how often density effects manifest as expected, or whether they are counteracted or undermined by a range of spatially structured processes like cooperation, competition, or resource availability.

To address this gap, I will conduct a series of spatial-social analyses across a range of wildlife disease datasets. I will meta-analyse the findings to identify general trends, building eco-evolutionary models to test mechanistic hypotheses and to address complex, long-term processes. In doing so, I will develop predictive models of density-dependent host-pathogen dynamics, incorporating elements of behaviour, immunity, virulence, and more. As well as providing fun-

damental insights into the ecology and evolution of sociality, this project will provide a framework for understanding and predicting how increasing population density might alter disease dynamics in a rapidly changing world.

Recommended Reading

- Albery, Gregory F., Evan A. Eskew, Noam Ross, and Kevin J. Olival (2020). “Predicting the Global Mammalian Viral Sharing Network Using Phylogeography.” *Nature Communications* 11: 2260. <https://doi.org/10.1038/s41467-020-16153-4>.
- Albery, Gregory F., Chris Newman, Julius Bright Ross, David W. MacDonald, Shweta Bansal, and Christina Buesching (2020). “Negative Density-Dependent Parasitism in a Group-Living Carnivore.” *Proceedings of the Royal Society B* 287, no. 1941: 20202655. <https://doi.org/10.1098/rspb.2020.2655>.
- Albery, Gregory F., Alison Morris, Sean Morris, Josephine M. Pemberton, Tim H. Clutton-Brock, Daniel H. Nussey, and Josh A. Firth (2021). “Multiple Spatial Behaviours Govern Social Network Positions in a Wild Ungulate.” *Ecology Letters* 24, no. 4: 676–686. <https://doi.org/10.1111/ele.13684>.

CONSTANTIN ARDELEANU

from February to June 2022

Dr., Professor of History

“Dunărea de Jos” University of Galați

Born in 1976 in Galați, Romania

Studied History at “Dunărea de Jos” University of Galați

FLOATING COMMUNITIES IN BETWEEN EMPIRES:
STEAM NAVIGATION COMPANIES IN THE BLACK SEA
AND THE EASTERN MEDITERRANEAN (1820S–1914)

The advent of steamships on the world’s rivers and seas revolutionized economic, political, and cultural realities wherever they started plying. Steamships served as agents of modernization that galvanized regional and global mobility with their ability to convey passengers and cargo relatively inexpensively, rapidly, and safely. But they equally facilitated access to new forms of social encounters for voyagers who boarded them for popular tourism or to travel to all corners of the globe.

Launched by Michel Foucault, the idea of ships as “floating spaces” and “heterotopias par excellence” has been recently fleshed out by scholars who look at ships as “contact zones” in which different cultures meet. The “passage itself” gets more focus, with the ship’s space regarded as a “historical arena, a zone of cultural contact and interaction.”

Starting from such premises, this project aims to turn steamships into arenas of global history and explore the social dimension of cruising by looking at the sociality engendered by the coming of the transportation revolution to the Black Sea and the Eastern Mediterranean.

While gliding along a politically disputed borderland that separated – and connected – the Austrian, Ottoman, and Russian empires, steamships themselves became a microcosm teeming with social life.

Considering sociality to be an integral part of modern transportation, the project will analyze the early phases of the industrialization and commodification of travelling through Europe's southeastern peripheral seas, with a focus on the social experiences that cruising provided to its customers. Also, the project will detail the activity of shipping companies active in the region, from those of the larger maritime powers to those established by riparian states as a way of increasing their economic and political independence.

Recommended Reading

Ardeleanu, Constantin. "A British Meat Cannery in Moldavia (1844–52)."

Slavonic and East European Review 90, no. 4 (2012): 671–704.

—. *International Trade and Diplomacy at the Lower Danube: The Sulina Question and the Economic Premises of the Crimean War (1829–1853)*. Brăila: Istros, 2014.

—. *The European Commission of the Danube, 1856–1948: An Experiment in International Administration*. Leiden: Brill, 2020.

LARS BEHRISCH

Dr, Assistant Professor of History
Utrecht University

Born in 1973 in Munich, Germany
Studied History, Russian, and Islamic Studies at Humboldt-Universität zu
Berlin and at Universität Hamburg

THE GENESIS OF DEMOCRACY IN EARLY MODERN EUROPE

Existing long-term narratives present democracy as a necessary outcome of historical development. This project will create a long-term narrative that is not another linear success story. As such, it will also help us to better understand democracy's challenges.

The core argument is that representative democracy has its roots in two distinct, originally unrelated, and to some extent even contradictory features: a tradition of pluralistic but highly elitist political participation – and the notion that all people are equal. Their convergence was not inevitable and it is not irreversible, either.

Medieval kings assembled the powerful of their realms to enlist support. This was the beginning of Estate assemblies – parliament, États, cortes, Stände, staten etc. – institutions of political participation that existed in all pre-modern states. Their very existence, though, was predicated on inequality: noble and other elites based their right to sit on such Estates, and to take part in politics, on their supposedly special nature acquired by birth. Enlarging Estates' social basis was not remotely in their interest, as this would threaten to undermine their special status and thus also their very claim to participate.

The notion of individual equality was essentially alien to medieval and early modern societies that obeyed a strictly hierarchical and corporate logic: a person's status was derived entirely from the social group(s) he or she was born into. There were no broad claims, as yet, for equality among individuals, let alone for

their political emancipation. And yet, notions of equality were gradually emerging in various contexts. Starting with the late 18th-century revolutions, they also began to be grafted onto institutions of political participation.

The project will trace the genesis of participatory institutions, the emergence of individual equality, and, finally, their convergence into representative democracy. It will do so in a broad inter- and transnational approach, arguing that the competitive and emulative world of early modern European states drove both the emergence and the convergence of participation and equality. Finally, it will argue that while representative democracy ties equality to the pluralistic logic of participation, it is by rejecting the latter that authoritarianism and populism try to reduce equality to uniformity and to a majoritarian and plebiscitary logic.

Recommended Reading

- Behrisch, Lars. "Social Control and Urban Government: The Case of Goerlitz, Fifteenth and Sixteenth Centuries." In "Urban Governance and Petty Conflict in Early Modern Europe," edited by Joachim Eibach and Raingard Esser, special issue, *Urban History* 34, no. 1 (May 2007): 39–50.
- . "Statistics and Politics in the 18th Century." In "Conventions and Quantification – Transdisciplinary Perspectives on Statistics and Classifications," edited by Rainer Diaz-Bone and Emmanuel Didier, special issue, *Historical Social Research* 41, no. 2 (2016): 238–257.
<https://doi.org/10.12759/hsr.41.2016.2.238-257>.
- . "Empowering Comparisons? The Making of Republics in the Early Modern Period." In *The Force of Comparison: A New Perspective on Modern European History and the Contemporary World*, edited by Willibald Steinmetz, 113–136. New York: Berghahn Books, 2019.

SIR DAVID CANNADINE
DPhil, Dodge Professor of History
Princeton University

Born in 1950 in Birmingham, United Kingdom
Studied History in Cambridge, Oxford, and Princeton

HISTORY OF THE FORD FOUNDATION

My current research and writing project, which I hope to complete during my year in Berlin, is to write the previously unwritten history of the Ford Foundation, one of the great philanthropies of the world. Established in 1936, the Foundation was the richest in America (and thus the world) from the 1950s to the 1980s and has remained the most highly profiled and controversial US philanthropy ever since. Created by Henry Ford I and his son Edsel as a way of avoiding paying the massively increased Federal estate taxes enacted during Roosevelt's New Deal, the Ford Foundation was devoted from the outset to improving the welfare of humanity, which it began to try to do on a large scale once the estates of Henry I and Edsel were finally settled by 1950. How did it go about doing so, and how far has it succeeded? Drawing on an unprecedented amount of research in the Foundation's extraordinary rich and voluminous archives, as well as in the personal papers of many of those who worked for it or were connected to it, my book hopes to answer these two questions, recognizing that the first is easier to answer than the second. I have drafted fourteen of eighteen chapters, and during my time at the Wissenschaftskolleg I hope to write those that remain to be done and to revise those already written. It is a history that works, like the Foundation itself, at many levels, from the politics of Washington, D.C. and the personnel and decisions of the trustees to the activities of program officers and heads of the Foundation's overseas offices round the world. It is a history of the second half of "the American century" even as it is also a history of ideas and academic disciplines, such as sociology and development economics, sometimes misunderstood and misapplied. And the book I

hope to finish next academic year will also be a major contribution to current debates about the nature and purpose of philanthropy in our own times.

Recommended Reading

Cannadine, David. *The Decline and Fall of the British Aristocracy*. New Haven: Yale University Press, 1990.

—. *Mellon: An American Life*. New York: Knopf, 2006.

—. *Victorious Century: The United Kingdom, 1800–1906*. New York: Viking, 2018.

TERESA CASTRO-MARTÍN

PhD, Research Professor of Demography

Centre for Human and Social Sciences, Spanish National Research Council (CSIC), Madrid

Born in 1961 in A Coruña, Spain

Studied Sociology at the University of Wisconsin-Madison

UNEVEN FAMILY CHANGE IN LATIN AMERICA: DOES IT LEAD TO “DIVERGING DESTINIES”?

The social polarization of reproductive and family behaviours is perhaps the most salient demographic feature of Latin America. Social groups at the top and the bottom of the socioeconomic ladder follow very different reproductive calendars and family trajectories. However, it is uncertain whether divergences in family lives across social strata are on the rise, because the highly educated are starting to adopt family behaviours traditionally associated with low education and poor economic prospects, such as unmarried cohabitation and nonmarital childbearing, giving them a renewed meaning. Inspired by the “diverging destinies” thesis of Sara McLanahan and building on my previous work, I want to address two broad research questions: Are social class disparities in family life courses growing? And if so, how does this affect social inequality at the macro-level and the life opportunities of women and children at the micro-level? The ultimate goal is to make a theoretical contribution – challenging, adapting or refining existing theories of global family change – and, by analysing large microdata sources in a comparative framework, to make a relevant empirical contribution to better understanding the implications of uneven family change across social strata in a context already characterized by great socioeconomic inequality.

Recommended Reading

Castro-Martín, Teresa. “Consensual Unions in Latin America: Persistence of a Dual Nuptiality System.” *Journal of Comparative Family Studies* 33, no. 1 (2002): 35–55. http://digital.csic.es/bitstream/10261/93121/1/2002_Castro_JComFamStudies.pdf. <https://doi.org/10.3138/jcfs.33.1.35>.

Laplante, Benoît, Teresa Castro-Martín, Clara Cortina, and Teresa Martín-García. “Childbearing within Marriage and Consensual Union in Latin America, 1980–2010.” *Population and Development Review* 41, no. 1 (2015): 85–108. <https://doi.org/10.1111/j.1728-4457.2015.00027.x>.

Kraus, Elisabeth K., and Teresa Castro-Martín. “Does Migrant Background Matter for Adolescents’ Fertility Preferences? The Latin American 1.5 Generation in Spain.” *European Journal of Population* 34, no. 3 (2018): 277–312. <https://doi.org/10.1007/s10680-017-9427-3>.

WEITSENG CHEN

J.S.D., Associate Professor of Law
National University of Singapore

Born in 1972 in Taipei

Studied Law at National Taiwan University and Yale Law School

THE LEGACY OF GERMAN LAW IN ASIAN DEVELOPMENTAL STATES

To see how the Weimar Constitution might operate in the 21st century, one can look to Taiwan, as its constitution was modelled upon the Weimar Constitution and still functions well today. The same can be said of other areas of law in Japan, South Korea, and China, all of which began to transplant the German laws as early as the late 19th century. These laws have constituted these countries' political and market spaces and powerfully influenced their ideas about state power, market force, and social welfare.

This project aims to unveil German law legacies in Asian developmental states. These countries are (or once were) characterized by authoritarianism and mercantilism and constitute this small cluster of countries that managed to grow rapidly and/or become part of the developed world within a few decades. Their experiences demonstrate an illiberal model of law and development, in that they all adopted the ideas of rule of law, constitutionalism, and capitalism, while remaining authoritarian during their modernization eras. To understand the rise of illiberalism in Asia, part of a worrying global phenomenon concerning multiple disciplines, this project of legal history explores the linkages between German jurisprudential legacies and Asian authoritarianism and state capitalism, including their convergence, divergence, and resistance.

Recommended Reading

Chen, Weitseng, ed. *The Beijing Consensus? How China has Changed Western Ideas of Law and Economic Development*. Cambridge: Cambridge University Press, 2017.

—. “Twins of Opposites: Why China Will Not Follow Taiwan’s Model of Rule of Law Transition toward Democracy.” *American Journal of Comparative Law* 66, no. 3 (2018): 481–535. <https://ssrn.com/abstract=2922458>.

Chen, Weitseng, and Hualing Fu, eds. *Authoritarian Legality in Asia: Formation, Development and Transition*. Cambridge: Cambridge University Press, 2020.

LINDA COLLEY

Ph.D., Shelby M.C. Davis 1958 Professor of History
Princeton University

Born in 1949 in Chester, United Kingdom
Studied History at Bristol University and at Cambridge University

*BECOMING GLOBAL: BRITAIN 1688–1815 AND A
THEORETICAL ARTICLE TAKING OFF FROM MY BOOK
THE GUN, THE SHIP, AND THE PEN (2021)*

I anticipate working on two main projects. The first is to write the eighteenth-century volume of the Penguin New History of Britain, which I have provisionally entitled *Becoming Global: Britain 1688–1815*.

Part of the original stimulus for this came from reading Sebastian Conrad's *Globalisation and the Nation in Imperial Germany* (2010), especially its concluding remark (p. 402): "What has still to be undertaken is an analysis of national history in a global context, in which the nation is not the starting-point of the investigation but rather the object to be explained within a global context". There are obvious ways in which such an approach fits very snugly and usefully with varieties of British experience in the 1688–1815 period. It was in this era that what became the United Kingdom also evolved into the prime world power and most dominant maritime empire. As a result, this polity was especially and progressively exposed at this time to developments, commodities, commerce, knowledge, and contacts across all continents and all oceans.

During the past two decades or so, vast amounts of new writings and research have been devoted to these themes. However, while this scholarly extroversion is welcome, an enhanced focus on varieties of the *global* and the *imperial* in the British past in this era has sometimes had the effect of pushing aside the mixed and essential *European* dimensions of this same society. It has also obscured the important degree to which all of these things – the global, the imperial, and the European – were interconnected.

One of the things I hope to develop from extended time in Berlin is an enhanced appreciation of Continental European histories to combine with my recent deep exploration of global history so as to complete a renovated, balanced, multilateral, and enquiring eighteenth-century British history. My second project will be to develop out of my new book *The Gun, the Ship, and the Pen: Warfare, Constitutions and the Making of the Modern World* a more abstract and theoretical long article, possibly for publication in the *American History Review*.

Recommended Reading

Colley, Linda. *Britons: Forging the Nation 1707–1837*. New Haven, CT: Yale University Press, 1992.

—. *The Ordeal of Elizabeth Marsh: A Woman in World History*. London: HarperCollins, 2007.

—. *The Gun, The Ship, and the Pen: Warfare, Constitutions, and the Making of the Modern World*. New York: Liveright, 2021.

TATENDA DALU

from September to October 2021

Iso Lomso Fellow

Ph.D., Lecturer in Biology and Environmental Sciences

University of Mpumalanga, Mbombela

Born in 1985 in Bulawayo, Zimbabwe

Studied Marine Biology at Rhodes University

IMPACTS, OPPORTUNITIES, AND CHALLENGES
RELATED TO COMMUNITY-SUSTAINABLE LIVELI-
HOODS: A CASE STUDY OF THE POTAMONAUTID
CONSERVATION IN CHIMANIMANI, EASTERN
HIGHLANDS

Human population growth threatens the integrity of 0.8% of the Earth's freshwater ecosystems globally, through reduction of their ability to support biodiversity and provide ecosystem services. The aim of the project is to assess the direct or indirect impacts of community livelihoods on the preservation of the crab species *Potamonautes* spp. and to attempt to identify opportunities for and constraints on the conservation of crabs within the pre-existing livelihoods of the community households in Chimanimani, Eastern Highlands, Zimbabwe. This will lead to better formulation and implementation of conservation strategies through the provision of recommendation strategies that provide long-lasting conservation action plans. Local communities' involvement will be key for the success of any crab conservation activities.

