

Wissenschaftskolleg zu Berlin

INSTITUTE FOR ADVANCED STUDY

ARBEITSVORHABEN DER FELLOWS FELLOWS' PROJECTS 2012/2013

Herausgeber: Wissenschaftskolleg zu Berlin Wallotstraße 19

14193 Berlin

Tel.: +49 30/89 00 1-0 Fax: +49 30/89 00 1-300 wiko@wiko-berlin.de

wiko-berlin.de

Redaktion: Angelika Leuchter Redaktionsschluss: 10. August 2012

INHALT

VORWORT
SADIK J. AL-AZM
MARK ANDRE
KELLY ASKEW
ROWAN D. H. BARRETT
GILLIAN BENTLEY
KAMAL BOULLATA
DANIEL BOYARIN
ALFRED BRENDEL
HUBERTUS BUCHSTEIN
JOSE EMILIO BURUCUA
JAMES T. COSTA
LORRAINE DASTON
GÁBOR DEMSZKY
WILLIAM AUGUSTE FOLEY
GARTH FOWDEN
RAGHAVENDRA GADAGKAR
DELPHINE GARDEY
LUCA GIULIANI
STEPHEN GREENBLATT
JONAS GRETHLEIN
DIETER GRIMM
ANGELA M. GRONENBORN
ULRICH HALTERN
ATAC IMAMOGLU
AKIHITO ISHIZAKI
EMILY I. JONES
BRUCE M. KOGUT
MARIANNE KOOS
CRISTINA LAFONT
SHAKTI LAMBA
WOLF LEPENIES
AVI LIFSCHITZ
USSAMA MAKDISI
JOANNA MASEL
CHRISTOPH MÖLLERS
FRANCO MORETTI
EDGAR MORIN

MARTIN MULSOW	_ 80
JOHANNA NICHOLS	
ANNE PETERS	_ 84
ANDREI G. PLEŞU	_ 86
UWE PÖRKSEN	88
ANDRII PORTNOV	_ 90
QUATUOR DIOTIMA	_ 92
ANTHONY REID	_ 94
ALESSANDRA RUSSO	_ 96
PAUL SCHMID-HEMPEL	
GUSTAV SEIBT	_ 100
RICHARD SENNETT	_ 102
SURESH SHARMA	_ 104
MAURICIO SOTELO	_ 106
MICHAEL SQUIRE	_ 108
TANJA STADLER	
ULRICH KARL STEINER	
SONIA E. SULTAN	
ROBERT TRIVERS	
ALIPASHA VAZIRI	_ 118
JOHN H. WERREN	_ 120
KATHARINE BIRGITTA WHALEY	_ 122
MENAHEM E. YAARI	
LIAN YANG	_ 126
FROMA I. ZEITLIN	_ 128
SCHWERPUNKTGRUPPE QUANTENMECHANISCHE	
PROZESSE IN BIOLOGISCHEN SYSTEMEN	_ 130
FOCUS GROUP QUANTUM MECHANICAL PROCESSES	
IN BIOLOGICAL SYSTEMS	_ 131
COLLEGE FOR LIFE SCIENCES	

Wenn nicht anders angegeben, erstrecken sich die Fellowships vom 15. September 2012 bis zum 15. Juli 2013. If not otherwise indicated, the Fellowships extend from September 15, 2012 to July 15, 2013.



VORWORT

In dieser Broschüre werden die Fellows des Wissenschaftskollegs im akademischen Jahr 2012/13 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 Interessenten zur Lektüre empfehlen, sowie kurze biografische Angaben.

Die meisten Fellows kommen für ein volles akademisches Jahr (15. September bis 15. Juli) und verfolgen ein individuelles Forschungsvorhaben. In jedem Jahr gibt es aber auch eine Reihe von Wissenschaftlern, die in Schwerpunktgruppen eingebunden sind. Die Zugehörigkeit zu einer Schwerpunktgruppe sowie gegebenenfalls eine kürzere Aufenthaltsdauer sind jeweils vermerkt.

In der Zeit zwischen dem Redaktionsschluss dieser Broschüre und dem Beginn des akademischen Jahres am 15. September 2012 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 2012

PREFACE

This brochure presents the Fellows of the Wissenschaftskolleg of the academic year 2012/13. The emphasis here is on their descriptions of the work they plan to pursue during their stay at the Wissenschaftskolleg, plus the titles of some articles or books they recommend and short biographical notes.

The majority of the Fellows come for an entire academic year (September 15 through July 15), and the invitation is usually made on the basis of their individual research plans. But each year there are also a number of researchers who are integrated in focus groups. Membership in a focus group and a shorter planned stay are noted for each Fellow, where applicable.

Between the deadline for submission to this brochure and the beginning of the academic year on September 15, 2012, some minor changes may arise. Upto-date information on the Fellows, their work plans, and the Wissenschaftskolleg in general is available on the Wissenschaftskolleg's website (www.wiko-berlin.de).