As (human) community dynamics are ever-changing, it has been recognized that, within a local context, it is usually challenging to identify the issues that the local people regard as important within conservation (Andrade and Rhodes, 2012). This creates great conflict of interest between the community and any potential conservation cause. With this in mind, the aim is to provide key ecological and conservation strategies for freshwater crabs. The resulting socio-

ecological information has conservation value for any action plans that will be developed or initiated and, thus, be able to provide data on freshwater crab populations, threats, habitats preferences, and human associations. The aim is, through the involvement of local communities, schools, and university students, to develop human capital capacity that has knowledge of invertebrate projects and conservation, to avoid habitat loss or any associated threats in future. Awareness campaigns, which will be one of the main pillars, will foster the interaction and collaboration of different groups of people from the local communities up to the government level so that the conservation of these species will be a success.

Recommended Reading

- Van Straaten, Peter (2000). "Mercury Contamination Associated with Small-Scale Gold Mining in Tanzania and Zimbabwe." *Science of the Total Environment* 259, no. 1–3: 105–113.
- Barros, Vicente R., Christopher B. Field, David Jon Dokken, Michael D. Mastrandrea, Katharine J. Mach, T. Eren Bilir, et al., eds. (2014). *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Working Group II Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge and New York: Cambridge University Press.
- Cumberlidge, Neil (2014). "An Overview of the Afrotropical Freshwater Crab Fauna: Diversity, Biogeography, and Conservation (Brachyura, Potamoidea, Potamonautidae and Potamidae)." In *Advances in Freshwater Decapod Systematics and Biology*, edited by Darren Yeo, Neil Cumberlidge, and Sebastian Klaus, 71–99. Leiden: Brill.

LORRAINE DASTON

Permanent Fellow of the Wissenschaftskolleg

Ph.D., Director emerita, Max Planck Institute for the History of Science, Berlin

Professor, Committee on Social Thought, University of Chicago

Born in 1951 in East Lansing, Mich., USA

Studied History, Philosophy, Mathematics, and History of Science

at Harvard and at Cambridge

DIVERSITY: THE HISTORY OF A NEW VALUE

It is startling to realize how quickly and thoroughly the value of diversity, until a few decades ago a value confined to the aesthetic and organic realms, has acquired deep political and moral significance. Universities, corporations, and governments are now judged by the degree to which they achieve diversity among their leaders and recognize diversity among their publics. Older values of the liberal polity, for example that of honoring merit without regard to creed, race, sex, or ethnicity, have been increasingly eclipsed by values that closely attend to these and other differentiating traits. Universalism has become an object of suspicion, either as the interests of a particular privileged group masquerading as the interests of humanity, or as simply a failure to appreciate the riches of pluralism. The very word “rich” as a term of praise for everything from lectures to tourist destinations echoes the more-the-better and the more-various-the-better ethos of diversity. How did this sea change in value – political, moral, aesthetic, and intellectual – come about, and come about so swiftly?

I hope to trace the history of the value of diversity in three stages. *First*, the aesthetic values of *copia* and *varia* of sixteenth- and seventeenth-century rhetoric, natural history, and display. This is the aesthetic of the *Wunderkammer* or the princely intermezzo, emphasizing the dazzling variety of the productions of art and nature, deliberately displayed as a miscellany so as to heighten the impressions of abundance, strangeness, and diversity. *Second*, the philosophical, scientific, and religious doctrine of the principle of plenitude in organic nature

from the eighteenth through the twentieth centuries, whether manifested in Linnaeus' Great Chain of Being, the teeming variety of creation in natural theology, the Darwinian doctrine of niche specialization and speciation, or the ecological concept of biodiversity. *Third*, the transformation of political liberalism in the late twentieth and early twenty-first centuries from a project that aimed to overcome difference to one that enshrined it.

Recommended Reading

Daston, Lorraine. *Against Nature*. Cambridge, Mass.: MIT Press, 2019.

—. "Ground-Zero Empiricism." *Critical Inquiry*, "Posts from the Pandemic" (blog), April 10, 2020. <https://critinq.wordpress.com/2020/04/10/ground-zero-empiricism/>.

ELISA DOMÍNGUEZ-HÜTTINGER

from September to November 2021

Fellow of the College for Life Sciences

PhD, Bioengineering

National Autonomous University of Mexico (UNAM), Mexico City

Born in 1984 in Mexico City

Studied Biology at the National Autonomous University of Mexico (UNAM)

and Systems and Synthetic Biology and Bioengineering at Imperial College

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TOWARDS A MATHEMATICAL DESCRIPTION OF HEALTH: FROM PHENOTYPICAL STABILITY TO ECOLOGICAL RESILIENCE

A key feature of healthy biological systems is their ability to adapt and respond to environmental and genetic fluctuations while simultaneously maintaining their stability, homeostasis, and resilience. Understanding how this balance between robustness and plasticity is maintained in health and lost in disease is one of the most pressing questions in biology.

In my research, I tackle this question from a systems biology perspective. Specifically, I construct and analyse mechanistic mathematical models of complex biological systems and ask under which conditions health emerges from the system's interactions. Qualitative transitions between healthy and disease states can be interpreted as catastrophic shifts, or bifurcations, of the mathematical model. Using this approach, it has been possible to contribute to understand, prevent, diagnose, and reverse health-to-disease transitions in complex biological systems ranging from individual cells to whole ecosystems.

The time is ripe to critically think about the features of these models from a theoretical perspective. Questions to be addressed include:

(1) What are the shared structural properties of the regulatory networks that maintain homeostasis in biological systems operating at different scales?

(2) Can we define the health of complex biological systems as a trade-off between robustness and plasticity in response to perturbations?

(3) What are the methodological scopes, limitations, and implications of using catastrophe theory to study the health of complex biological systems?

In this project, I will tackle these questions by constructing, validating, analysing, and comparing a set of minimal mathematical models that represent critical bifurcations of complex biological systems operating at three different scales: (1) Cellular-level phenotypical stability; (2) Physiological homeostasis, and (3) the Integrity of an ecological community.

This project will contribute to an integrative and systems-level understanding of health in complex biological systems across different scales and to improve the strategies for the prevention, early detection, and reversal of unwanted catastrophic transitions.

Recommended Reading

Domínguez-Hüttinger, Elisa, Panayiotis Christodoulides, Kosuke Miyauchi, Alan D. Irvine, Mariko Okada-Hatakeyama, Masato Kubo, and Reiko J. Tanaka (2017). “Mathematical Modeling of Atopic Dermatitis Reveals ‘Double-Switch’ Mechanisms Underlying Four Common Disease Phenotypes.” *Journal of Allergy and Clinical Immunology* 139, no. 6: 1861–1872.e7. <https://doi.org/10.1016/j.jaci.2016.10.026>.

Domínguez-Hüttinger, Elisa, Neville J. Boon, Thomas B. Clarke, and Reiko J. Tanaka (March 2017). “Mathematical Modeling of *Streptococcus pneumoniae* Colonization, Invasive Infection and Treatment.” *Frontiers in Physiology* 8: 115. <https://doi.org/10.3389/fphys.2017.00115>.

Álvarez-Buylla Rocas, María Elena, Juan Carlos Martínez-García, José Dávila-Velderrain, Elisa Domínguez-Hüttinger, and Mariana Esther Martínez-Sánchez (2018). *Modeling Methods for Medical Systems Biology: Regulatory Dynamics Underlying the Emergence of Disease Processes*. Cham: Springer.

DIETER EBERT

Permanent Fellow of the Wissenschaftskolleg
Dr. phil., Professor of Zoology and Evolutionary Biology
University of Basel

Born in 1961 in Saarburg, Germany
Studied Biology and Chemistry at the Technische Universität München, the
University of South Alabama, and the University of Basel

EVOLUTION'S UNSUNG HERO: DIFFUSE COEVOLUTION

My research interest is in understanding biological diversity, i.e., the evolution of traits that make organisms look and function differently. In particular, I am interested in how processes of coevolution contribute to this. Here I will focus on the concepts that underlie diffuse coevolution of hosts and parasites. Coevolution is typically defined as reciprocal selection between two closely interacting species. This definition focuses on the phenotypic traits of the coevolving antagonists that negatively influence each other. However, in many cases, it is not one pair of a host and a parasite species that interact and coevolve, but multiple host species and/or multiple parasite species. This was first recognized for flowering plants and their pollinators, where several pollinators (e.g. bees, flies) may interact with several plant species. Coevolution is no longer specific, but diffuse. The same has been observed for hosts and their parasites and may well be the dominant form of coevolution. But it has received hardly any attention from evolutionary biologists.

Population genetic models have greatly helped to elucidate the mechanisms of specific coevolution, but they fail to explain the processes underlying diffuse coevolution. In my project, I want to conceptualize the phenomenon of diffuse coevolution, focussing on hosts and their parasites. In particular, I want to work out:

- Where is the boundary between the parameter space of models for specific and diffuse coevolution?

- Which evolutionary framework is best suited to understand the processes at work during diffuse coevolution?
- And what predictions can be derived from the model of diffuse coevolution?

With my project, I hope to gain a better understanding of how coevolution works and which models can explain genetic- and species-diversity best. I want to explore whether there are general rules determining the underlying processes. Answering these questions would be a major step forward in understanding biodiversity.

Recommended Reading

- Ebert, Dieter (2008). “Host-Parasite Coevolution: Insights from the *Daphnia*-Parasite Model System.” *Current Opinion in Microbiology* 11, no. 3: 290–301. <https://doi.org/10.1016/j.mib.2008.05.012>.
- (2018). “Open Questions: What Are the Genes Underlying Antagonistic Coevolution?” *BMC Biology* 16: 114. <https://doi.org/10.1186/s12915-018-0583-7>.
- Ebert, Dieter, and Peter D. Fields (2020). “Host-Parasite Coevolution and Its Genomic Signature.” *Nature Reviews Genetics* 21: 754–768. <https://doi.org/10.1038/s41576-020-0269-1>.

ADRIAN FAVELL

PhD, Professor of Sociology and Social Theory

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University of Leeds

Born in 1968 in Wellingborough, United Kingdom

Studied Comparative Literature and Philosophy at the University of East

Anglia and Political and Social Sciences at the European University Institute

TOWARDS A NEW POLITICAL DEMOGRAPHY:
RETHINKING IMMIGRATION, INTEGRATION, AND
CITIZENSHIP

The 1990s and early 2000s offered many examples – not least in a European context – of optimistic post-national forms of governance: a world in which national societies would, as a result of regional and global interdependence, start to dismantle the fundamental inequalities between citizens in different countries, rooted in the stratified value of national citizenship. Since the global economic crisis of 2008/9, however, there has been an overwhelming return to realist and critical views of the “neo-liberal” mobilities, transnationalism, and cosmopolitanism of the earlier era. These have stressed the resurgence of sovereignty, borders, popular democracy, and (among conservatives and liberals) the maintenance of national societal integration as the only viable political response to inequality within and between populations. The COVID pandemic, meanwhile, has emphasised that the era of “free movement” and deregulation of the state may be over, as nation-states have reasserted fundamental “governmental” powers over populations in the name of public health. Building on a short textbook, *The Integration Nation: Immigration and Colonial Power in Liberal Democracies*, that will be published by Polity Press in early 2022, my project aims to fully develop a foundational-style treatise in political demography. This will rethink the case for post-national political theory in the light of these trends, as well as the damaging decolonial and anti-capitalist critiques of the European regional

project that have attended the growing crisis in advanced liberal democratic societies. Rejecting linear views of immigration and citizenship, as well as the methodological nationalism of theories of immigrant integration, I will develop a framework considering ongoing examples of transformative transnational migration/mobilities in Europe and other regions, in terms of the rights and claims of non-nationals, aliens, and minority or subaltern populations around the world.

Recommended Reading

Favell, Adrian. *Philosophies of Integration: Immigration and the Idea of Citizenship in France and Britain*. London: Macmillan; New York: St. Martin's Press, 1998.

—. *Eurostars and Eurocities: Free Movement and Mobility in an Integrating Europe*. Oxford: Blackwell, 2008.

Recchi, Ettore, Adrian Favell, Fulya Apaidin, Roxana Barbulescu, Michael Braun, Irina Ciornei, Niall Cunningham, et al. *Everyday Europe: Social Transnationalism in an Unsettled Continent*. Bristol: Policy Press, 2019.

RAGHAVENDRA GADAGKAR

Permanent Fellow of the Wissenschaftskolleg

PhD, DST Year of Science Chair Professor

Centre for Ecological Sciences, Indian Institute of Science, Bangalore

Born in 1953 in Kanpur, India

Studied Zoology and Molecular Biology in Bangalore

CAN WE UNDERSTAND AN INSECT SOCIETY?

I have just completed writing a book titled *Experiments in Animal Behaviour: Cutting-Edge Research at Trifling Cost*. This has been published as an open-access e-book by the Indian Academy of Sciences. I will now return to a longer book project that I had begun some years ago, but had put on hold to write the book on “experiments”. In the longer book, I will attempt to use my research, in collaboration with a large number of students, on the Indian paper wasp *Ropalidia marginata* to pose the question “Can We Understand an Insect Society?” I will describe the questions we have asked, the experiments we have performed, and the answers we have obtained. I will also show how the answer to each question inevitably led to the next set of questions, resulting in an endless cycle of questions and answers. In the end, I will leave it to the reader to decide whether we have indeed understood something of the workings of this interesting insect society. I will also continue to spend about half my time writing my fortnightly column “More Fun Than Fun”, taking the spirit and joy of science to a wider audience.

Recommended Reading

Gadagkar, Raghavendra (2001). *The Social Biology of Ropalidia marginata: Toward Understanding the Evolution of Eusociality*. Cambridge, MA: Harvard University Press.

— (2020 and continuing). “More Fun Than Fun” (column). *The Wire Science*. <https://science.thewire.in/tag/more-fun-than-fun/>.

— (2021). *Experiments in Animal Behaviour: Cutting-Edge Research at Trifling Cost*. Bangalore: Indian Academy of Sciences. E-book. https://www.ias.ac.in/public/Resources/Other_Publications/e-Publications/017/Experiments_in_Animal_Behaviour.pdf?v=1.1.

LUCA GIULIANI

Permanent Fellow des Wissenschaftskollegs
Rektor des Wissenschaftskollegs (2007–2018)
Dr. phil., Prof. emer. für Klassische Archäologie
Humboldt-Universität zu Berlin

Geboren 1950 in Florenz, Italien
Studium der Klassischen Archäologie, Ethnologie und
Italienischen Literaturwissenschaft an der Universität Basel
und an der Ludwig-Maximilians-Universität München

HABEN RÖMISCHE BILDHAUER GRIECHISCHE MEISTERWERKE KOPIERT? EINE TRANSATLANTISCHE KONTROVERSE

Noch vor einer Generation schien in dieser Frage ein weitgehender Konsens zu bestehen, der vor allem auf deutscher Forschungsarbeit des späten 19. Jahrhunderts beruhte. Herausragendes Beispiel dafür sind Adolf Furtwänglers *Meisterwerke der griechischen Plastik* (1893). Unter den überlieferten römischen Statuen hatte Furtwängler Serien von Repliken erkannt und diese als Kopien nach griechischen Vorbildern erklärt. Auf dieser Grundlage unternahm er es, die verlorenen Bronzewecke der großen Bildhauer der griechischen Klassik wiederzugewinnen. Dies bezeichnete er als *Kopienkritik*.

Furtwänglers Kopienkritik ist seit den 1980er-Jahren, vor allem in den USA, einer umfassenden Revision unterzogen worden. Miranda Marvin erhob als Erste den Vorwurf, Furtwängler betrachte römische Statuen als ein transparentes Medium, um durch sie hindurch etwas zu erfassen, was er für griechisch halte. Marvin schlug vor, eben diese Statuen umgekehrt als *römische* Werke ernst zu nehmen: Für die römischen Kunden hätten die Statuen in erster Linie der Ausstattung bestimmter Räume gedient, passend zu deren Funktion; Kunstkennerchaft sei ihnen in aller Regel fremd gewesen. Aber die Kritik an Furtwängler ging noch weiter. So hält etwa Elaine Gazda das Konzept der „römi-

schen Kopie“ für einen modernen (deutschen) Mythos; exakte Kopien habe es in der Antike überhaupt nicht gegeben; unter dieser Voraussetzung erscheint Kopienkritik als eine Pseudomethode, die imaginären Phantomen nachjagt.

Zwischen dem traditionellen Ansatz Furtwänglers und dem der RevisionistInnen, so gegensätzlich sie auch sind, gibt es eine überraschende Gemeinsamkeit: Beide betrachten das Kopieren als eine mechanische Tätigkeit, die nichts mit wahrer Kunst zu tun habe. Genau aus diesem Grund hatte Furtwängler sich kaum für römische Kunst interessiert (weil er die Römer für bloße Kopisten hielt); aus demselben Grund bestreiten wiederum die RevisionistInnen, die sich für eine Aufwertung römischer Kunst stark machen, die Existenz römischer Kopien – es seien nämlich gar keine Kopien, sondern eigenständige Kunstwerke.

Diese Geringschätzung der Kopistentätigkeit erweist sich indessen bei näherem Zusehen als ein typisch neuzeitliches Phänomen, das einem besseren Verständnis der antiken Verhältnisse eher hinderlich ist. Römische Bildhauer haben griechische Meisterwerke nicht einfach kopiert – sie haben das Kopieren überhaupt erst erfunden und zu einer verbreiteten Praxis gemacht. Dabei wurde großer Aufwand getrieben, um eine weitgehende Treue zum Vorbild zu erreichen; zugleich verweisen Kopien aber auch unmissverständlich auf die eigene Virtuosität. Es ist genau diese (zum Teil paradoxe) Kombination aus Selbstverweis und Originaltreue, die den ästhetischen Reiz der Kopien als Gattung ausmacht.

Lektüreempfehlung

Gazda, Elaine, Hg. *The Ancient Art of Emulation: Studies in Artistic Originality and Tradition from the Present to Classical Antiquity*. Ann Arbor: University of Michigan Press, 2002.

Marvin, Miranda. *The Language of the Muses: The Dialogue between Roman and Greek Sculpture*. Los Angeles: J. Paul Getty Museum, 2008.

DIETER GRIMM

Permanent Fellow des Wissenschaftskollegs

Rektor des Wissenschaftskollegs (2001–2007)

Dr. Dr. h.c. mult., LL.M. (Harvard), Professor (em.) des Öffentlichen Rechts

Humboldt-Universität zu Berlin

Bundesverfassungsrichter a. D.

Geboren 1937 in Kassel, Deutschland

Studium der Rechtswissenschaft und Politikwissenschaft in Frankfurt/Main,

Freiburg/Breisgau, Berlin, Paris und Harvard

KANN MAN DIE GESCHICHTE DER BUNDESREPUBLIK OHNE IHRE VERFASSUNGSGESCHICHTE SCHREIBEN?

Mich beschäftigt zurzeit eine merkwürdige Diskrepanz in der Wahrnehmung von Verfassung und Verfassungsgerichtsbarkeit in Deutschland. Während die Verfassungsrechtswissenschaft (und zunehmend auch die Politikwissenschaft) dem Grundgesetz und der Rechtsprechung des Bundesverfassungsgerichts eine bedeutende Rolle für den Zustand und die Entwicklung der Bundesrepublik zuschreibt und Politik und Medien bei jedem Verfassungsjubiläum das Grundgesetz zur besten und segensreichsten Verfassung erklären, die Deutschland je hatte, wird der Verfassung und ihrer Auslegung und Fortentwicklung durch das Bundesverfassungsgericht in den Gesamtdarstellungen zur Geschichte der Bundesrepublik wenig Beachtung geschenkt. Warum ist das so? Überschätzt die Verfassungsrechtswissenschaft die reale Bedeutung der Verfassung oder entgeht der Geschichtswissenschaft ein für ihren Gegenstand wesentlicher Bestimmungsfaktor?

Lektüreempfehlung

Grimm, Dieter. *Constitutionalism: Past, Present, and Future*. Oxford: Oxford University Press, 2016.

EDUARDO HALFON

Writer

Guatemala

Born in 1971 in Guatemala City

Studied Industrial Engineering at North Carolina State University

STORY AND HISTORY

I'm a storyteller. I write stories. And although all of the stories I've written and published over the last twenty years are fiction, they're also strongly rooted in my own personal experience and in my family's history.

My maternal grandfather was a Jew from Poland, from Lodz, who survived the Holocaust. I started to write his story of survival in my novel *Der polnische Boxer* (the German translation was published in 2014, by Hanser), but couldn't truly write about his experience without seeing for myself his hometown of Lodz, his cell in the infamous Block 11 at Auschwitz, and the concentration camp at Sachsenhausen where he was interned for several years. In 2011, I received a Guggenheim Fellowship to continue writing his story. I've since been to Poland, seen his house, lived in his hometown, and walked around some of the concentration camps where he was a prisoner. Thus, I was able to continue writing his story in my subsequent books *Signor Hoffman* (Hanser, 2016) and *Duell* (Hanser, 2019).

I am currently working on the story of my paternal grandfather's kidnapping in 1967 by the Guatemalan guerrilla. And as I follow my grandfather's footsteps in his exodus from Beirut to Guatemala, and then throughout the ordeal of his kidnapping, I inevitably have to enter the long and complicated history of the Guatemalan civil war. My time at the Wissenschaftskolleg zu Berlin will be dedicated to researching and writing these stories.

Recommended Reading

Halfon, Eduardo. *El boxeador polaco*. Valencia: Pre-Textos, 2008. English: *The Polish Boxer*. New York: Bellevue Literary Press, 2012. German: *Der polnische Boxer*. Munich: Hanser, 2014.

—. *Monasterio*. Barcelona: Libros del Asteroide, 2014. English: *Monastery*. New York: Bellevue Literary Press, 2014. German: *Signor Hoffman*. Munich: Hanser, 2016.

—. *Duelo*. Barcelona: Libros del Asteroide, 2017. English: *Mourning*. New York: Bellevue Literary Press, 2018. German: *Duell*. Munich: Hanser, 2019.

MARK E. HAUBER

Ph.D., D.Sc., Harley Jones Van Cleave Professor of Host-Parasite Interactions
University of Illinois at Urbana-Champaign

Born in 1972 in Szolnok, Hungary

Studied Organismal Biology at Yale University and Neurobiology and Behavior
at Cornell University

MATERNAL PHYSIOLOGY, CLUTCH DIVERSITY, AND EGG REJECTION BEHAVIOR IN HOSTS OF AVIAN BROOD PARASITES

My research focuses on the evolution of recognition systems in animal societies, using land- and seabirds to address questions about how individuals recognize themselves, their mates, their young, their prey, and their brood parasites (i.e., species, such as the Cuckoo, that lay their eggs into nests of other bird species). I use comparative and genetic tools, chemical and physical techniques, and perceptual and mathematical modelling to understand how individuals make the decisions that are critical for their survival and reproductive success. For the Wiko project, I will ask questions about how and why birds recognize their own eggs and how and why they reject parasitic eggs from the clutch. I will address these questions through three different approaches. First, I will use online, digital (COVID-accessible) museum-collections to understand how eggs differ vs. are similar in the clutch produced by the same individual female, predicting that hosts of brood parasites have greater clutch uniformity in their nests relative to non-hosts. Second, I will use field data collected by my lab during May–June of 2021 in the USA to address the endocrine basis of egg recognition, predicting that experimentally increased circulating steroid levels in the female are associated with her increased egg rejection patterns. Finally, I will develop a phylogenetically controlled formal meta-analysis to test the prediction that greater maternal investment into clutches, eggs, and their constituents, is associated with higher egg rejection rates across host species.

Recommended Reading

Hauber, Mark E., Stefani A. Russo, and Paul W. Sherman (2001). "A Password for Species Recognition in a Brood-Parasitic Bird." *Proceedings of the Royal Society of London B* 268: 1041–1048. <https://doi.org/10.1098/rspb.2001.1617>.

Hauber, Mark E. (2014). *The Book of Eggs*. Chicago: University of Chicago Press.

Abolins-Abols, Mikus, and Mark E. Hauber (2020). "Endocrine Regulation of Egg Rejection in an Avian Brood Parasite Host." *Biology Letters* 16: 20200225. <https://doi.org/10.1098/rsbl.2020.0225>.

HEIKO HECHT

Dr., Professor für Allgemeine Psychologie
Johannes Gutenberg-Universität Mainz

Born in 1960 in Bremen, Germany

Studied Philosophy and Psychology at Trier University and Psychology at the
University of Virginia

SOCIAL DISTANCING IN THEORY: RELATING PHYSICAL AND PICTORIAL SPACE

From cave drawings to modern paintings or photographs in an art gallery, the observer has been in a stable dual visual relation with the picture: a well-defined relation with the physical picture (the distance between the observer's eye and the canvas can be precisely quantified, as can the size of the canvas), as well as an ill-defined relation with the content of the picture (tenuous distance to the portrayed person or object). The latter has been associated with the notion of a disembodied eye of the observer, which is in a constant relation to the objects seen in the picture. This relation remains stable even if the observer moves relative to the image. In film and other moving images, basically the same twofold relation holds. With the recent advent of virtual reality (VR), in contrast, the observer has acquired a new level of situatedness with respect to pictorial representations. Pictorial space is no longer disembodied, but shows immediate visual, or even acoustic and tactile consequences in response to the observer's movements. Distance to a person depicted in a picture becomes interactive, more definitive, and acquires social meaning. My project seeks to investigate the theoretical implications of the novel relationship between pictorial and physical space in VR contexts. Being visually well-defined is no longer a privilege of the physical world; it now extends to pictorial space, which nonetheless remains unreal. We need a theory of perception of space that explains how well-defined and ill-defined pictorial spaces are related to well-defined physical spaces. I wish to lay the groundwork for such a theory.

Recommended Reading

Hecht, Heiko, Robert Schwartz, and Margaret Atherton, eds. (2003). *Looking into Pictures: An Interdisciplinary Approach to Pictorial Space*. Cambridge, MA: MIT Press.

Hecht, Heiko, and Wolfgang Desnizza (2012). *Psychologie als empirische Wissenschaft: Essentielle wissenschaftstheoretische und historische Grundlagen*. Heidelberg: Springer Spektrum.

Hecht, Heiko, Robin Welsch, Jana Viehoff, and Matthew R. Longo (2019). "The Shape of Personal Space." *Acta Psychologica* 193: 113–122.

THOMAS W. HOLSTEIN

Dr. phil., Professor für Biologie
Universität Heidelberg

Geboren 1953 in Heidelberg, Deutschland
Studium der Biologie an der Universität Wien

DIE ENTSTEHUNG EVOLUTIONÄRER NEUHEITEN – ZUR KAUSALITÄT IM EVOLUTIONSPROZESS

Das geplante Projekt adressiert eine zentrale Frage der Biologie: die nach der Kausalität und den molekularen Mechanismen im Evolutionsprozess. Grundlage der biologischen Evolution sind die Nukleinsäuren (DNS, RNS) und der genetische Code, über den alle Organismen miteinander verbunden sind. Die vergleichende Genomforschung hat die Rolle deterministischer Faktoren für die Ontogenese und Evolution der Organismen deutlich gemacht, sie manifestieren sich vor allem in Struktur und Organisation des Genoms. Gegenstand des Projekts ist eine Standortbestimmung zur Erfassung struktureller genomischer Faktoren im Evolutionsprozess. Ziel ist dabei, molekulare Mechanismen zu identifizieren, welche der zunehmenden morphologischen Komplexität der Organismen zugrunde liegen. Dabei wird auf unsere Arbeiten zur genomischen und zellulären Komplexität früher Metazoen zurückgegriffen, ebenso auf unsere evolutionsbiologischen Arbeiten zur Entstehung der Körperachsen und des zentralen Nervensystems. Ein Fokus wird auf dem Zusammenhang von morphologischer und genomischer Komplexität liegen. Die frühe genomische Komplexität der Metazoen ist ein Paradoxon der Genomevolution, da es keine zunehmende genetische Komplexität gibt (gemessen in der Anzahl der Gene), der die morphologische Komplexität folgte.

Lektüreempfehlung

Holstein, Thomas und Pierre Tardent (1984). „An Ultrahigh-Speed Analysis of Exocytosis: Nematocyst Discharge.“ *Science* 223: 830–833.
<https://doi.org/10.1126/science.6695186>.

Kusserow, Arne, Kevin Pang, Carsten Sturm, Martina Hrouda, Jan Lentfer, Heiko A. Schmidt, Ulrich Technau et al. (2005). „Unexpected Complexity of the *Wnt* Gene Family in a Sea Anemone.“ *Nature* 433: 156–160.
<https://doi.org/10.1038/nature03158>.

Watanabe, Hiroshi, Heiko A. Schmidt, Anne Kuhn, Stefanie K. Höger, Yigit Kocagöz, Nico Laumann-Lipp, Suat Özbek und Thomas W. Holstein (2014). „Nodal Signalling Determines Biradial Asymmetry in Hydra.“ *Nature* 515: 112–115. <https://doi.org/10.1038/nature13666>.

EVA HORN

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Universität Wien

Geboren 1965 in Frankfurt/Main, Deutschland
Studium der Allgemeinen Literaturwissenschaft, Romanistik, Germanistik und
Philosophie in Bielefeld, Konstanz und Paris

LUFT: EINE KULTURTHEORIE DES KLIMAS

Die aktuelle Sorge um den Klimawandel stützt sich auf einen Begriff von Klima als globalem, statistischem Durchschnitt von Witterung. Dieses abstrakt gefasste Klima muss um die Geschichte eines Wissens vom Klima ergänzt werden, das dieses als unmittelbar spürbar und höchst wirksam für Körper, Seelen, Kulturen und Gesellschaften gedacht hat. Klima und Witterungen waren einst intensiv mit Landschaften, Lebensformen, Gefühlen, Stimmungen, Zeiterfahrungen, sozialen Institutionen oder kulturellen Praktiken verbunden. Meine Studie zielt auf eine Kulturtheorie und Geschichte eines erfahrbaren „Im-Klima-Seins“. Dabei geht es weniger um die Frage, was Klima ist, sondern was es bewirkt. Welche Effekte auf den Körper und Geist von Individuen wurden der Luft, den Witterungen, den klimatischen Bedingungen eines Orts zugeschrieben? Wie wurde ein Zusammenhang zwischen Lebensformen, Gesellschaften und Umwelt hergestellt? Welchen Rhythmus geben die Jahreszeiten dem menschlichen Leben? Wie wurden Veränderungen des Klimas beobachtet, dargestellt und gedeutet?

Das geplante Buch konzentriert sich auf die europäische Kultur- und Wissensgeschichte, jedoch mit Ausblicken auf außereuropäische Schauplätze. Literatur spielt dabei eine besonders wichtige Rolle, weil sie in Form von Stimmungen und Atmosphären Dimensionen einer Klimaerfahrung aufbewahrt hat, die heute verschwunden ist. Ziel meiner Studie ist es, Klima als kulturelles Phänomen wieder verständlich zu machen und ihm damit auch ein anderes gesellschaftliches Gewicht zu verleihen.

Lektüreempfehlung

Horn, Eva. „Air as Medium.“ *Grey Room*, no. 73 (Fall 2018): 6–25.
https://doi.org/10.1162/grey_a_00254.

—. *Zukunft als Katastrophe*. Frankfurt/Main: S. Fischer, 2014. Englisch: *The Future as Catastrophe*. New York: Columbia University Press, 2018.

Horn, Eva und Hannes Bergthaller. *The Anthropocene: Key Issues for the Humanities*. Oxford und New York: Routledge, 2020.

SZABOLCS HORVÁT

from September 2021 to February 2022

Fellow of the College for Life Sciences

Ph.D., Physics

Center for Systems Biology, Dresden

Max Planck Institute of Molecular Cell Biology and Genetics, Dresden

Born in 1983 in Sf. Gheorghe, Romania

Studied Theoretical Physics at Babeş-Bolyai University

A SOLID FOUNDATION FOR SPATIAL NETWORK ANALYSIS

Many natural and man-made systems possess a connectivity structure that shapes their behaviour in significant ways. An example that is especially pertinent today is the web of interpersonal contacts through which infections can spread. To understand the progression of an epidemic, it is not sufficient to consider how many contacts each individual has: where those contacts are within the network can make a dramatic difference in how fast the disease will spread. This is the premise of the young field of network science: structure influences function. The main question it seeks to answer is: in a given system, what is the relationship between the two? To take an example from biology, it is believed that the “programming” of the brain is encoded in the interconnections of its neurons. Therefore, the first step towards understanding how the brain processes information – one of the great scientific questions for the 21st century – is to describe the organization of its connectivity. Network science has developed many different quantitative tools to characterize networks. However, whenever a network’s nodes exist in physical space, only nearby nodes tend to be connected, which puts a strong constraint on the possible network structures. My research project concerns specifically the analysis of such spatial networks, with a view to biological applications. Spatially embedded networks appear particularly frequently in biology, whether we consider vascular networks in animals and

plants, structures with a mechanical function like bone canaliculi, or the complex interconnections of neurons. In all these cases, classical network analysis techniques tend to produce uninformative results, revealing nothing more than trivial geometrical features. I aim to develop a robust mathematical toolset tailored to spatial networks that will enable the analysis and comparison of biological datasets by separating true network effects from simple spatial ones.