Berlin, July 2012

SADIK J. AL-AZM

Ph.D., Professor (emer.) of Modern European Philosophy Beirut

Born in 1934 in Damascus Studied Philosophy at the American University of Beirut and at Yale University

THE CIVIL SOCIETY DEBATE IN THE ARAB WORLD

The subject I am working on is tracing the recent debates in the Arab World over the question of civil society and religion, and their relationship to the state and to the possibilities of democratic rule in key Arab countries such as Egypt, Syria and Iraq. The subject, recently, acquired extra urgency and significance on account of the currently unfolding Arab Spring and especially the continuing Intifada against military dictatorship in Syria. Throughout the Arab Spring, the buzz words have been: "civil society", "civil government" and "civil rule" as opposed to military rule, on the one hand, and Islamic rule and government, on the other. The point of the investigation is the emergence of Arab "civil society" in these countries as the political way out of the impasse of military dictatorship and Islamic government. One point of emphasis is the clarification of the distinction in Arab societies today between "civil society" and "ahli society", and its importance for the possibilities of future democratic rule there.

Recommended Reading

- Al-Azm, Sadik J. Self-Criticism After the Defeat. London: Saqi Books, 2011.
- —. The Tabooing Mentality: Salman Rushdie and the Truth of Literature. London: Riad El-Rayess Books, 1992.
- —. The Origins of Kant's Arguments in the Antinomies. Oxford: Clarendon/Oxford University Press, 1972.
- —. Kant's Theory of Time. New York: Philosophical Library, 1967.

MARK ANDRE

Professor (MA) für Komposition Hochschule für Musik Carl Maria von Weber Dresden

Geboren 1964 in Paris

Studium der Musikwissenschaft und Komposition am Conservatoire National Supérieur de musique et de danse de Paris, an der École Normale Supérieure in Paris, am Centre d'Études Supérieures de la Renaissance in Tours und an der Hochschule für Musik und Darstellende Kunst Stuttgart

IM FORTGEHEN (Arbeitstitel)

Ich arbeite an einem Werk für Musiktheater, das die Oper Stuttgart in Auftrag gegeben hat. Es handelt sich um eine musikalische Reflexion über die Figur des Humanisten Johannes Reuchlin, mit Fragmenten aus dem Johannesevangelium und aus Texten des französischen Philosophen Jean-Luc Nancy.

Hörempfehlung

Andre, Mark. *durch ... zu ... in ... als ... II*. Mit dem Trio Accanto, dem Ensemble Recherche und Shizuyo Oka. Audio-CD bei Kairos, 2008.

—. ... 22, 13 ... A Music-Theatrical Passion. Opera in three acts for singers, instruments and live electronics, Audio-CD bei Neos, 2004.

—. ... auf ... III. Donaueschinger Musiktage 2007 Vol. 3. CD bei Neos, 2007.



KELLY ASKEW

Ph.D., Associate Professor of Anthropology and Afroamerican/African Studies University of Michigan, Ann Arbor

Born in 1966 in Los Angeles Studied Anthropology at Yale University and Harvard University

POSTSOCIALIST POETICS: ARTICULATING POLITICS IN THE UNITED REPUBLIC OF TANZANIA

The project explores how Tanzanians and Zanzibaris in the United Republic of Tanzania musically and poetically respond to the changes that have emerged with the unraveling of socialism. Tapping the vast repertoires of popularly produced, mass-mediated Swahili poetic arts from newspaper poetry to popular song, the project investigates how Tanzanians from many walks of life narrate and assess recent institutional and cultural shifts away from socialist policy and practice. These range from (1) memories and practices of communal labor to (2) the privatization of formerly state-owned resources; from (3) the privatization of property rights in land to (4) monuments and memorials in socialist/postsocialist landscapes and ideoscapes; from (5) new commodity flows and retraction of government services to (6) the reconfiguring of national and international political alliances.

Music and/or poetry frames each topic since it is through these aesthetic forms that ordinary citizens regularly engage and challenge government rhetoric and projects. Through poetic discourse – sung or in print – Tanzanians and Zanzibaris lay persuasive claim to rights that they either formerly held or that were promised to them with the advent of liberalization, but that remain largely unfulfilled. Their hopes for themselves, their families, their futures, and their nation emerge strongly in data spanning song lyrics and newspaper poetry, formal and informal interviews, household surveys, ethnographic participant-observation, analysis of government documents, textual analysis of media productions (newspaper, television, video/film, radio, and internet), and insights

gained from extensive fieldwork in Zanzibar and mainland Tanzania since the early 1990s. The study thus interweaves in equal measure analysis of policy, practice and populist poetics.

Recommended Reading

Askew, Kelly. *Performing the Nation: Swahili Music and Cultural Politics in Tanzania*. Chicago and London: University of Chicago Press, 2002.

- (with M. Anne Pitcher). "African Socialisms and Postsocialisms." *Africa: Journal of the International African Institute* 76, 1 (2006): 1–14.
- —. "Sung and Unsung: Musical Reflections on Postsocialist Tanzania." *Africa: Journal of the International African Institute* 76, 1 (2006): 15–43.