Recommended Reading

- Horvát, Szabolcs, Éva Czabarka, and Zoltán Toroczkai (2015). “Reducing Degeneracy in Maximum Entropy Models of Networks.” *Physical Review Letters* 114: 158701. <https://doi.org/10.1103/PhysRevLett.114.158701>.
- Horvát, Szabolcs, Răzvan Gămănuț, Mária Ercsey-Ravasz, Loïc Magrou, Bianca Gămănuț, David C. Van Essen, Andreas Burkhalter, Kenneth Knoblauch, Zoltán Toroczkai, and Henry Kennedy (2016). “Spatial Embedding and Wiring Cost Constrain the Functional Layout of the Cortical Network of Rodents and Primates.” *PLoS Biology* 14, no. 7: e1002512. <https://doi.org/10.1371/journal.pbio.1002512>.
- Horvát, Szabolcs, and Carl D. Modes (2021). “Connectedness Matters: Construction and Exact Random Sampling of Connected Networks.” *Journal of Physics: Complexity* 2, no. 1: 015008. <https://doi.org/10.1088/2632-072X/abcd5>.

LAURENCE D. HURST
from October 2021 to January 2022
DPhil, Professor of Evolutionary Genetics
University of Bath

Born in 1965 in Ilkley, United Kingdom
Studied Zoology at the University of Cambridge and the University of Oxford

THE EVOLUTION OF IMPERFECTION: GENE AND GENOME EVOLUTION AS A WINDOW INTO NON- DARWINIAN EVOLUTION

Why aren't organisms perfect? Does imperfection explain unexpected selection on otherwise innocuous mutations and does imperfection predispose to the evolution of novelty? Natural selection as envisaged by Darwin was a force that eliminates harmful mutations from populations while promoting the spread of advantageous ones. As such, we expect organisms to evolve towards and to maintain perfection. The human genome, however, appears to be anything but perfect. Very little of our DNA (about 1.4%) codes for proteins and less than 10% appears to be under selection to have some function conserved. Instead, we see that we have big spans of sequence between our genes and our genes are mostly sequence that is removed during the gene processing steps. Indeed, much more of our DNA is the dead and decaying remains of old infectious agents (such as viruses and other mobile elements) than is under selection. The same cannot be said of all organisms. The laboratory yeast, for example, has very little sequence that isn't under selection, its genome is compact. Why then is our genome "bloated" while other genomes seem to be tidy and lithe? My research uses these issues to address the bigger problem of the evolution of imperfection more generally. I also ask whether genome bloating causes its own problems, forcing novel modes of selection. Conversely, I also ask whether a bloated genome provides the context for the evolution of novelty in the form of new or co-opted genes. These problems address fundamental questions about evolution,

but in addition have direct medical relevance, both for diagnostics and therapeutics, including vaccine design.

Recommended Reading

Papp, Balázs, Csaba Pal, and Laurence D. Hurst (2003). “Dosage Sensitivity and the Evolution of Gene Families in Yeast.” *Nature* 424: 194–197.

<https://doi.org/10.1038/nature01771>.

Chamary, J.-V., Joanna L. Parmley, and Laurence D. Hurst (2006). “Hearing Silence: Non-Neutral Evolution at Synonymous Sites in Mammals.” *Nature Reviews Genetics* 7: 98–108.

<https://doi.org/10.1038/nrg1770>.

Wang, Jichang, Gangcai Xie, Manvendra Singh, Avazeh T. Ghanbarian, Tamás Raskó, Attila Szvetnik, Huiqiang Cai, et al. (2014). “Primate-Specific Endogenous Retrovirus-Driven Transcription Defines Naive-like Stem Cells.”

Nature 516: 405–409. <https://doi.org/10.1038/nature13804>.

NKATHA KABIRA
from April to June 2022
Iso Lomso Fellow
S.J.D., Senior Lecturer of Law
University of Nairobi

Born in 1982 in Nairobi
Studied Law at Harvard Law School

THE FUTURE OF LAW IN AFRICA: HOW COMMISSIONS ARE CHALLENGING LAW'S RIGIDITY

Like many other governments throughout the world, African governments are famous for establishing commissions to deal with stormy matters of public importance. The issues include women's rights, ethnic violence, land ownership, boundary disputes, education policy, public health, food security, regulation of labor relations, corruption in government, national and social cohesion, constitution making, and unlawful killings – all matters that touch upon every area of our socio-political, economic, and legal existence. Critics often warn that the establishment of a commission is usually an indication that the government has no intention of doing anything about the problem. Indeed, commissions are often criticized for buying time, burying issues, and being a waste of time and resources. Despite these criticisms, recent trends show that the African governments continue to use commissions and that their use is in fact escalating. What is it about commissions that makes African governments continue to use them despite all these criticisms? Have commissions as they are used in Africa remained true to their roots? How have commissions behaved in their encounter with African socio-political contexts? This project examines how commissions became technologies of rule and governance to regulate and manage diverse tensions in Africa. We take up the Law of Commissions in Africa as a body of law to reflect on how the laws produced by commissions are challenging conventional “rigid” narratives about law by creating, deploying, and developing their

own modes of legal and social thought and exercising, managing, institutionalizing and professionalizing power. I argue that commissions in Africa break down the boundaries of the law, illuminate law's rigidity, and challenge conventional understandings of law and what it constitutes in Africa. The future of law in Africa lies in unpacking, understanding, and unraveling the law of commissions.

Recommended Reading

Kabira, Nkatha. "Constitutionalizing Travelling Feminisms in Kenya." *Cornell International Law Journal* 52, no. 1 (Spring 2019): 137–169.

Kabira, Nkatha, and Patricia Kameri-Mbote. "Woman of Law: Women's Triumph in Kenya's Constitution of Kenya 2010." In *Changing the Mainstream: Celebrating Women's Resilience*, co-edited with Wanjiku Mukabi Kabira, Patricia Kameri-Mbote, and Agnes Meroka, 31–48. African Women Studies Center, University of Nairobi, 2018.

Kabira, Nkatha, and Wanjiku Mukabi Kabira. "Okoth the Dream Keeper: Breaking Down the Boundaries of Law." In *The Gallant Academic: Essays in Honour of HWO Okoth Ogendo*, edited by Patricia Kameri-Mbote and Collins Odote, 205–220. School of Law, University of Nairobi, 2017.

ILYA KALININ

Dr., Associate Professor of Literary Studies
Saint Petersburg State University

Born in 1975 in Leningrad (Saint Petersburg)
Studied Literary Studies at Saint Petersburg State University

RUSSIAN CULTURE AS A PUBLIC GOOD, PRIVATE PROPERTY, NATIONAL VALUE, AND STATE RESOURCE

The core of my project is an attempt to discover a structural homology between the working mechanisms of the material and symbolic economies of contemporary Russia. In other words, I aim to demonstrate the links between economic activity dependent on natural resources and forms of cultural life, emphasizing a beneficial dependence on the historical past, national traditions, spiritual well-springs, and victorious ancestors.

The project comprises analytical work on a number of distinct levels of description.

1) The symbolic level, responsible for the transfer of ideas about the material economy to the sphere of the production of cultural values: as a result, concepts about natural resources (nonrenewable and limited) are transferred to the cultural field, which begins to be understood as also a productive system based on competition for limited resources. In the case in question, the historical past and national tradition begin to be regarded as limited resources, subject to a zero-sum conflict.

2) The institutional level, consisting of the infrastructure of agents on various levels (state, social, private) that seek to monopolize the sphere of cultural production, minimizing access to cultural values (understood as a limited resource) for any who are not willing to reproduce the given national-patriotic hegemony. As a result of this institutional landscape, property relations are systematically projected into culture: from the status of a civic public good, culture is trans-

formed into a resource for state and national construction or into property, privatized by the state or by businesses with close relations to the state.

3) The axiological level constitutes the more profound level of analytical description, corresponding to a comprehension of culture not as a space for free work with values that belong to all (to civil society), but rather as the sphere of the formation of the normative identity of the national collectivity, whose resilience determines state security. Here once again we confront the conceptual framework described above, according to which culture does not constitute an open-ended multiplicity of practices of exchange among individual subjects, but rather a closed sphere of assignment and reassignment, controlled by an external instance of some sort. This is the logic not of capital (that is, of independently increasing value), but rather of resources (that is, of a limited quantity).

Recommended Reading

Kalinin, Ilya. "Petropoetics: The Oil Text in Post-Soviet Russia." In *Russian Literature Since 1991*, edited by Evgeny Dobrenko and Mark Lipovetzky, 120–144. Cambridge: Cambridge University Press, 2015.

—. "Why 'Two Russias' Are Less than 'United Russia': Cultural Distinctions and Political Similarities: Dialectics of Defeat." In *Cultural Forms of Protest in Russia*, edited by Birgit Beumers, Alexander Etkind, Olga Gurova, and Sanna Turoma, 48–67. London: Routledge, 2017.

—. "Antirevolutionäre Revolutionserinnerungspolitik: Russlands Regime und der Geist der Revolution." *Osteuropa* 67, no. 6–8 (2017): 7–17.

ILYA KLIGER

Ph.D., Associate Professor of Russian and Slavic Studies
New York University

Born in 1973 in Moscow
Studied European Intellectual History at Cornell University and
Comparative Literature at Yale University

MAKING THE STATE VISIBLE: THE POETICS AND POLITICS OF RUSSIAN REALISM

The task of this book-length project is to present 19th-century Russian realist fiction as a challenge to the prevalent critical assumptions – developed predominantly with reference to the British and French novelistic traditions – about the formal and ideological constitution of the modern novel. Specifically, while much of the existing theoretical work on the novel assumes that it owes its basic social-imaginary architecture to its involvement in the institutions, practices, and ideologemes of bourgeois civil society, I will ask what happens to the novel form (and to realist fiction more broadly) when its fundamental socio-historical orientation is, as in the Russian case, toward the political authority of the state. Given its central problematic, the project draws on three distinct theoretical paradigms: work in political theory pertaining to the concepts of sovereignty and representational scenarios of power; recent socio-politically inflected theory of the novel; and Historical Poetics, which includes, but is not limited to, the field of “world literature studies” as a paradigm of inquiry into the historical, geo-cultural and geopolitical circulation of literary forms. Relying on these critical traditions, I propose a political poetics of Russian realist fiction based on a broad range of texts from the 1830s–’70s.

Recommended Reading

- Kliger, Ilya. "Hegel's Political Philosophy and the Social Imaginary of Early Russian Realism." *Studies in East European Thought* 65, no. 3–4 (2013): 189–199. <https://doi.org/10.1007/s11212-014-9188-z>.
- . "Historical Poetics between Russia and the West: Toward a Nonlinear Model of Literary History and Social Ontology." *Poetics Today* 38, no. 3 (2017): 453–483. <https://doi.org/10.1215/03335372-4166659>.
- . "Scenarios of Power in Turgenev's *First Love*: Russian Realism and the Allegory of the State." *Comparative Literature* 70, no. 1 (2018): 25–45. <https://doi.org/10.1215/00104124-4344056>.

BRITT KOSKELLA

Ph.D., Associate Professor of Integrative Biology
University of California, Berkeley

Born in 1980 in Stuttgart, Germany

Studied Biology at the University of Virginia and Ecology and Evolution at
Indiana University

ADAPTATION OF MICROBIAL COMMUNITIES: WHEN SOME OF THE PARTS RELY ON THE SUM OF THE PARTS

Microbiomes (the microorganisms living in/on eukaryotes) critically shape the evolution, ecology, and disease epidemiology of host populations, influencing everything from disease susceptibility, to metabolism and growth, to an organism's ability to adapt to human-mediated change. The advent of "next-generation" sequencing has offered unprecedented insight into the complex and dynamic nature of microbiomes, but we still understand little of how these diverse, multi-kingdom communities function. Much like actors in a play, protists, bacteria, fungi, and viruses all interact in ways that can benefit themselves directly, but also benefit other members of their community, including the host. In this way natural selection, which we typically think of as acting on individual organisms, can act on the level of the "holobiont" (the host and its microbiome). For such selection to result in (co)evolution (whereby each species influences the evolution of the other via imposed reciprocal selection pressure), host-microbiome associations must remain relatively stable over time, and there is to date very limited evidence that this is the case. During my fellowship, I plan to synthesize the history of multi-level selection in evolutionary theory and to use this synthesis to bring together recent data from across systems with the goal of identifying when and how we might predict selection on host-microbiome interactions to result in (co)evolutionary change.

Recommended Reading

Koskella, Britt, Lindsay J. Hall, and C. Jessica E. Metcalf (2017). “The Microbiome beyond the Horizon of Ecological and Evolutionary Theory.” *Nature Ecology & Evolution* 1, no 11: 1606–1615. <https://doi.org/10.1038/s41559-017-0340-2>.

Koskella, Britt, and Joy Bergelson (2020). “The Study of Host–Microbiome (Co)Evolution across Levels of Selection.” *Philosophical Transactions of the Royal Society B* 375, no. 1808: 20190604. <https://doi.org/10.1098/rstb.2019.0604>.

Morella, Norma M., Francis Chen-Hsuan Weng, Pierre M. Joubert, C. Jessica E. Metcalf, Steven Lindow, and Britt Koskella (2020). “Successive Passaging of a Plant-Associated Microbiome Reveals Robust Habitat and Host Genotype-Dependent Selection.” *Proceedings of the National Academy of Sciences* 117, no. 2: 1148–1159. <https://doi.org/10.1073/pnas.1908600116>.

HANNAH LANDECKER

Ph.D., Professor of Sociology, and Society and Genetics
University of California, Los Angeles

Born in 1969 in Sydney, Australia

Studied Cell and Developmental Biology at the University of British Columbia
and Science, Technology, and Society at the Massachusetts Institute of
Technology

THE BIOLOGY OF HISTORY: LIFE AFTER INDUSTRIALIZATION, FROM ANTIMICROBIALS TO METABOLISM

This project seeks to understand how human technologies are changing the biological world, to the extent that we can speak of an anthropogenic biology – evolutionary, physiological, and behavioral shifts on a large scale, shaped by human activities from antibiotic use to light at night. Much like anthropogenic geological shifts such as human-mediated climate change, the ability to measure and conceptualize human sociotechnical activity as genetic, physiological, ecological, and evolutionary change across diverse life forms confounds some traditional understandings of the separate domains of the natural and social sciences. Historians of science are more used to tracing shifts in concepts and instrumentation and the social context of science than they are adept at understanding how the very matter in the petri dishes and microscopes and clinical subjects is undergoing historical transformation. Can historians of biology, in conversation with the natural sciences, also engage the material changes in the living world driven by techno-scientific activity? Drawing on in-depth exploration of examples such as antimicrobial resistance, this project explores and proposes a new genre to complement and complicate the history of biology: the biology of history. Antimicrobial resistance is a good example to work with, because the industrialization of microbial metabolism in the production of antibiotics and the synthetic chemistry of disinfectants has profoundly changed the selective environment in which

microbes live. Events such as armed conflict and worldwide viral pandemics drive the mass deployment of these forces in microbial survival and adaptation and can be seen in genetic and phenotypic shifts in cells and populations. Such examples also raise the larger questions of science and society that this project grapples with: what happens to scientific inquiry, once the object of study is no longer Nature, but nature-after-industrialization? What legacies do techno-scientific concepts leave via the matter that future researchers study?

Recommended Reading

Landecker, Hannah. "Antibiotic Resistance and the Biology of History." *Body and Society* 22, no. 4 (2016): 19–52. <https://doi.org/10.1177/1357034X14561341>.

—. "Antimicrobials Before Antibiotics: War, Peace, and Disinfectants." *Palgrave Communications* 5 (2019): 45. <https://doi.org/10.1057/s41599-019-0251-8>.

—. "A Metabolic History of Manufacturing Waste: Food Commodities and Their Outsides." *Food, Culture and Society* 22, no. 5 (2019): 530–547. <https://doi.org/10.1080/15528014.2019.1638110>.

SABINA LEONELLI

PhD, Professor of Philosophy and History of Science
University of Exeter

Born in 1979 in Modena, Italy

Studied History, Philosophy, and Social Studies of Science at the University
College London, Philosophy and History of Science at the London School of
Economics and Political Science, and Philosophy of Science at Vrije Universiteit
Amsterdam

EXCELLENCE AND DIVERSITY IN GLOBAL SCIENTIFIC PRACTICE

Science is a global phenomenon, with research sites located around the world across highly diverse cultural, technological, and institutional settings. Communication and exchange across these sites is crucial to tackling transnational and cross-cultural challenges, and yet it remains unclear how the diverse characteristics of research environments affect how scientific knowledge produced in them is communicated, evaluated, and used. Philosophers have long discussed the role of theories and models in the creation of scientific knowledge and the significance of nurturing a diversity of theoretical perspectives, styles of reasoning, and ways of doing within the sciences. There is also a growing historical and social scientific literature on how diversity in research environments – defined as the equipment, material resources, and infrastructures available to researchers – affects research practices and thus the content of the knowledge being produced. However, little has been written on the relation between such diversity and the understanding of good science that underpins the many research practices and related institutional expectations. What constitutes good science in different research contexts? What types of knowledge are created by research environments with different characteristics? Should there be global standards for best practice given such diversity, and what would they look like? I plan to address these questions through a historically and ethnographically informed philosophical

account of the relation between types and understandings of research environments, the outputs generated in them, and the criteria and procedures by which such outputs are circulated, evaluated, and legitimised. My aim is a broad theorisation of what counts as “best research practice” within globalised networks linking diverse environments, building on my ongoing research on: (1) the philosophy, history, and social studies of data-intensive and open science; (2) the epistemology and history of experimental practices and organisms; and (3) the transnational political economy in which research systems are embedded and its effects on knowledge production and assessment.

Recommended Reading

Leonelli, Sabina. *Data-Centric Biology: A Philosophical Study*. Chicago: Chicago University Press, 2016.

Ankeny, Rachel A., and Sabina Leonelli. *Model Organisms*. Elements in the Philosophy of Biology. Cambridge: Cambridge University Press, 2020.
<https://doi.org/10.1017/9781108593014>.

Leonelli, Sabina. “Data Science in Times of Pan(dem)ic.” *Harvard Data Science Review* 3, no. 1 (Winter 2021). <https://doi.org/10.1162/99608f92.fbb1bdd6>.

WOLF LEPENIES

Permanent Fellow (em.) des Wissenschaftskollegs
Rektor des Wissenschaftskollegs (1986–2001)
Dr. Dr. h.c. mult., Professor (em.) der Soziologie
Freie Universität Berlin

Geboren 1941 in Deuthen, heute Polen
Studium der Soziologie, Philosophie und Publizistik
in München, Münster und Berlin

DAS DEUTSCH-FRANZÖSISCHE VERHÄLTNIS IM PROZESS DER EUROPÄISCHEN INTEGRATION

Das Barcelona Center for Foreign Affairs (CIDOB) hat europäische Politiker und Wissenschaftler eingeladen, an einem Projekt mitzuwirken, das die Rolle Deutschlands im Prozess der europäischen Integration untersuchen soll: *Pax Germanica? The Rise and Limits of German Hegemony in European Integration*. An diesem Projekt, das 2022 abgeschlossen sein soll, werde ich mich mit einem Rück- wie Ausblick auf die deutsch-französischen Beziehungen beteiligen, der über den engeren politischen Rahmen hinaus die Geschichte der Kulturkontakte und -konflikte zwischen beiden Ländern miteinbezieht.

Lektüreempfehlung

Lepenies, Wolf. *Kultur und Politik: Deutsche Geschichten*. München: Hanser, 2006.

—. *Die Macht am Mittelmeer: Französische Träume von einem anderen Europa*. München: Hanser, 2016.

LIZA LIM

Ph.D., Professor of Composition

Sculthorpe Chair of Australian Music

Sydney Conservatorium of Music, University of Sydney

Born in 1966 in Perth, Australia

Studied Music at the University of Queensland

POST-HUMAN SONGS FOR THE ANTHROPOCENE

My compositional practice focuses on transcultural ideas and collaborative methods invested in the distributed and emergent nature of knowledge and “making.” I will work closely with a number of exceptional performers, including violinist Karin Hellqvist, contraforte player Lorelei Dowling, and Berlin-based pianists Tamara Stefanovich and Kirill Gerstein, composing both solo and large-scale works (Piano Concerto for the Orchestre Philharmonique du Luxembourg, Donaueschinger Musiktage 2021 as well as “Fatimah – Jubilation of Flowers,” the third part of my Annunciation Triptych for WDR Sinfonieorchester, Acht Brücken Festival 2022). I prioritise embodied knowledges and am developing notions of the “lyric,” of “contact noise” and “respiration” for an *écriture féminine* (Cixous) that writes on, with, and through bodies in order to speculate on music’s connections to ecological thinking and more-than-human agencies.

I will also look at the important role of artistic research during a time when the complexities of climate emergencies, global pandemics, and other forms of collapse create cognitive and emotional loads that leave us grasping for new stories to navigate our entanglement with what Anna Tsing and others have dubbed “ghosts and monsters” (Tsing, Swanson, Gan, Bubandt, 2017). I’m intrigued by the ways the stories one tells are ways of knowing that organise the world; the form of an analysis is already an epistemological structure; the beliefs one holds already make their own rules; and so on. Hence, in terms of compositional practice and writing texts, the two parts of my project are speculative

attempts to think with and through music to find new ways of “telling,” exploring juxtapositions of material realities, sounds, ideas, and stories that are cultural attempts to respond to the challenges of the Anthropocene.

Recommended Reading

Lim, Liza. “An Ecology of Time Traces in *Extinction Events and Dawn Chorus*.” *Contemporary Music Review* 39, no. 5 (2020): 544–563.
<https://doi.org/10.1080/07494467.2020.1852800>.

Recommended Listening

Lim, Liza. “Ash – Music for the Eremozoic” (2020), for saxophone quartet.
YouTube video. Posted by Sigma Project Quartet, March 18, 2021.
https://www.youtube.com/watch?v=_6EmrHIzp3Y.

—. *Extinction Events and Dawn Chorus*. Sophie Schafleitner, Lorelei Dowling, Klangforum Wien, Peter Rundel, Stefan Asbury. KAIROS 0015020KAI, 2020, compact disc.

ANNA MARMODORO
PhD, Professor of Philosophy
University of Durham

Born in 1975 in Brescia, Italy
Studied Philosophy at the University of Pisa and the University of Edinburgh

CROSSING ONTOLOGICAL CATEGORIES: ANCIENT ANSWERS TO TIMELESS QUESTIONS

Try to conceptualise two objects that resemble one another with respect to e.g. shape, but share nothing in common. How do they differ from two objects that *do not* resemble each other shape-wise? The (thus far, insurmountable) difficulty of providing an answer to this question indicates that either qualitative resemblance is to be treated as a brute fact, without explanation (which is unsatisfactory), or something has to be added to the ontology that resembling objects share. Metaphysicians who do not take resemblance to be primitive appeal to a *sui generis* type of entity, *properties*, to explain resemblance between objects. But if *resemblance* is explained by the *recurrence* of a property “in” different objects, now it is recurrence that needs to be explained. We know how objects are in the world: non-recurrently, i.e. occupying distinct spatiotemporal locations. But how are properties in the world? The mainstream stance among philosophers, of antiquity and of our time, is that properties are in the world somehow on account of the objects *of which* they are properties. But how is a property that is *of many* object(s) in the world?

The ancients did not think that qualitative resemblance was metaphysically primitive. So these questions arose for them, first. Accounting for resemblance became one of their greatest metaphysical challenges. My main goal during my stay at the Wissenschaftskolleg will be to write a short monograph about how the challenge arose in the work of some of the most influential metaphysicians of antiquity – Anaxagoras, Plato, and Aristotle – and how they addressed it, pio-

neering ideas and conceptual space that their successors have continued to explore to the present day.

Further, we now believe that *causation* presupposes resemblance. Since Aristotle, we understand resemblance in terms of categories of being, and believe that items that belong to different ontological categories, and so do not resemble one another, cannot relate and interact causally (which is at the root of the mind-body problem). Rather, we hold, with Aristotle, that causal interaction takes place between items of the same genus. However, Plato came before Aristotle, and did not think of causation in terms of sameness of genera. Do Plato's pre-categorical intuitions about *causation* and *resemblance* "emancipate" our own Aristotelian understanding of them? During my stay at the Wissenschaftskolleg, I want to combine writing the aforementioned monograph with a more blue-sky line of research, investigating the philosophical origins of the requirement that gave birth to many of today's philosophical problems (including the mind-body one), that only items within the same ontological category can interact causally.

Recommended Reading

Marmodoro, Anna. *Aristotle on Perceiving Objects*. New York: Oxford University Press, 2014.

—. *Everything in Everything: Anaxagoras's Metaphysics*. New York: Oxford University Press, 2017.

Marmodoro, Anna, and Erasmus Mayr. *Metaphysics: An Introduction to Contemporary Debates and Their History*. New York: Oxford University Press, 2019.

C. JESSICA E. METCALF

PhD, Associate Professor of Ecology, Evolution, and Public Affairs
Princeton University

Born in 1978 in Oxford, United Kingdom
Studied Biology at Oxford University and at Imperial College London

FROM THE EVOLUTIONARY ROOTS OF SEX
DIFFERENCES TO THE CONTEMPORARY
LANDSCAPE OF HEALTH

Male and female health is different, but just how much more vulnerable older males were in the SARS-CoV-2 pandemic may have come as a surprise. Sex differences in health, rooted in our biology and evolutionary history, combined with the effects of gender, have implications that span from our individual well-being to global health. A balance of the immune and resource requirements associated with competing and with caring for young will have forged the evolution of sex differences in immune system function in mammals. The field of immunology is rapidly expanding in scope and scale, with ever more detailed characterization both of processes of protection against infection or cancers and of the harm inflicted by the immune system itself (the immune system is quite a dangerous line of defence). The more we learn about the mechanisms underpinning immune function, the better equipped we are to understand the trajectory of the evolution of immunity and current facets of differences in health. In turn, this readies us to better meet the different treatment needs of different individuals and to understand how these differences intersect with and refract the shifting demographic and epidemiological global context.

Recommended Reading

Metcalf, C. Jessica E., and Andrea L. Graham (2018). “Schedule and Magnitude of Reproductive Investment under Immune Trade-Offs Explains Sex Differences in Immunity.” *Nature Communications* 9: 4391.
<https://doi.org/10.1038/s41467-018-06793-y>.

Metcalf, C. Jessica E., Dylan H. Morris, and Sang Woo Park (2020). “Mathematical Models to Guide Pandemic Response.” *Science* 369: 368–369.
<https://doi.org/10.1126/science.abd1668>.

Mina, Michael J., C. Jessica E. Metcalf, Adrian B. McDermott, Daniel C. Douek, Jeremy Farrar, and Bryan T. Grenfell (2020). “A Global Immunological Observatory to Meet a Time of Pandemics.” *eLife* 9: e58989.
<https://doi.org/10.7554/eLife.58989>.

SANYU A. MOJOLA

Ph.D., Professor of Sociology and Public Affairs
Director, Office of Population Research
Princeton University

Born in 1979 in Nairobi

Studied Psychology and Sociology at the University of Durham and
Sociology at the University of Chicago

RACE, HEALTH, AND INEQUALITY: PRODUCING AN EPIDEMIC IN THE SHADOW OF THE CAPITOL

This book project uses the case of Washington, D.C. to examine the socio-historical production of racial health disparities in the United States. The capital city has had some of the worst epidemic rates in the nation over the last 120 years, including infant mortality, drug addiction, homicide, and HIV. In each case, African-Americans have been disproportionately affected. I focus primarily on the HIV epidemic and draw on a combination of life-history interviews and secondary data including survey trends and archival material. I situate the lives and HIV outcomes of my respondents within the larger historical, political, and social context of the city, examining historical disease epidemics and racial, spatial, and class segregation (Ch. 2); gendered sexual dynamics, networks, and politics (Ch. 3); overlapping drug epidemics (Ch. 4); mass incarceration (Ch. 5); living and aging with HIV (Ch. 6); and finally, the city's public health interventions and national politics (Ch. 7). In the epilogue, I consider the implications for the city's COVID-19 epidemic.

Recommended Reading

Mojola, Sanyu A. "Fishing in Dangerous Waters: Ecology, Gender, and Economy in HIV Risk." *Social Science and Medicine* 72, no. 2 (2011): 149–156.
<https://doi.org/10.1016/j.socscimed.2010.11.006>.

—. *Love, Money, and HIV: Becoming a Modern African Woman in the Age of AIDS*. Oakland: University of California Press, 2014.

—. Mojola, Sanyu A., Nicole Angotti, Danielle Denardo, Enid Schatz, and F. Xavier Gómez Olivé. "The End of AIDS? HIV and the New Landscape of Illness in Rural South Africa." *Global Public Health* (2020).
<https://doi.org/10.1080/17441692.2020.1851743>.

FRANCO MORETTI

Permanent Fellow of the Wissenschaftskolleg
Professor (emer.) of English and Comparative Literature
Stanford University

Born in 1950 in Sondrio, Italy
Studied Modern Literatures at the University of Rome

FALSE MOVEMENT

My project next year will consist in completing a collection of essays that will try to cast a retrospective glance at twenty-five years of quantitative literary research. Some of the studies contain original research – on the operationalization of Aby Warburg’s *Pathosformel*, the simulations of dramatic networks, or the lost bestsellers of nineteenth-century Britain – but the main thread is an (often self-critical) reflection on what the quantitative approach has and has not achieved so far. Neither a success story nor a recantation, the collection’s working title is *Qualcosa*: “something,” “etwas.” The new approach *has* reached some interesting results, but most certainly not all that seemed possible at first – and, often, in different fields from those that seemed more likely. Maybe the title will change and become *False movement*, in homage to Wim Wenders’ great remake of Goethe’s *Wilhelm Meister*.

The final phase of the work, which should cover more or less the entire academic year, will focus on the conceptual issues that have arisen in the course of my empirical research, such as the implicit (and usually wrong) assumptions that guide the visualization of cultural data, the relationship between measurement and hermeneutics, and the disparate explanatory roles of anomalies, norms, and extreme cases. Much of the work addresses the epistemology of the humanities, the social sciences, and the natural sciences – and the possibility (or not) of bringing them together within a single framework. To pursue such a project, I can think of no place that would be better than the Wissenschaftskolleg.

Recommended Reading

Moretti, Franco. *Distant Reading*. London: Verso, 2013.

—. “The Roads to Rome: Literary Studies, Hermeneutics, Quantification.” *New Left Review*, no. 124 (July–August 2020): 125–136.

—. “Simulating Dramatic Networks: Morphology, History, Literary Study.” *Journal of World Literature* 6, no. 1 (2020): 24–44.

ANTHONY OSSA-RICHARDSON

PhD, Lecturer in English Literature

University College London

Born in 1981 in London

Studied Philosophy at Bristol University, English Literature at the University of York, and Intellectual History at the Warburg Institute, University of London

THE TYPICAL IN RENAISSANCE LITERATURE

The project, which marks the start of my work on a monograph, is about the nature of the “type” (Typus) in the Renaissance – and also in the modern study of literature and history. It asks, among other questions: What is typical and what less typical in the literary works of the Renaissance? How can we ascertain which is which? Which scholarly tools are capable of, or appropriate to, dealing with each? How do forms, ideas, and phrases become and cease to be typical? Why does an author reach for the typical, and why not?

I teach in a department of English Literature, but my background is in intellectual history, and much of my current thinking is an effort to find ways to combine these two disciplines, a project that is particularly difficult for the Renaissance. While my study of typicality will focus on literary and quasi-literary works, then, it will be rooted in early modern modes of thought about typicality. For instance, the word “typical” itself (or Latin “typicalis”) did not denote, as it does now, the relationship of an object to a set that it represents; rather, it meant something like “figurative” or “symbolic”, dependent on a particular concept of the kinship between the two biblical Testaments. My aim will be to probe how the genealogy of this idea, and related terms such as “figure” and “character”, can help us to understand modes of reference in and around works of what we now call “literature”, an idea with its own distinctive ancestry.

My hope is to find a new way (or newly to recover an old way) to connect literary texts – tragedies, satires, sacred drama, sonnet cycles, translated epics, and perhaps fine prose – to the rich corpus of humanist writing from the sixteenth

century, most of which is in Latin. But it is also my hope to historicise literary criticism as a current intellectual practice, by thinking about how and why the idea of typicality has changed since the Renaissance.

While at the Wissenschaftskolleg, I also hope to complete my translation of Leo Africanus's *Description of Africa*, a 1526 account of the geography, history, culture, flora, and fauna of North Africa.

Recommended Reading

Ossa-Richardson, Anthony. "The Idea of a University and its Concrete Form."

In *The Physical University: Contours of Space and Place in Higher Education*, edited by Paul Temple, 131–158. London: Routledge, 2014.

—. "Sir Thomas Browne, Paolo Giovio, and the Tragicomedy of Muleasses, King of Tunis." *Studies in Philology* 113, no. 3 (2016): 668–693.
<https://doi.org/10.1353/sip.2016.0017>.

—. *A History of Ambiguity*. Princeton, NJ: Princeton University Press, 2019.

NUNO RAMOS

Artist

São Paulo

Born in 1960 in São Paulo, Brazil

Studied Philosophy at the University of São Paulo

MY VOICE BACK (MINHA VOZ DE VOLTA)

My work spreads across a number of genres – literature (essays, poetry, short stories), visual arts (painting, drawing, installations), songwriting, theater, and performance. I have always exercised this diversity simultaneously, seeking to leap from one genre to the other without searching for a convergence. I feel that my stay in Berlin offers a new position, from which I might regard this flux of works and, perhaps, regain my breath.