ROWAN D. H. BARRETT

from September to December 2012
Fellowship awarded in connection with the John Maynard Smith Prize of the European Society for Evolutionary Biology
Ph.D., Evolutionary Biology
Harvard University

Born in 1980 in Toronto, Canada Studied Evolutionary Biology at the University of British Columbia, at McGill University, and at University of Guelph, Ontario, Canada

ADAPTATION TO CHANGING ENVIRONMENTS

The biological world contains a spectacular array of morphology, behavior and physiology. Understanding the mechanisms responsible for the generation and maintenance of this diversity is a central goal of biological research, and one that requires the synthesis of knowledge from ecology and evolution. The fit between form and function suggests the influence of adaptive evolution, but direct tests of the ecological mechanisms driving evolutionary diversification are still relatively uncommon. This is largely because of two difficulties: (1) It is often not feasible to conduct manipulative experiments on the evolutionary timescales relevant to eukaryotes that are typically the focus of ecological studies in the field, and (2) there are few species for which there is both sufficient ecological information and genomic tools to characterize the genetic architecture that underlies fitness-related traits.

My research combines a variety of approaches and study systems to ameliorate these problems. In addition to developing analytical theory and numerical simulations to address key questions about the genetics of adaptation, I have exploited the large population sizes and short generation times of microbes to observe ecological processes over evolutionary time. I have also taken advantage of the recent emergence of full genome sequencing, which promises to enable ecological information about the function of morphological traits to be com-

bined with knowledge of the underlying genes that produce them. A powerful addition to this approach, once the genes responsible for adaptive traits have been identified, is to conduct field experiments with selected genetic variants to evaluate directly the ecological consequences arising from the functional effects of specific genes in nature. I have demonstrated the utility of this approach by directly measuring selection on genes in stickleback fish, and I am currently expanding the scope of this work by conducting experimental genomics with deer mice.

Recommended Reading

Barrett, R. D. H. and H. E. Hoekstra (2011). "Molecular spandrels: tests of adaptation at the genetic level." *Nature Reviews Genetics* 12: 760–780.

Barrett, R. D. H., S. M. Rogers, and D. Schluter (2008). "Natural selection on a major armor gene in three-spine stickleback." *Science* 322: 255–257.

Barrett, R. D. H., R. C. MacLean, and G. Bell (2005). "Experimental evolution of *Pseudomonas fluorescens* in simple and complex environments." *American Naturalist* 160: 470–480.

GILLIAN BENTLEY

Ph.D., Professor of Biological Anthropology Durham University, UK

Born in 1957 in Cardiff, Wales Studied Archaeology of the Levant at the University of London and Near Eastern Languages and Civilizations at the University of Chicago

DEVELOPMENTAL INFLUENCES ON REPRODUCTIVE FUNCTION AND LATER LIFE HEALTH

I will be working on papers from a collaborative, long-term project examining the effects of early developmental environments on reproductive function among migrant Bangladeshis to the UK. The project has been studying groups of Bangladeshis who: a) still live in Sylhet, North East Bangladesh, b) migrants who move to the UK during adulthood (post-puberty), c) migrants who move to the UK as children (pre-puberty), d) second-generation British-Bangladeshis born in the UK and e) comparative groups of white British who live in neighbourhoods similar to those of the migrants.

Our first project looked at women aged 18–25 and found statistically significant differences in levels of reproductive hormones between women who grew up in Sylhet (residents and adult migrants) and those who grew up in the UK (white British and second-generation migrants), with the former having lower levels. Child migrants, however, and particularly those who migrated prior to eight years of age, also had significantly higher levels of hormones. This suggests that the childhood environment prior to puberty can influence later life development.

In more recent projects (which I will be writing up), we examined the developmental environment on female reproductive ageing. In preliminary analyses, we again found significant differences in levels of reproductive hormones relating to the menopause between migrants and non-migrants. Women who grew up in Bangladesh have menopause at an earlier age than those who develop in

the UK. Child migrants match the profiles of UK residents and approach menopause later. Similarly, we have studied Bangladeshi male migrants and found that the childhood environment affects levels of salivary testosterone, with Bangladeshi residents having significantly lower levels.

Since levels of hormones across the life course affect risks for reproductive cancers, the changes in hormonal profiles across migrant groups will also alter long-term health profiles.

Recommended Reading

Núñez-de la Mora, A. and G. R. Bentley (2008). "Changes in risk factors for breast cancer in migrant women: An inter-generational comparison among Bangladeshis in the UK." In *Health, Risk and Adversity: A Contextual View*, edited by C. Panter-Brick and A. Fuentes, 129–149. London: Berghahn Press.

Núñez-de la Mora, A., G. R. Bentley, R. T. Chatterton, O. A. Choudhury, and D. A. Napolitano (2008). "The impact of developmental conditions on adult salivary estradiol levels: Why this differs from progesterone." *American Journal of Human Biology* 20, 1: 2–14.