I will focus on a literature project, “Minha voz de volta” (“My voice back”), which I began some years ago and hope to dedicate myself extensively to. It is structured in two moments, or “Books.” The first one, with a strong autobiographical strain, tries to reach memorialistic themes through the dialogue between three “voices” typographically characterized (italic voice/bold voice/red voice). In the second “Book,” these same themes and memories are taken up again and fictionally recast, in a sort of post-death limbo where they mix into other bodies and voices. It is a very open project and, as the title suggests, seeks some unity (“My voice back”) between the fictional and the biographical, within (again) a great diversity of themes and literary genres.

On a theoretical level, in some of my essays, I have proposed a reading of aspects and authors of Brazilian culture that takes the Möbius strip as a model. The main idea is that when culture fails to influence the outside world in some way, acquiring public presence within the interior world (a situation in which large part of Brazilian culture has always found itself), cultural production turns on itself, “falling” literally inward, like Russian nesting-dolls or someone walking along a Möbius strip. I have analyzed some Brazilian authors (artists and

writers) in accordance with this inward movement and would like to widen my reasoning, testing it with other authors.

I am also working with performance and theater, using two basic ideas: the replication of a model and simultaneity. A personal paradigmatic work, for me, would be “A gente se vê por aqui,” produced in 2018, in which a couple of actors, living onstage for 24 hours, replicate, simultaneously and “verbatim,” every voice and casual sound in the televised transmission of the main broadcaster in Brazil. I am still developing this performative and theatrical route and hope to continue it remotely during my stay at the Wissenschaftskolleg.

Finally, I’m so glad that I will be able to work in a small art studio. There, I hope to exercise this quotidian and almost physical form of thinking, present in the act of drawing.

Recommended Reading

Ramos, Nuno. *Cujo*. Rio de Janeiro: Editora 34, 1992.

—. *Ó*. São Paulo: Editora Iluminuras, 2008.

—. *Verifique se o mesmo*. São Paulo: Editora Todavia, 2019.

SOPHIE ROUX

Dr, Professor of History and Philosophy of Science
École normale supérieure, Paris

Born in 1965 in Paris

Studied Philosophy at the École normale supérieure and History of Science at
the École des hautes études en sciences sociales

THE PINEAL GLAND, COMETS, AND SUBTLE MATTER: THE NATURAL OBJECTS WITH WHICH CARTESIANS TRIED TO CONQUER FRANCE (1637–1691)

The Descartes who is now read and commented on by historians of philosophy is the Descartes who wrote the *Meditationes de prima philosophia*. But in the seventeenth century, the Descartes who was debated, criticized, or admired was the physicist who claimed that all natural phenomena can be explained by matter and motion alone. My project is to write a book on the various receptions of Cartesian physics in France, from the publication of Descartes' *Discours de la méthode* (1637) to the publication of Pierre-Sylvain Régis' *Système de philosophie* (1691), with a special focus on the years 1660–1690, which were indeed those of the great battle of Cartesianism.

The originality of my project comes not only from my focus on physics, rather than on metaphysics and epistemology. It comes above all from the methodological assumption I adopt, according to which the history of Cartesianism should be written in the plural and cannot be conceived independently of the history of anti-Cartesianisms, which was indeed plural. The demarcation between Cartesians and anti-Cartesians was itself a matter of debate, the question of what is characteristic of Cartesianism not being fixed once and for all, either for Cartesians or for anti-Cartesians.

This methodological assumption leads me to take into consideration a corpus that includes a great number of diverse sources and to study the texts of well-known authors as well as of totally unknown figures. Rather than adopting a

homogeneous narrative, my intention is to vary scales and points of view and to focus on particular objects that created heated controversies. Objects of this kind include for example the pineal gland, the circulation and transfusion of the blood, subtle matter, and vortices. It is only by working on various objects and diverse figures that what was initially a methodological assumption on the diversity of Cartesianisms and Anti-Cartesianisms will become an organizing principle of the book that I plan to write.

Recommended Reading

Roux, Sophie. “Was There a Cartesian Experimentalism in 1660s France?” In *Cartesian Empiricisms*, edited by Mihnea Dobre and Tammy Nyden, 47–88. Dordrecht: Springer, 2013.

—. “The Two Comets of 1664–1665: A Dispersive Prism for French Natural Philosophy Principles.” In *The Idea of Principles in Early Modern Thought*, edited by Peter R. Anstey, 98–146. New York and London: Routledge, 2017.

—. “The Condemnations of Cartesian Natural Philosophy under Louis XIV (1661–1691).” In *Oxford Handbook of Descartes and Cartesianism*, edited by Steven Nadler, Tad M. Schmaltz, and Delphine Antoine-Mahut, 755–779. Oxford and New York: Oxford University Press, 2019.

ULINKA RUBLACK

PhD, Professor of History

St John's College, University of Cambridge

Born in 1967 in Tübingen, Germany

Studied History, Sociology, and Art History in Hamburg and Cambridge

THE TRIUMPH OF FASHION: A GLOBAL HISTORY

My book analyses how a fascination with fashion became a marked feature of life in Europe as well as other parts of the world, and what the legacy of this historical process means today. The pre-industrial period of c. 1300 to 1800 proved to be pivotal for fashion's global triumph. Fashion emerged as a powerful economic sector that involved and newly interconnected broad groups of makers, traders, consumers, and thinkers who embraced its effects. Books about the history of fashion often don't start until 1800 or focus just on Europe, and many commentators see only courts and top elites as drivers of change, while others assume that fashion has always existed through practices of adornment. But the story needs to be told from the bottom up, as consumers drove innovation.

Fashion, moreover, is often defined through European categories, which turn on novelty in tailoring. As a result, Europe is often claimed to have invented fashion. Yet the definition is wrong, and change within Europe shared features with and substantially depended on change elsewhere – in fact, it particularly thrived on Asian and Ottoman innovation. Nor was the Western world central to trade in textiles, well into modernity. To understand these processes means to understand history and how we have come to think about ourselves in time in new ways.

Recommended Reading

Rublack, Ulinka. *Dressing Up: Cultural Identity in Renaissance Europe*. Oxford: Oxford University Press, 2010.

Rublack, Ulinka, and Maria Hayward, eds. *The First Book of Fashion: The Book of Clothes of Matthäus and Veit Konrad Schwarz of Augsburg*. London: Bloomsbury, 2015.

Riello, Giorgio, and Ulinka Rublack, eds. *The Right to Dress: Sumptuary Legislation in a Global Perspective, c. 1300–1900*. Cambridge: Cambridge University Press, 2019. Paperback 2020.

MICHAEL SEEWALD

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Westfälische Wilhelms-Universität Münster

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Studium der Katholischen Theologie, der Politikwissenschaft und Philosophie
an der Eberhard-Karls-Universität Tübingen und der Ludwig-Maximilians-
Universität München

VOLK GOTTES? EINE PROBLEMGESCHICHTE KATHOLISCHER EKKLESIOLOGIE IN DER MODERNE

Das Ziel des Projektes ist es, eine Geschichte jener Selbstdeutung zu erarbeiten, die die katholische Kirche etwa ab dem Jahr 1800 von sich entwickelt hat.

Leitend sind vier Probleme, die mit einem Verständnis der Kirche als „Volk Gottes“, wie es in der katholischen Theologie stark rezipiert wird, einhergehen.

Im Umfeld des Zweiten Vatikanischen Konzils wurde der Volk-Gottes-Begriff als Wiederentdeckung eines biblischen oder patristischen Motivs gefeiert. Eine solche Sichtweise verkennt, wie stark der ekklesiologische Volksbegriff im Laufe der Moderne, etwa durch Diskussionen um Volksgeistlehren im 19. oder Volkskirchenideen im 20. Jahrhundert, geprägt wurde. An der Volk-Gottes-Ekklesiologie lassen sich deshalb – erstens – Techniken des ekklesialen Geschichtszugriffs studieren: Welches durch Anknüpfungen an (quasi-)kanonische Textbestände und Auslassungen bestimmter Entwicklungen geprägte Bild ihrer eigenen Geschichte macht sich eine Kirche, die sich als durch die Zeit wanderndes Gottesvolk versteht? Zweitens geraten Logiken der Repräsentation in den Blick: Wer beansprucht mit welcher Begründung, eine amorphe, unter der Sammelbezeichnung „Volk“ firmierende Gruppe zu repräsentieren, und nach welchen Kriterien werden die Angehörigen dieser Gruppe selektiert, so dass die Referenzgruppe „Volk“ zu den Geltungsansprüchen derjenigen passt, die reklamieren, sie zu repräsentieren? Im Zentrum der Volk-Gottes-Theologie stehen Vorstellungen von Schöpfung und Erwählung. Gott schaffe sich, so das

Zweite Vaticanum, sein Volk, indem er Menschen aus allen Völkern in die Kirche berufe. Daraus ergibt sich – drittens – die Frage nach den Implikationen eines ekklesial abgerichteten Gottesbildes, das Gott als innergeschichtlich erwählende und sozialstrukturierend tätige Größe denkt. Viertens hat die Volk-Gottes-Idee eine interreligiöse Problematik: Welche Schwierigkeiten entstehen, wenn Gott durch eine Bekenntnisgemeinschaft, die sich als sein Volk versteht, derart beansprucht wird, dass Anhänger anderer Religionen, die ebenfalls an Gott glauben, nicht als dem Volk Gottes zugehörig betrachtet werden? Vor allem mit Blick auf das Judentum ist die Rede von der Kirche als dem „neuen“ Volk Gottes, wie sie sich im Zweiten Vaticanum findet, problematisch.

Eine Auffächerung der vier genannten, mit dem Volk-Gottes-Begriff verbundenen Schwierigkeiten bietet dem Projekt einen thematisch fokussierten Zugang zur katholischen Ekklesiologie der Moderne.

Lektüreempfehlung

Seewald, Michael. „Religion als Kontingenzbewältigung? Präzisierungen zu einem gängigen Topos in Auseinandersetzung mit Niklas Luhmann, Hermann Lübbe und Ernst Tugendhat.“ *Jahrbuch für Religionsphilosophie* 15 (2016): 152–179.

—. *Theologie aus anthropologischer Ansicht: Der Entwurf Franz Oberthürs (1745–1831) als Beitrag zum dogmatischen Profil der Katholischen Aufklärung*. Innsbrucker Theologische Studien 93. Innsbruck: Tyrolia, 2016.

—. *Dogma im Wandel: Wie Glaubenslehren sich entwickeln*. Freiburg im Breisgau: Herder, 2018.

OLGA SHPARAGA

von Januar bis Juni 2022

Dr. phil., Professorin für Philosophie

European College of Liberal Arts in Belarus (ECLAB), Minsk

Geboren 1974 in Minsk

Studium der Philosophie und Sozialwissenschaften an der Belarussischen

Staatlichen Universität

EMANZIPATION, SORGE, REVOLUTION: DER FALL BELARUS

Im dritten Kapitel meines Buches *Die Revolution hat ein weibliches Gesicht: Der Fall Belarus* (Suhrkamp 2021) habe ich versucht, mithilfe der Begriffe „gesellschaftliche Emanzipation“ und „Sorge“ die revolutionären Ereignisse in Belarus 2020 konzeptionell zu erfassen. Dieser Versuch rührt daher, dass *erstens* eben die gesamte belarussische Gesellschaft (und nicht nur die Opposition) zur Triebkraft der Revolution geworden ist, *zweitens* diese Gesellschaft dabei als höchst heterogen in Erscheinung getreten ist und *drittens* nach Auffassung der Beteiligten das wichtigste Ergebnis der Revolution eine grundlegende Transformation dieser Gesellschaft war. Fragen der kulturellen Identität spielten kaum eine Rolle. Stattdessen wurden verschiedene neue soziale Allianzen gebildet und horizontale Formen der Kooperation und der gegenseitigen Unterstützung praktiziert. Ebendiese sind zum tragenden Gerüst der Solidarisierung innerhalb verschiedener sozialer Gruppen und über deren Grenzen hinweg geworden.

In diesem Zusammenhang schrieben die AktivistInnen in Belarus schon im September 2020 darüber, dass die Sorge für sich selbst und für andere zum zentralen Ansatz und zum Programm der Revolution in Belarus geworden ist. Dabei wurde auch der Begriff des Sorgestreiks verwendet. Die Beziehungen gegenseitiger Sorge, so könnte man mit Judith Butler interpretieren, wurden zu einer neuen sozial-politischen Infrastruktur, welche die Grundlage für demo-

kratische Solidarität und Kooperation bildet und autoritäre Unterdrückung und Gewalt infrage stellt. Bedeutet das, dass dadurch die gesellschaftliche Emanzipation eine neue Form annimmt und zur weiteren politischen Subjektivierung der belarussischen Gesellschaft und somit zur Fortsetzung der Revolution beiträgt? Die Darstellung und Analyse einer neuen Konstellation der Emanzipation, der Sorge, der politischen Subjektivierung und der Revolution in Belarus ist das Hauptanliegen meines Forschungsprojektes.

Lektüreempfehlung

Shparaga, Olga. Soobščestvo-posle-Cholokosta: na puti k obščestvu inkljuzii (Die-Post-Holocaust-Gemeinschaft: Auf dem Weg zur Gesellschaft der Illusion). Minsk: Medisont, 2018 (ECLAB-books). E-book: <https://www.academia.edu/42910979/>.

—. „New Emancipatory Agenda: Critique of Patriarchy, Non-discrimination, Eco-consciousness, Real Equality and Social Art.“ *pARTisanKa*, 34 (2020): 9–17. <https://www.academia.edu/43084231/>.

—. *Die Revolution hat ein weibliches Gesicht: Der Fall Belarus*. Berlin: Suhrkamp, 2021.

BARBARA STOLLBERG-RILINGER

Rektorin des Wissenschaftskollegs

Dr. phil., Professorin der Geschichte

Westfälische Wilhelms-Universität Münster

Geboren 1955 in Bergisch Gladbach, Deutschland

Studium der Geschichte, Germanistik und Kunstgeschichte

an der Universität zu Köln

GRAUSAMKEIT, DISZIPLIN UND VERZWEIFLUNG: FRIEDRICH WILHELM I. UND DER PREUSSISCHE MYTHOS

Friedrich Wilhelm I., der „Soldatenkönig“ (1688–1740), traumatisierte seinen Sohn, demütigte seine Töchter, verprügelte seine Diener, misstraute seinen Beamten, verabscheute die Gelehrten, verachtete den Adel, mied die Frauen, war legendär geizig und detailversessen, rauchte, trank, fluchte und tobte, hielt aber peinlich auf Sauberkeit, Drill und strengste Frömmigkeit. Kurzum: Sein bizarres Verhalten desavouierte sämtliche Normen und Werte der zeitgenössischen Eliten. In Europa seiner Zeit galt er deshalb als lächerlicher Tyrann, dessen Macht früher oder später von selbst zusammenbrechen würde. Das war bekanntlich ein Irrtum. Im preußisch-deutschen Nationalmythos des 19. und 20. Jahrhunderts spielte Friedrich Wilhelm I. die Rolle des großen Staats- und Heeresbaumeisters; selbst kritischen Historikern galt er als derjenige, der „das deutsche Volk zum Preußentum erzog“. Daran konnte der Alliierte Kontrollrat nach dem Zweiten Weltkrieg anknüpfen, als er Preußen als „Träger des Militarismus und der Reaktion“ von der Landkarte strich.

Ich schreibe eine Biografie dieses Königs und analysiere die Entstehung seines Mythos, um den Normenwandel des 18. Jahrhunderts an einem spektakulären Fall zu untersuchen: vom Wandel des Männlichkeitsideals, des körperlichen Habitus und des Kleidungsstils bis hin zum Wandel des Wirtschaftsverhaltens, der Regierungspraxis und der Organisation physischer

Gewalt. Wie kam es dazu, dass das, was besorgte Zeitgenossen als Folge einer schweren Affektstörung des Königs beobachteten, nachträglich als genialer Plan erscheinen konnte?

Lektüreempfehlung

Stollberg-Rilinger, Barbara. *Des Kaisers alte Kleider: Verfassungsgeschichte und Symbolsprache des Alten Reiches*. München: C.H.Beck, 2008. Englisch: *The Emperor's Old Clothes: Constitutional History and the Symbolic Language of the Holy Roman Empire*. New York: Berghahn, 2015.

—. *Rituale*. Frankfurt/Main: Campus, 2013.

—. *Maria Theresia: Die Kaiserin in ihrer Zeit. Eine Biographie*. München: C.H.Beck, 2017. Englisch: *Maria Theresa: The Habsburg Empress in Her Time*. Princeton, NJ: Princeton University Press, im Erscheinen.