Núñez-de la Mora, A., R. T. Chatterton, O. A. Choudhury, D. A. Napolitano, and G. R. Bentley (2007). "Childhood conditions influence adult progesterone levels." *PLoS Med* 4(5): e167. doi:10.1371/journal.pmed.0040167

KAMAL BOULLATA

Painter and Writer Menton, France

Born in 1942 in Jerusalem Studied at the Accademia di Belle Arti di Roma and Corcoran Art Museum School, Washington, DC

ON TRANSPARENCY

During my residency at the Wissenschaftskolleg zu Berlin, I would like to create a series of abstract paintings drawing upon the visual perception of transparency and simultaneously to write my observations on the subject. Through its abstract rendering, each composition would seek to embody the tactile experience of perceiving transparency and the breathing of life into the materialization of imagined space.

Venturing in such an undertaking should obviously raise many questions. How can mere layers of acrylic paint assuming geometric forms composed on a flat surface seduce the viewer the way transparency in clothing seduces the onlooker's eye? Can transparency in an abstract painting reveal a form's volume, the way transparency of a thin-pleated skirt in the statue of a Greek Goddess defines the volume of her body in marble? When a painting is not a mimetic representation of nature, can its transparencies allude to a metaphor as does Debussy's *La Mer*, which is not a depiction of the sea but a metaphor of seaness?

Some of these questions might be answered through painting. Others might only be contemplated through writing.

Recommended Reading

Boullata, Kamal. *Between Exits: Paintings by Hani Zurob*. London: Black Dog Publishing, 2012.

- —. Palestinian Art: From 1850 to the Present. London: Saqi, 2009.
- —, ed. Belonging and Globalisation: Critical Essays in Contemporary Art and Culture. London: Saqi, 2008.

DANIEL BOYARIN

Ph.D., Taubman Professor of Talmudic Culture University of California, Berkeley

Born in 1946 in New Jersey, USA Studied Semitic Languages at Columbia University and Talmud at the Jewish Theological Seminary of America, New York

A TRAVELING HOMELAND: THE BABYLONIAN TALMUD AS THE FOUNDATION OF A DIASPORA

During my year's tenure at the Wissenschaftskolleg, I plan, Deo Volente, to produce a manuscript with the above title. It will be an interrogation into the structure of diaspora itself as a cultural phenomenon and a case study based on the theoretical position thus developed. The underlying hypothesis is that, indeed, diaspora is best described as a synchronic cultural phenomenon and not as a diachronic historical development. The condition of diaspora is generated by people/a "people" having a doubled cultural location, one local and one translocal. The location of culture here is precisely generated, not infrequently it involves the production/consumption of culture in more than one language, one closely related (if not identical) to the local language where a given community lives and one in a language shared by other communities belonging to the diasporic structure but not necessarily the locale of the given community. An excellent example of such a diaspora is the Jewish Community of late antiquity and through the Middle Ages in which cultural production was oriented toward local cultures/languages, viz Arabic, Spanish, Germanic, French, and Italian (among others), while there was also highly significant cultural production in Hebrew, which was thus shared among other Jews who did not speak or write the same local vernaculars.

The thesis of this monograph is that the Babylonian Talmud, studied in two ways, manifests this structure and even is originary for it.

After a first chapter laying out and exemplifying the theoretical claims above, I plan two more sections (whether each will be a chapter or more than a chapter remains to be seen). The first of these sections will deal with the Talmud as a text, seeking to explore its cultural location in such a diasporic condition, one plane of the language (or one language within the text to use Bakhtinian talk) is produced in deep interaction with the local culture of Sasanian Iran, while the other plane within the text involves a Hebrew/Aramaic cultural location of production and impact and consumption that is oriented toward the other great rabbinic center of late antiquity, Greco-Roman Palestine. An attempt will be made in this chapter to describe this condition more exactly than has been done until now, perhaps furthering an ongoing vital discourse within Talmudic studies at the present moment. The latter of the two sections belongs to the project "Zukunftsphilologie: Revisiting the Canons of Textual Scholarship" organized by the Forum Transregionale Studien. It is a study of the reception and interpretation of the Talmud in early modern Spain and the Sefardic diaspora of the 16th century, the argument being that the doubled location of Talmudic studies in 14th-century Spain between the cultures of transnational rabbinism and Latin/Arabic culture in Iberia is a productive way of thinking about what is going on there as well.

In a conclusion, I hope to argue that the text seen this way constitutes this Jewish diaspora as much as it is constituted by it – or even more.

Recommended Reading

Boyarin, Daniel. *Socrates and the Fat Rabbis*. Chicago: University of Chicago Press, 2009.

—. Border Lines: The Partition of Judaeo-Christianity. Philadelphia: University of Pennsylvania Press, 2004.

Boyarin, Daniel and Jonathan Boyarin. *Powers of Diaspora: two Essays on the Relevance of Jewish Culture*. Minneapolis: University of Minnesota Press, 2002.

ALFRED BRENDEL

von März bis Mai 2013 Dr. h. c. mult. Musiker und Schriftsteller, London

Geboren 1931 in Wiesenberg, heute Kozianau, Tschechien Studierte Klavier an der Akademie für Musik und Darstellende Kunst, Wien

1. ÜBERSETZUNG MEINES BUCHES A PIANIST'S ALPHABET

2. UNTERSUCHUNGEN ZU SCHUBERTS KAMMERMUSIK

Meine Arbeitsvorhaben für meine Zeit am Wissenschaftskolleg sind der Abschluss der Übersetzung meines neuen Buches *A Pianist's Alphabet* ins Englische sowie Untersuchungen zu Schuberts Kammermusik. Meine Arbeit mit jungen Musikern und dem Casals-Quartett wird damit in Verbindung stehen.

Lektüreempfehlung

Brendel, Alfred. *Playing the Human Game. Collected Poems of Alfred Brendel.* London: Phaidon, 2011.

- —. Alfred Brendel on Music: Collected Essays. London: Robson Books, 2001; aktualisierte Neuauflage: J. R. Books, 2007. Deutsche Ausgabe: Über Musik: Sämtliche Essays und Reden. München: Piper, 2001; aktualisierte Neuauflage 2007.
- —. Spiegelbild und schwarzer Spuk: Gesammelte und neue Gedichte. München: Hanser, 2003.

—. Ausgerechnet ich: Gespräche mit Martin Meyer. München: Hanser, 2001. Englische Ausgabe: The Veil of Order: Alfred Brendel in Conversation with Martin Meyer. London: Faber and Faber, 2002.

HUBERTUS BUCHSTEIN

Dr. phil., Professor für Politische Theorie und Ideengeschichte Universität Greifswald

Geboren 1959 in Eutin Studium der Politikwissenschaft, Germanistik, Philosophie und Geschichte an der Freien Universität Berlin

POLITIK DES ALEATORISCHEN

Der Zufall hat in der Politischen Philosophie und den Sozialwissenschaften in der Regel keinen guten Leumund; Geistes- und Sozialwissenschaftler haben den kaum zu bändigenden Impuls, das Phänomen Zufall unter ihre Kontrolle zu bekommen. Dies gilt auch für die Politik: Die Basismodule des modernen Politikverständnisses sind "Vernunft" und/oder "Interesse" und damit das genaue Gegenteil vom blinden Spiel mit dem Zufall.

Demgegenüber möchte ich in meinem Projekt am Wissenschaftskolleg mit dem Titel "Politik des Aleatorischen" dazu beitragen, das Moment des Zufalls auf produktive Weise als Instrument der aktiven Gestaltung von Gesellschaft und Politik zu betrachten. Mit diesem Vorhaben möchte ich meine bisherigen Überlegungen zu Losverfahren und Demokratie in drei Richtungen weiterführen. Erstens ist beabsichtigt, das Phänomen "Zufall" in seinen philosophischen, historischen und konzeptionellen Dimensionen genauer in den Blick zu nehmen und von hier aus nach Verbindungen zu aktuellen Debatten über "Kontingenz" in der Politik zu suchen. Zweitens ist vorgesehen, Vorschläge zu erarbeiten, wie sich mithilfe von zufallsgenerierten Entscheidungen bei der Besetzung von Ämtern die viel beklagten Repräsentations-, Transparenz- und Effizienzdefizite in supranationalen politischen Gremien abbauen lassen. Und drittens möchte ich diese Überlegungen schließlich in ein Vorhaben einmünden lassen, das den provisorischen Titel "Eine allgemeine Theorie politischer Verfahren" trägt.

Lektüreempfehlung

Buchstein, Hubertus. Demokratie und Lotterie: Das Los als politisches Entscheidungsinstrument von der Antike bis zur EU. Frankfurt/Main, New York: Campus, 2009.

- —. (zusammen mit Michael Hein). "Randomizing Europe. The Lottery as a Decision-Making Procedure for Policy Creation in the EU." *Critical Policy Studies* 3, 1 (2009): 29–57.
- —. "Reviving Randomness for Political Rationality: Elements of a Theory of Aleatory Democracy." *Constellations* 17, 3 (2010): 435–454.

JOSÉ EMILIO BURUCÚA

Ph.D., Professor of Cultural History Universidad Nacional de San Martín, Argentina

Born in 1946 in Buenos Aires Studied Art History at the Universidad de Buenos Aires

MASSACRES: THE MEANING OF THEIR HISTORICAL AND AESTHETIC REPRESENTATIONS

My project proposes to finish an on-going piece of long-term research, carried out with my colleague Nicolás Kwiatkowski, regarding the representation of massacres in history. Examples from Classical Antiquity, Early Modern Europe and the Late Modern World have been surveyed. The inquiry has enabled us to identify, so far, three main recurring formulae used to represent massacres:

- 1) A cynegetic representational form, invented in Ancient Greece, that has been used sometimes to portray the behaviour and character of the victims and some other times those of the perpetrators.
- 2) The formula of collective martyrdom appeared during the Middle Ages in Western Europe, a theme that has been adopted since Early Modern times to narrate real massacres as well.
- 3) An infernal metaphor that has been mobilized, in some cases to identify victims with demons, in others to describe the experience of the massacre as "infernal". The use of this formula began in the sixteenth century, but it soon became one of the most powerful themes for the representation of mass killings, especially in the nineteenth and twentieth centuries.

The Warburgian notion of *Pathosformel* has been one of our major theoretical groundings in describing the uses and transformations of the aforementioned formulae. From the times of the Shoah and other contemporary genocides, it is also evident that these potential *Pathosformeln* reached their limits and were deemed useless. In this respect, we found that depictions of recent massacres and massive killings used the multiplication of silhouettes as a new formal device.