PETER STROHSCHNEIDER

von September bis November 2021 und von April bis Juni 2022

Dr. phil., Professor em. für Germanistische Mediävistik

Ludwig-Maximilians-Universität München

Geboren 1955 in Stuttgart, Deutschland

Studium der Germanistik und Geschichtswissenschaft sowie der Rechtswissenschaft, Soziologie und Politikwissenschaft an der Ludwig-Maximilians-Universität München

KRANKE KÖNIGE: FABELN ÜBER MACHT, WISSEN UND GEWALT

Kulturelle Ordnungen müssen gute von böser Gewalt abheben. Sie müssen semantisch (axiologisch, juristisch usw.) auseinanderhalten, was phänomenologisch (strukturell, physiologisch usw.) schwer zu trennen ist: Gewalt ist Gewalt. Eine Möglichkeit dessen sind Verfahren der Naturalisierung: Man verknüpft Gewalt mit Annahmen über die „Natur“ des Menschen. Ein wichtiges literarisches Medium solcherart naturalistischer Anthropologie in der Vormoderne sind Fabel und Tierepos. Ihre Akteure sind als anthropomorphisierte Tiere stets doppelt codiert, Löwe, Fuchs oder Wolf stehen zugleich inner- wie außerhalb des Spannungsraums von Moral, Willensfreiheit oder Schuldfähigkeit.

Ein besonders komplexes Beispiel dafür ist die „Hoftagsfabel“. Sie erzählt, wie der kranke Löwe das ganze Tierreich zu einem Hoftag versammelt und wie man auf Anraten des oft als Arzt verkleideten Fuchses (vorgeblich) versucht, den König zu heilen – und also das Heil der Monarchie wiederherzustellen – vermittels des dem Wolf bei lebendigem Leibe abgezogenen Balgs. In vielen Sprachen und Versionen (auch im „Fuchsroman“ seit *Ysengrimus* und *Roman de Renart*) gehört diese Fabel zur kulturellen Semantik des vormodernen Europa. Sie etabliert literarische Diskurse über das Verhältnis von Macht (Löwe), Wissen (Fuchs) und Gewalt (Wolf), in deren Horizont auch noch die

epochalen Texte des politisch-philosophischen Kanons (Machiavelli, Hobbes u. a.) stehen.

Mein Vorhaben rekonstruiert diese in die Hoftagsfabel eingelagerten Diskurse, um zu zeigen, dass tierepisches Erzählen gesellschaftliche Ordnung immer wieder auf Paradoxien und Aporien hin durchsichtig macht – solche zumal, die in „offiziellen“ Theorien des Politischen gerade verdeckt werden (müssen). Hier kann das Verhältnis von politischer Machteffizienz und moralischer *rectitudo* lange vor Machiavelli aporetisch werden; hier kann die für vormoderne Epistemiken konstitutive Moralisierung von Wissen kollabieren; hier kann sich zeigen, dass wohl Recht sich naturalisieren, nicht aber umgekehrt auch Natur sich verrechtlichen lässt. Wie auch sollte der Wolf für Gewalttaten zur Rechenschaft gezogen werden, die er aufgrund seiner Natur gar nicht vermeiden konnte?

Sozusagen auf der Rückseite legitimistischer Theorien des Politischen können die Erzählungen also auch die Kontingenzen der Unterscheidung von legitimierter und illegitimierter Gewalt thematisch werden lassen. Mir scheint, dies sei keine uninteressante Möglichkeit, die intellektuellen Transformationen von mittelalterlichem zu modernem politischem Denken zu verfolgen.

Lektüreprüfung

Strohschneider, Peter. „Opfergewalt und Königsheil: Historische Anthropologie monarchischer Herrschaft in der *Ecbasis captivi*.“ In *Tierepiik und Tierallegorese: Studien zur Poetologie und historischen Anthropologie vormoderner Literatur*, herausgegeben von Bernhard Jahn und Otto Neudeck, 15–51.

Frankfurt/Main: Peter Lang, 2004.

—. *Höfische Textgeschichten: Über Selbstentwürfe vormoderner Literatur*. Germanisch-Romanische Monatsschrift. Beiheft 55. Heidelberg: Winter, 2014.

—. *Zumutungen: Wissenschaft in Zeiten von Populismus, Moralisierung und Szientokratie*. Hamburg: kursbuch.edition, 2020.

KULBHUSHANSINGH SURYAWANSHI

from September 2021 to February 2022

Fellow of the College for Life Sciences

PhD, Ecology

Nature Conservation Foundation, Mysore

Born in 1985 in Malkapur, India

Studied Zoology, Botany, and Computer Science at Dr. Babasaheb Ambedkar

Marathwada University, Wildlife Biology and Conservation at the National

Centre for Biological Sciences, and Ecology and Conservation at Manipal

University

SNOW LEOPARD ON THIN ICE: ECOLOGY AND HUMAN DIMENSIONS OF CONSERVATION IN THE INDIAN TRANS-HIMALAYA

The Hindu Kush Himalaya Mountains are the water towers of Asia. I am interested in the many facets of nature conservation in the Indian trans-Himalaya, a vast but little-known region hidden in the rain shadow of the Himalayas. The charismatic and elusive snow leopard is a flagship and emblem for the conservation of this region. I want to understand how ecological research over the past five decades influenced the trajectory of conservation policy and practice in this region. Early efforts of conservation in this region followed the old idea of focussing on the creation of large protected areas. By the early 2000s, however, conservation efforts started diverging from the mainstream discourse, with new ideas that were more inclusive and people-centric. This led the Indian Ministry of Environment and Forest to launch Project Snow Leopard with the stated goal to promote conservation in the larger landscape beyond protected areas through participatory policies and actions. What role did ecological research play in this change in a national level conservation policy?

Over the past few years, conservationists across the distribution range of the snow leopard have been confronted with the question “how many snow leopard

ards are there in the world?” This was partly sparked by the International Union for Conservation of Nature’s (IUCN) decision to down-list snow leopards from the category of Endangered to Vulnerable in its Red List of species. But how do we reconcile this idea of species-focussed conservation with the ideas of landscape-focussed conservation as envisaged by Project Snow Leopard? My research will focus on building an understanding of the diverse and interwoven strands that have led to the specific current practice of conservation in the Indian trans-Himalaya and its resonance with emerging global discourse on conservation as it tries to grapple with ideas of community-based conservation, neo-protectionism, and market-based solutions.

Recommended Reading

- Suryawanshi, Kulbhushansingh R., Saloni Bhatia, Yash Veer Bhatnagar, Stephen Redpath, and Charudutt Mishra (2014). “Multiscale Factors Affecting Human Attitudes toward Snow Leopards and Wolves.” *Conservation Biology* 28, no. 6: 1657–1666. <https://doi.org/10.1111/cobi.12320>.
- Suryawanshi, Kulbhushansingh R., Stephen M. Redpath, Yash Veer Bhatnagar, Uma Ramakrishnan, Vaibhav Chaturvedi, Sophie C. Smout, and Charudutt Mishra (2017). “Impact of Wild Prey Availability on Livestock Predation by Snow Leopards.” *Royal Society Open Science* 4: 170026. <https://doi.org/10.1098/rsos.170026>.
- Suryawanshi, Kulbhushansingh R., Munib Khanyari, Koustubh Sharma, Purevjav Lkhagvajav, and Charudutt Mishra (2019). “Sampling Bias in Snow Leopard Population Estimation Studies.” *Population Ecology* 61, no. 3: 268–276. <https://doi.org/10.1002/1438-390X.1027>.

GUY TILLIM

Photographer

Cape Town

Born in 1962 in Johannesburg, South Africa

BERLIN TRILOGY

The temptation to assert meaning, rather than to make visible, is ancient. Landscape, memorial, monument, and our memory of what happened to us are constantly in dispute.

I propose, by way of a photographic investigation in Berlin, the following “section”:

Street photographs

Museum. Monument. Past.

The history of the city as seen through its collections and memorials, the way they are shown and stored.

Europe.

Using public modernist and post-modernist architecture in Berlin as a stage to produce an image of governance.

Recommended Publications

Tillim, Guy. *Jo'Burg*. Paris: Filigranes Éditions; Johannesburg: STE, 2005.

—. *Avenue Patrice Lumumba*. Munich: Prestel; Cambridge, MA: Peabody Museum of Archaeology and Ethnology, 2008.

—. *O Futuro Certo*. New York: The Walther Collection; Göttingen: Steidl, 2015.

SOFÍA TORALLAS TOVAR

Ph.D., Professor of Classics and Near Eastern Languages and Civilizations
University of Chicago

Born in 1967 in Madrid

Studied Classics at the Universidad Complutense de Madrid

THE LANGUAGE OF THE MAGICAL PAPYRI

The corpus of Greek, Coptic, and Demotic magical handbooks on papyrus is the most important body of magic in Antiquity. It is a window into ritual and popular practice of protective and aggressive magic, portraying the anxieties and wishes of peoples in all social settings. Produced in Egypt in the Greco-Roman period, this corpus is also a witness to an interesting contact between Greek and Egyptian cultures, religions, and languages.

I am one of the two general editors of the project “Transmission of Magical Knowledge: Magical Handbooks on Papyrus” and have led a group of international scholars in the task of reediting, translating, and studying all the magical handbooks from Egypt that have been preserved on papyrus.

The results from this project are a two-volume edition of 88 magical handbooks, including the edition of, extensive commentaries on, and analysis of both the textual and material dimensions of this corpus. The systematic revision of the material characteristics of these books, together with the assessment of the paleography, has transformed the utility of this invaluable corpus of ancient magical knowledge, organizing it chronologically for the first time. With this reorganization achieved, we can now better understand the influence of some textual and cultural traditions on others. New dates assigned to some pieces have also changed the perception of book formats, scribal practices, readership, and the material culture of book production.

At the Wissenschaftskolleg, I would like to explore the possibilities that a full examination of such an interesting corpus of texts offers from the point of view of linguistics, including language contact in Egypt, literary Greek in the magical

papyri, the use of Egyptian in its different scripts, and lexical issues. While the main focus will be on the Greek language, both in its contact with Egyptian and in its connection to Greek literary heritage, I will include the presence of Egyptian in our corpus, in order to understand the balance between the two languages in Egypt. This project connects two of my main areas of interest: magical papyri and language contact in Egypt.

Recommended Reading

- Torallas Tovar, Sofía. “The Reverse Case: Egyptian Borrowing in Greek.” In *Greek Influence on Egyptian-Coptic: Contact-Induced Change in an Ancient African Language*, edited by Eitan Grossman, Peter Dils, Tonio Sebastian Richter, and Wolfgang Schenkel, 97–113. Hamburg: Widmaier, 2017.
- . “Athanasius’ Letter to Dracontius: A Fourth-Century Coptic Translation in a Papyrus Roll (P.Monts.Roca inv. 14).” *Adamantius: Annuario di Letteratura Cristiana Antica e di Studi Giudeoellenistici* 24 (2018): 43–59.
- . “In Search of an Egyptian Greek Lexicon in Ptolemaic and Roman Egypt.” In *Varieties of Post-Classical and Byzantine Greek*, edited by Klaas Bentein and Mark Janse, 141–162. Berlin: De Gruyter Mouton, 2020.

JORDI VAN GESTEL

from March to June 2022

Fellow of the College for Life Sciences

Ph.D., Biology

University of California, San Francisco

Born in 1987 in Gilze, the Netherlands

Studied Biology at the University of Groningen

BUILDING A ROADMAP FOR MICROBIAL MULTICELLULARITY

Despite their simplicity, microbes express a wide range of multicellular phenotypes – i.e. biofilms, colonies, pellicles, filaments, fruiting bodies, swarms. Many of these phenotypes are of great relevance to humans, either because of their beneficial side effects or because they cause severe medical problems. Over the last decades, it has become evident that multicellular phenotypes not only are abundant, but also profoundly affect the competitive success of microbes in their natural ecology. Accordingly, microbes express many features that are often associated with multicellular development: cells can communicate, differentiate, cooperate, divide labor, and give rise to distinct spatial patterns. For several species, we have a detailed understanding of how cells, through self-organization, give rise to multicellular phenotypes; but there is no comparative framework yet that enables us to compare these self-organizing processes across species. During my stay at the Wissenschaftskolleg zu Berlin, I aim to build a comparative framework to study the self-organizing processes that bring about microbial multicellularity. To this end, I will leverage the increasing amount of transcriptomic and genomic data that is currently available and build cross-species expression maps that foster a comparative analysis of microbial multicellularity.

Recommended Reading

- Van Gestel, Jordi, and Corina E. Tarnita (2017). “On the Origin of Biological Construction, with a Focus on Multicellularity.” *Proceedings of the National Academy of Sciences* 114, no. 42: 11018–11026. <https://doi.org/10.1073/pnas.1704631114>.
- Van Gestel, Jordi, Martin Ackermann, and Andreas Wagner (2019). “Microbial Life Cycles Link Global Modularity in Regulation to Mosaic Evolution.” *Nature Ecology & Evolution* 3, no. 8: 1184–1196. <https://doi.org/10.1038/s41559-019-0939-6>.
- Van Gestel, Jordi, Tasneem Bareia, Bar Tenennbaum, Alma Dal Co, Polina Guler, Nitzan Aframian, Shani Puyesky, et al. (2021). “Short-Range Quorum Sensing Controls Horizontal Gene Transfer at Micron Scale in Bacterial Communities.” *Nature Communications* 12: 2324. <https://doi.org/10.1038/s41467-021-22649-4>.

ETIENNE WAMBA

from April to June 2022

Iso Lomso Fellow

Dr., Lecturer in Physics

University of Buea

Born in 1980 in Baleveng, Cameroon

Studied Physics at the University of Dschang and Mechanics at the

University of Yaounde I

SPLITTING DYNAMICS OF QUANTUM GASES

Since the realization of the first Bose-Einstein condensate a couple of decades ago, there has been intense work in the quantum gas field. Bose-Einstein condensates constitute a very interesting platform for highly controllable experiments aiming mostly at unravelling the quantum properties of matter on a large scale. Experiments with Bose-Einstein condensates also allow us to mimic the behavior of physical systems that cannot be directly explored. With the advent of the era of high-frequency and big-data processing, the hunt for better cryptomachines, miniaturized devices, and more powerful computers has heightened interest in quantum mechanics and in particular in Bose-Einstein condensates. The complete characterization of the devices with dominant quantum effects will have to take into account various kinds of quantum dynamics that could take place inside them. In this respect, the present project is devoted to examining the splitting dynamics of ultra-cold quantum gases using analytical and numerical tools. More specifically, we address a crucial aspect of quench physics in the simple scenario of a quantum gas being spatially split by deforming its trapping potential from single-well into double-well form. The interaction between the particles of the gas varies along with the trap splitting. The system in consideration is realistic and can be achieved experimentally. However, we will use an exact space-time mapping to investigate the system. We intend to show that the time evolution of such model many-body systems with rapid parametric driving

may have a kind of hidden adiabaticity, inasmuch as the quench-like scenarios of rapid splitting can be mapped exactly onto much slower adiabatic splitting in which excitations are negligible. Applying the mapping in a mean-field regime, we will examine how different dynamical mechanisms of non-equilibrium excitation can compete or cooperate. These results may allow improvements to general theories of non-equilibrium evolution, to avoid an intuitively wrong estimation of excitations.

Recommended Reading

Wamba, Etienne, Alidou Mohamadou, and Timoléon C. Kofané (2008). “Modulational Instability of a Trapped Bose-Einstein Condensate with Two- and Three-Body Interactions.” *Physical Review E* 77: 046216.

<https://doi.org/10.1103/PhysRevE.77.046216>.

Wamba, Etienne, Axel Pelster, and James R. Anglin (2016). “Exact Quantum Field Mappings between Different Experiments on Quantum Gases.” *Physical Review A* 94: 043628. <https://doi.org/10.1103/PhysRevA.94.043628>.

Tamilthiruvalluvar, Ramakrishnan, Etienne Wamba, Sabari Subramaniyan, and Kuppuswamy Porsezian (2019). “Impact of Higher-Order Nonlinearity on Modulational Instability in Two-Component Bose-Einstein Condensates.” *Physical Review E* 99: 032202. <https://doi.org/10.1103/PhysRevE.99.032202>.