Are we consequently midwifing the birth of a new *Pathosformel* that will increase our understanding and capacity to represent the overwhelming traumas implied by the massacres of our age? If that is the case, better knowledge of the facts could be a keystone for the attainment of the yearned *Nunca más*.

Recommended Reading

Burucúa, José Emilio. *Historia, arte, cultura: de Aby Warburg a Carlo Ginzburg*. Buenos Aires: Fondo de Cultura Económica, 2003.

- —. "Occurrences and Eclipses of the Myth of Ulysses in Latin American Culture." In *Written Culture in a Colonial Context: Africa and the Americas 1500–1900*, edited by Adrien Delmas and Nigel Penn, 326–356. Cape Town: UCT Press, 2011.
- —. "Der Begriff der Alterität und die Darstellung des Odysseus in der Renaissance." In *Das Meer, der Tausch und die Grenzen der Repräsentation*, edited by Hannah Baader and Gerhard Wolf, 329–355. Zurich et al.: Diaphanes, 2010.

JAMES T. COSTA

Ph.D., Professor of Evolutionary Biology Western Carolina University, Cullowhee, North Carolina and Executive Director Highlands Biological Station, North Carolina

Born in 1963 in Long Island, New York Studied Biology at Cortland College and Entomology, Population Genetics, and Evolutionary Biology at the University of Georgia and at Harvard University

EXPERIMENTISER - CHARLES DARWIN AT WORK

We can only imagine that Emma Darwin had the patience of Job. At one point in the mid-1850s, sheets of damp paper stuccoed with frog eggs lined the hall-way of her house, pigeons cooed boisterously in a dovecote in the yard, row upon row of glass jars with saltwater and floating seeds filled the cellar, and earth-filled flower pots housing earthworms decorated the drawing room. And that was only the beginning: what about the terrarium of snails with suspended duck feet, the heaps of dissected flowers, or the roped-off beds in the lawn where the grass was carefully scraped away to study struggling seedlings? Of course, being married to Charles Darwin over a dozen years by then, she was undoubtedly used to it. Charles, she would say to friends, was *experimentising* again.

What Charles was doing was laying empirical groundwork for key elements of his revolutionary ideas of evolution. His *experimentising*, which appeared to some merely the odd pursuits of a middle-aged Victorian naturalist, turned out to be fuel for the fire, pushing the envelope on his – and our – understanding of the biological world and our place within it. My project at the Wissenschaftskolleg entails completion of a book that introduces a Charles Darwin that few people know, seen through the lens of his rich experimental program: Darwin the inveterate observer and correspondent, ingenious synthesizer and experimentalist, devoted family man.

Darwin's very home was his laboratory, and his and Emma's large brood worked with him as his able field assistants. The rich array of projects Darwin carried out, often with his children, reveal a very human side of a man too often seen one-dimensionally, a cardboard icon. But more than this, Darwin's experiments exemplify science as a process, providing object lessons and blue-prints for how science works. His experiments are an untapped resource for teaching the nature of science that has been staring us in the face for a century and a half. I aim to show readers how Darwin's approach has relevance today – how his backyard experiments can be *their* backyard experiments, for the fun of it as much as for the educational value, letting Darwin teach Darwin to a new generation.

Recommended Reading

Costa, James T. *The Annotated Origin: A Facsimile of the First Edition of* On the Origin of Species. Cambridge, Mass.: Belknap/Harvard University Press, 2009.

- —. "Darwinian revelation: tracing the origin and evolution of an idea." *BioScience* 59 (2009): 886–894.
- —. "Teaching Darwin with Darwin." BioScience 53 (2003): 1030–1031.

LORRAINE DASTON

Permanent Fellow of the Wissenschaftskolleg Ph.D., Director, Max Planck Institute for the History of Science, Berlin Professor, Committee on Social Thought, University of Chicago

Born in 1951 in Michigan Studied History, Philosophy of Science, and History of Science at Cambridge and at Harvard

THE PASSIONS OF THE UNNATURAL

During the academic year 2012/13 I will be working on the final chapter of a book about natural and moral orders that tries to answer a question that can be simply put, even if it is not a simple question: Why do people, in many different cultures and epochs, pervasively and persistently, look to nature as a source of norms for human conduct? In ancient India and in ancient Greece, in medieval France and Enlightenment America, in the latest controversy over homosexual marriage or genetically modified organisms, people have linked the natural and moral orders — and disorders. Nature has been invoked to emancipate, as the guarantor of human equality, and to enslave, as the foundation of racism. Nature's authority has been enlisted by reactionaries and by revolutionaries, by the devout and secular alike

Yet for centuries philosophers have insisted that there are no values in nature. Nature simply is; it takes a human act of imposition or projection to transmute that "is" into an "ought". In this view, there is no legitimate inference that can be drawn from how things happen to be to how things should be. So why does the conflation of the natural and moral orders persist so stubbornly?