RACHEL WHEATLEY

from September to December 2021

Fellow of the College for Life Sciences

DPhil, Biology

University of Oxford

Born in 1993 in Devon, United Kingdom

Studied Molecular Biology and Biochemistry at the University of Durham

and Biology at the University of Oxford

DETERMINANTS OF SUCCESS IN THE ECOSYSTEM OF THE LUNGS

The lungs can be considered an ecosystem. From birth, the lungs are continually exposed to microorganisms. They host a diversity of microorganisms, collectively known as the microbiome, both in healthy and in diseased states. It is fascinating to think that the concept of a lung microbiome is a relatively new one; the lungs have historically been considered a sterile environment. We know now that a healthy lung can contain common key microbiome members, and that the lung microbiome and other environmental factors may in fact play a fundamental role in determining an individual's susceptibility to respiratory disease. The focus of my research is to understand how a single pathogen species is able to emerge in a lung microbiome, and to characterise the genetic and metabolic determinants of this success. I am especially interested in the opportunistic pathogen *Pseudomonas aeruginosa*, which is a major cause of healthcare-associated respiratory infection. During my stay at the Wissenschaftskolleg, I would like to explore how understanding bacterial metabolism can help advance pathogen treatment strategies. Successful infection of a human host is dependent on multiple pathogen behaviours, including successful resource competition, virulence factor production, and antibiotic and host immune evasion. Success of these behaviours can be linked to bacterial metabolism, and investigating metabolism can help identify metabolites or pathways with the potential to sup-

press pathogens. Identifying potential therapeutic targets given the wide range of environmental variables and metabolic targets remains a significant challenge, however, which high-throughput metabolic screening approaches and computational metabolic models have tried to overcome. This explorative work will form an important cornerstone for directing future studies I wish to approach. Outside of these interests, my additional research enthusiasms include antibiotic resistance evolution, transposon-based functional genomics approaches, and phage defence mechanisms.

Recommended Reading

Wheatley, Rachel M., Brandon L. Ford, Li Li, Samuel T. N. Aroney, Hayley E. Knights, Raphael Ledermann, Alison K. East, Vinoy K. Ramachandran, and Philip S. Poole (2020). “Lifestyle Adaptations of *Rhizobium* from Rhizosphere to Symbiosis.” *Proceedings of the National Academy of Sciences* 117, no. 38: 23823–23834. <https://doi.org/10.1073/pnas.2009094117>.

Wheatley, Rachel M., and R. Craig MacLean (2020). “CRISPR-Cas Systems Restrict Horizontal Gene Transfer in *Pseudomonas aeruginosa*.” *The ISME Journal*. <https://doi.org/10.1038/s41396-020-00860-3>.

Wheatley, Rachel, Julio Diaz Caballero, Natalia Kapel, Fien H. R. de Winter, Pramod Jangir, Angus Quinn, Ester del Barrio-Tofiño, et al. (2021). “Rapid Evolution and Host Immunity Drive the Rise and Fall of Carbapenem Resistance during an Acute *Pseudomonas aeruginosa* Infection.” *Nature Communications* 12: 2460. <https://doi.org/10.1038/s41467-021-22814-9>.

DAN WIELSCH

Dr. iur., Professor für Bürgerliches Recht und Rechtstheorie
Universität zu Köln

Geboren 1970 in Frankfurt am Main, Deutschland
Studium der Rechtswissenschaft in Frankfurt am Main und Berkeley

DIGITALE MEDIENVERFASSUNG

Digitale Kommunikation findet über die Dienste neuer Intermediäre statt. Sie konfigurieren Kommunikation und Öffentlichkeit, insbesondere können sie eigene Kommunikationsregeln unmittelbar durchsetzen. Freilich enteilt die algorithmische Kontrolle der Kommunikation schon ihren Initiatoren. Technologische Kontrollmacht ist vor allem Macht der Medientechnologie selbst. Diese Verselbständigung einer neuen institutionellen Normativität darf nicht zu ihrer Naturalisierung verleiten, sondern bildet überhaupt erst den Gegenstand von Rechtfertigungsdiskursen. Doch anhand welcher Maßstäbe? Mit den digitalen Intermediären rückt vor allem das Privatrecht in den Blick. Denn das digitale Medium entwickelt sich maßgeblich über private Akteure und Handlungsformen, ist von einer Praxis der Selbstregulierung geprägt und schafft globale Öffentlichkeiten. Das Privatrecht steht damit nicht nur vor der allgemeinen Aufgabe, seine Begriffe und Methoden auf neu entstehende Institutionen einzustellen. Ihm wächst noch stärker als bei analogen (Massen-)Medien konkret eine medienverfassungsrechtliche Funktion zu. Es müsste die Autonomie des digitalen Mediums rezipieren und mit anderen Autonomien ins Verhältnis setzen. In diesem Zuge wären staatliche Kontrollvorbehalte schon wegen der liberalen Gesellschaften eigenen Staatsferne der Medien selbst reflexiv zu handhaben. Auch der Modus der Grundrechtswirkung wäre gegenüber digitaler Normativität zu reformulieren.

Das Projekt untersucht daher die Eigennormativität digitaler Medien, ihre Rezeption im Recht und ihre mögliche Rückwirkung auf den Rechtsbegriff

selbst. Auf dieser Grundlage gilt es, die Gewährleistung von Kommunikationsfreiheit in der digitalen Konstellation neu zu denken.

Lektüreempfehlung

Wielsch, Dan. *Zugangsregeln: Die Rechtsverfassung der Wissensteilung*. Jus Privatum 133. Tübingen: Mohr Siebeck, 2008.

—. „Contract Interpretation Regimes.“ *Modern Law Review* 81 (2018): 958–988. <https://doi.org/10.1111/1468-2230.12375>.

—. „Medienregulierung durch Persönlichkeits- und Datenschutzrechte.“ *Juristenzeitung* 75 (2020): 105–114. <https://doi.org/10.1628/jz-2020-0052>.

BERNARDO ZACKA

Ph.D., Assistant Professor of Political Science
Massachusetts Institute of Technology, Cambridge, MA

Born in 1983 in Zouk Mosbeh, Lebanon
Studied Electrical Engineering and Computer Science at the Massachusetts
Institute of Technology and Political Science at Harvard University

INSTITUTIONAL ATMOSPHERICS: THE INTERIOR ARCHITECTURE OF THE WELFARE STATE

The book project I will be working on at the Wissenschaftskolleg examines how architecture participates in setting the tone of our encounters with the democratic welfare state and to what political effect. The project takes up three inter-related questions: how should we conceptualize architecture as a political force? What should we demand of it in our ordinary encounters with the state? And how can we understand the challenges of building *for* the democratic state (in a way that upholds democratic values), while building *in* the democratic state (where architecture must accompany policy decisions it does not control)?

The project is anchored in three extended case studies, documenting for the first time the evolution of the interior architecture of public employment offices in the UK, the US, and Denmark from the early twentieth century to the present. Drawing on field visits, interviews, and research into government archives, I show that these offices, though bland and generic in appearance, have been a terrain of experimentation in design since their inception. I argue more specifically that democratic governments have had to grapple with the question of how to use architecture to redeem a social ritual – a “trip to the unemployment office” to claim benefits or search for jobs – that had come to be seen as stigmatizing and degrading, while knowing full well that architecture cannot by itself fundamentally transform the ritual.

I focus on the UK, the US, and Denmark because they have tackled this question differently, deploying architecture, respectively, to reframe the ritual, to

neutralize it, and to humanize it. They have drawn in the process on different design horizons inspired from the realms of retail, of office architecture, and of hospitality. While these architectural idioms may at first sight seem attractive, I argue that the legacy of their adoption is tarnished with painful ironies. By dwelling upon these ironies, I hope to show that we can understand more precisely not just how architecture can fail us, but also what we might hope from it and what we should demand more generally of an interface between state and society – a question that will continue to haunt us as the bureaucratic encounter migrates online.

Recommended Reading

Zacka, Bernardo. *When the State Meets the Street: Public Service and Moral Agency*. Cambridge, MA: Belknap Press of Harvard University Press, 2017.

Longo, Matthew, and Bernardo Zacka. “Political Theory in an Ethnographic Key.” *American Political Science Review* 113, no. 4 (2019): 1066–1070.
<https://doi.org/10.1017/S0003055419000431>.

Bell, Duncan, and Bernardo Zacka, eds. *Political Theory and Architecture*. London: Bloomsbury Academic, 2020.

XUN ZHOU
PhD, Reader in History
University of Essex

Born in 1968 in Sichuan province, China
Studied Library and Information Science at Sichuan University, Hebrew and Jewish Studies at the University College London, and Study of Religions and History at SOAS University of London

COPING MECHANISMS AND FOOD INSECURITY: A HISTORICAL APPROACH TO HEALTH IN EXTREMIS

For my project on a social history of everyday health and food practices in twentieth-century China, I will use both archival materials and extensive oral history to begin to examine what has been an obvious lacuna in the study of health and illness in modern East Asia: how food customs and food practices intersect with state public health goals, as well as with cultural and religious practices of food preparation and consumption. The wide disparity of food cultures throughout China and the changing emphases on Traditional Chinese Medicine (TCM) and allopathic medicine with their very different approaches to food consumption and healing/illness all point to the centrality of this approach in examining basic questions of the culture of health in modern China. My project will shift focus from dry statistics to lived experience, most poignantly for women and children. As a case study, I will examine the Great Leap Forward famine (1958–1962) and the survival strategies of rural populations across different regions of China.

The massive mortality caused by famines during the Great Leap Forward and its aftermath has not gone unnoticed. Yet there is little information from the ground up on how rural populations in China coped with the famine – designated the worst man-made disaster in human history. Intentionally eliciting family knowledge and healing/nutritional practices, I will use the Chinese obsession with food talk, their remedies, and their recipes to explore and record vivid accounts of survival strategies and ordinary people's, in particularly rural

villagers', responses to state policies and political indoctrination during those difficult years – still referred to by those survivors as the “years of bitterness”. In the late 1950s and '60s, rural villagers in China were forced to sacrifice their homes/possessions to build socialist collectives. Today many of the survivors of the famine have been left without homes, health care, and sometimes food, despite an economic boom in the cities. My question is quite simple: to what extent does the devastation of the famine continue to structure everyday life in the countryside? How does the lived experience of coping with famine structure today's lived experience of social inequality?

Recommended Reading

Dikötter, Frank, Xun Zhou, and Lars Laamann. *Narcotic Culture: A History of Drugs in China*. London: Hurst; Chicago: University of Chicago Press, 2004. Paperback, London: Hurst, 2016.

Zhou, Xun. *Forgotten Voices of Mao's Great Famine, 1958–1962: An Oral History*. New Haven, CT: Yale University Press, 2013.

—. *The People's Health: Health Intervention and Delivery in Mao's China, 1949–1983*. Montreal: McGill-Queen's University Press, 2020.

BÉNÉDICTE ZIMMERMANN

Permanent Fellow of the Wissenschaftskolleg

Dr., Directrice d'études

École des hautes études en sciences sociales, Paris

Born in 1965 in Mulhouse, France

Studied History and Political Science at the University of Paris 1 Panthéon-

Sorbonne and the Institut d'études politiques de Paris

WHAT KIND OF WORK FOR WHAT KIND OF SOCIETY AFTER THE PANDEMIC?

Over the last thirty years, changes in the sphere of work have been fostered by a continuous process of adapting companies and their employees to the quality, productivity, and profit demands of the economic and financial markets.

The pandemic has blatantly revealed, if that were needed, the limits of such a market- and profit-focused logic. At the same time, it has forcefully raised to a vital necessity another purpose of work: that of taking care. By consecrating as a new category of indispensable professions the socially undervalued jobs that, in different ways, care for the continuity of life and society – nurses, cashiers, garbage collectors, delivery drivers, etc. – the pandemic invites us to reconsider more broadly, beyond the jobs of the so-called care sector, what taking care means with respect to work. Caring about the environment and society where work is carried out and about those who perform it is key to such a broader understanding.

Taking France and Germany as two cases in point, the aim of the project is to ask about the meaning and practices of ecologically and socially sustainable work against the background of an empirical examination of experiments and initiatives that target such an extended meaning of work.

Recommended Reading

Zimmermann, Bénédicte. “From Critical Theory to Critical Pragmatism: Capability and the Assessment of Freedom.” *Critical Sociology* 44, no. 6 (2018). <https://doi.org/10.1177/0896920517691107>.

Lallement, Michel, and Bénédicte Zimmermann. “Tous responsables ? Transformations du travail, métamorphoses de la responsabilité.” *Sociologie du travail* 61, no. 2 (2019).

Renard, Léa, and Bénédicte Zimmermann. “‘Gute Arbeit’ und ‘qualité de vie au travail’: Kategorisierungsprozesse im deutsch-französischen Vergleich.” *Berliner Journal für Soziologie* 30, no. 3–4 (2020): 421–451. <https://doi.org/10.1007/s11609-021-00432-y>.

ISO LOMSO FELLOWSHIPS

Iso Lomso bedeutet in isiXhosa „das Auge von morgen“: in die Zukunft blicken, den Grundstein für das Morgen legen. Mit dem Iso Lomso Fellowship Programme hat das Stellenbosch Institute for Advanced Study (STIAS) im Jahr 2017 eine Förderlinie speziell für afrikanische Nachwuchswissenschaftlerinnen und -wissenschaftler aus allen Disziplinen etabliert. Die Fellowships in diesem Programm erstrecken sich über drei Jahre, von denen zehn Residenzmonate – in drei Etappen – am STIAS absolviert werden. Einige dieser Residenzmonate können alternativ an einem internationalen Partnerinstitut verbracht werden. Das Wissenschaftskolleg ist ein solches Partnerinstitut und lädt in jedem akademischen Jahr zwei bis drei Fellows aus dem Iso Lomso Programme ein, für drei Monate ans Kolleg zu kommen.

Iso Lomso means “the eye of tomorrow” in isiXhosa: seeing towards the future, laying the foundations for tomorrow. In 2017, the Stellenbosch Institute for Advanced Study (STIAS) established with the Iso Lomso Fellowship Programme a support programme especially for young African academics from all disciplines. The fellowships in this programme last for three years, of which ten months consist of residence in three stages at the STIAS. Alternatively, some of these residence months can be spent at an international partner institute. The Wissenschaftskolleg is such a partner institute and each year invites two or three Fellows from the Iso Lomso Programme to come to the Kolleg for three months.

Iso Lomso Fellows 2021/2022

Tatenda Dalu	Water Ecology	Mbombela
Nkatha Kabira	Law	Nairobi
Etienne Wamba	Physics, Mechanics	Buea
N.N.		

COLLEGE FOR LIFE SCIENCES

Mit dem *College for Life Sciences* will das Wissenschaftskolleg Forscherinnen und Forschern aus den Lebenswissenschaften am Beginn ihrer Karriere Gelegenheit geben, in der anregenden Atmosphäre eines internationalen und multidisziplinären Institute for Advanced Study zu arbeiten. Je nach persönlicher Situation soll der Aufenthalt den ausgewählten Junior Fellows dazu dienen, sich neu zu orientieren, Ideen zu entwickeln, Forschungspläne zu entwerfen, frühere Arbeiten oder empirische Daten zu überdenken – jedenfalls für eine beschränkte Zeit aus der Routine der täglichen Arbeit auszusteigen, Umschau zu halten und dabei mit Wissenschaftlern und Intellektuellen verschiedenster Fachgebiete und Traditionen zu interagieren.

Die Fellows des *College for Life Sciences*, die nach Begutachtung durch ein Expertengremium für eine Dauer von drei bis sechs Monaten eingeladen werden, sind den Fellows des Wissenschaftskollegs gleichgestellt. Das Institut erwartet, dass sie für die Dauer ihrer Fellowships in Berlin arbeiten und aktiv an der Gemeinschaft der Fellows teilnehmen. Das Wissenschaftskolleg stellt Stipendium, Unterkunft und Dienstleistungen zur Verfügung.

With the *College for Life Sciences*, the Wissenschaftskolleg wants to provide early-career researchers in the life sciences with the opportunity to work in the stimulating atmosphere of an international and multidisciplinary Institute for Advanced Study. Depending on the personal situations of the selected Junior Fellows, the residency should serve to gain new orientation, develop ideas and research plans, rethink earlier work or empirical data – at any rate, to drop out of the routine of daily work, to take a look around and to interact with scientists and intellectuals from the widest possible spectrum of fields and traditions.

Selected by a group of experts, the Fellows of the *College for Life Sciences* are invited to come for three to six months. They are on equal terms with the Fellows of the Wissenschaftskolleg.

The institute expects them to work in Berlin for the duration of their fellowships and to actively take part in the Fellow community. The Wissenschaftskolleg provides the stipend, accommodation, and services.

Fellows des College for Life Sciences 2021/2022

Gregory Albery	Disease Ecology	Washington, DC
Elisa Domínguez-Hüttinger	Systems Biology	Mexico City
Szabolcs Horvát	Physics of complex systems	Hamburg
Kulbhushansingh Suryawanshi	Ecology	Mysore
Jordi van Gestel	Evolutionary Microbiology	San Francisco
Rachel Wheatley	Biology	Oxford