My aim is first and foremost to explain this persistence – not to correct, not to unmask, not to cure. My line of inquiry will be to excavate the sources of the intuitions that propel the search for values in nature. In different times and places, these intuitions have expressed themselves in the most luxuriantly diverse forms – as diverse as the efflorescence of nature and culture themselves.

But the core intuitions underlying all this diversity of norms grounded in natures have something in common. At their heart is the perception of order – as fact and as ideal. And this perception is deepened and heightened by the passions of the unnatural that accompany perceptions of *disorder*: horror, terror, and wonder.

These are the passions of the unnatural. They register a breach of order, and are therefore cognitive emotions that presuppose a judgment that triggers an intense response. Whether the order in question is natural or moral is often extremely difficult, if not impossible to ascertain. It is characteristic of these passions to blur the distinction between the moral and the natural. They therefore offer a clue as to why natural and moral orders are so often conflated.

Recommended Reading

Daston, Lorraine and Elizabeth Lunbeck, eds. *Histories of Scientific Observation*. Chicago: University of Chicago Press, 2011.

Daston, Lorraine. "Human Nature Is a Garden." *Interdisciplinary Science Reviews* 35 (2010): 215–230.

Daston, Lorraine and Peter Galison. *Objectivity*. New York: Zone Books, 2007. (German edition: *Objektivität*. Frankfurt/Main: Suhrkamp, 2007.)

GÁBOR DEMSZKY

from September 2012 to January 2013 Dr., Budapest Former Governing Mayor of Budapest (1990–2010)

Born in 1952 in Budapest Studied Jurisprudence at Eötvös Loránd University Budapest

REFORMS OF THE URBAN ADMINISTRATION IN BUDAPEST

During my stay at the Wissenschaftskolleg zu Berlin, I have in mind to write a deeper analysis of the issues of my mayorship of Budapest that I have already documented in *Budapest Marathon* (in press), this time for a larger public, focusing on a set of tools in the field of city policy such as strategic planning, a targeted system of housing-related cost allowances, a crime prevention concept etc., for the use of experts enabling the city leadership to implement reforms in Budapest during the given period.

This updated version of *The Budapest Model* will be based on the aforementioned documentation and is intended for publication. It will be accessible in Public Archives. This new version of *The Budapest Model* aims to promote the reforms and innovations we have implemented among a wide range of experts of urban policy and self-governments interested in adapting them to their circumstances. One of these reforms is the following:

One of the cornerstones of *The Budapest Model* is the framework of mediumterm, 7-year financial planning. It is a rolling plan, updated in every annual budgetary round to project revenue flows, expenditures, and financial liabilities. This method of fiscal planning provides an effective and robust instrument for ensuring financial sustainability, achieving a good credit rating in external financing, systematically examining the budgetary consequences of current commitments, and striking the optimal balance between operating expenditures

and investment activities. This framework is readily available for adaptation depending on the local institutional context.

As during the two previous years, I also intend to deliver public lectures during the autumn and winter of 2012 in several European cities about my experiences in local government – in order to promote reform-minded projects mainly in capital cities of the new member states of the EU.

Recommended Reading

Demszky, Gábor. *Keleti éden: szamizdat apámnak* [Das Paradies im Osten]. Budapest: Noran, 2008.

- —. *A szabadság visszahódítása* [Die Rückeroberung der Freiheit]. Budapest: Új Mandátum Könyvk, 2001.
- —, ed. "Szamizdat 81–89." Hírmondó. Budapest: AB-Beszél Kft, 1990.

Pallai, Katalin, ed. *The Budapest Model. A Liberal Urban Policy Experiment*. Budapest: Open Society Institute, Local Government and Public Service Reform Initiative, 2003.

WILLIAM AUGUSTE FOLEY

EURIAS Fellow Ph.D., Professor of Linguistics University of Sydney

Born in 1949 in Providence, Rhode Island Studied Humanities and Social Sciences at Brown University and Linguistics at the University of California, Berkeley

A CO-EVOLUTIONARY STUDY OF GRAMMATICAL CHANGE

This project investigates the question whether there are innate cognitive biases that universally determine word classes in language. This will be investigated in detail in the Austronesian language family, where the status of the noun-verb distinction has long been controversial. We will approach the problem ontogenetically, by a systematic study of a representative sample to establish what evidence there is for coherent classes of nouns and verbs, but, more importantly, in light of a co-evolutionary account, phylogenetically, by how the patterns of words have shifted over time. Austronesian languages exhibit a high degree of diversity: sometimes a tendency to distinguish nouns and verbs seems clear, but elsewhere it seems extremely problematic. In most language families, the predisposition to distinguish nouns and verbs is strong. So what is it about Austronesian languages that leads to a recurring predilection to attenuate the distinction? Given the widespread attestation of a robust noun-verb distinction elsewhere, its attenuation is an analogue of a recessive trait. What conditions select for or against this? What are recurring solutions, evidently co-evolutionarily favoured, and what are outliers, statistically low probability outcomes, and why? While at first glance seemingly quite specialized, the project has broad implications for cognitive and anthropological science. It is the first detailed study within a co-evolutionary framework of any major grammatical property. It seeks to understand linguistic structure and its possible changes through the

selective interplay between cognitive biases due to likely panhuman biological givens and specific historical developments. This project probes some of the limitations on innate cognitive endowment for the formation of linguistic structures and their transitions through time and space, in particular the role that language-specific, in a word, *cultural*, learning plays in language acquisition.

Recommended Reading

Foley, William Auguste. *The Papuan Languages of New Guinea*. Cambridge: Cambridge University Press, 1986.

- —. Anthropological Linguistics: An Introduction. Oxford: Blackwell, 1997.
- —. "Determinism and Universals: the Arguments from Linguistics." In *Complexities*, edited by Susan McKinnon and Sydel Silverman, 43–63. Chicago: University of Chicago Press, 2005.

GARTH FOWDEN

EURIAS Fellow Ph.D., History

Director of Research, National Hellenic Research Foundation

Born in 1953 in Norwich, UK Studied Modern History at the University of Oxford

THE FIRST MILLENNIUM: FROM AUGUSTUS TO AVICENNA

The First Millennium project responds to two debates about Islam - its late antique roots, and the role it will play in twenty-first-century Europe. Starting from first pagan, then Christian Rome's creation of a Mediterranean empire, FM shifts attention eastward to Oriental (especially Syriac) Christianity and Iran, setting the stage for Muhammad and the Arab conquests. The Umayyad and Abbasid Caliphates united the old Sassanian world with much of Rome's territory, while Islam's cultural crystallization, well under way by 1000, drew on rabbinic Judaism, Christianity, Iranian Zoroastrianism and Greek philosophy, which all attained classical/canonical forms during the millennium after Augustus. FM interweaves political narrative with the development of these intellectual and scholarly traditions, which, along with Roman law, have so signally influenced the cultural foundations of the contemporary world. By examining these traditions in their interaction, during a phase when they were less rigidified and institutionalized than they later became, I hope to suggest lines of further thought about how they might cohabit within the emerging European polity. At the same time I offer the general reader a different account of all these histories that does not predestine them to culminate in European modernity but leaves open other possible perspectives and progressions, notably towards the great Muslim empires of early modern Eurasia.

Recommended Reading

Fowden, Garth. Empire to Commonwealth: Consequences of Monotheism in Late Antiquity. Princeton: Princeton University Press, 1993.

- —. "Contextualizing Late Antiquity: The First Millennium." In *The Roman Empire in Context: Historical and Comparative Perspectives*, edited by Johann P. Arnason and Kurt A. Raaflaub, 148–176. Chichester: Wiley-Blackwell, 2011.
- —. "The Parthenon Between Antiquity, Barbarism and Europe." Review article on Anthony Kaldellis. *The Christian Parthenon: Classicism and Pilgrimage in Byzantine Athens* (Cambridge: Cambridge University Press, 2009). *Journal of Roman Archaeology* 23 (2010): 802–810.

RAGHAVENDRA GADAGKAR

Permanent Fellow of the Wissenschaftskolleg Ph.D., Professor of Ecology Indian Institute of Science, Centre for Ecological Sciences, Bangalore

Born in 1953 in Kanpur, India Studied Zoology and Molecular Biology in Bangalore

THE ORGANIZATION AND EVOLUTION OF INSECT SOCIETIES

Many insect species, particularly those of ants, bees, wasps and termites live in societies consisting of large numbers of individuals. Their colonies are often characterised by sophisticated levels of integration, communication and division of labour and by acts of altruism by some individuals for the welfare of the rest of the colony. The mechanism of evolution of such altruistic behaviour and the mechanisms by which the observed levels of integration, communication and division of labour are achieved are of great interest to biologists and laymen alike and are dominant themes in my project. I have chosen the tropical primitively eusocial wasp *Ropalidia marginata* occurring in Southern India as a model system to investigate these questions.

From time to time I like to write for a general audience, giving an overview of my field of research. My *Survival Strategies* was one such example. This year I hope to begin work on a sequel entitled *Reproductive Strategies*, in which I will endeavour to show that throughout the animal kingdom, reproductive success is all about achieving a fine balance between cooperation and conflict among the partners involved.

Recommended Reading

- Gadagkar, Raghavendra. *The social biology of* Ropalidia marginata: *Toward understanding the evolution of eusociality*. Cambridge, Mass.: Harvard University Press, 2001.
- —. "Interrogating an insect society." *Proceedings of the National Academy of Sciences*, USA 106 (2009): 10407–10414. doi: 10.1073/pnas. 0904317106. [Reprinted in *Wissenschaftskolleg zu Berlin, Yearbook 2008–2009*].
- —. Survival strategies: Cooperation and conflict in animal societies. Cambridge, Mass.: Harvard University Press, 1997.
- —. "Science as a hobby: how and why I came to study the social life of an Indian primitively eusocial wasp." *Current Science* 100 (2011): 845–858.

DELPHINE GARDEY

Dr., Professor of Contemporary History Université de Genève

Born in 1967 in France Studied History and Sociology at Université Paris 7-Diderot and at the École des Hautes Études en Sciences Sociales Paris

FOR A HISTORICAL AND MATERIAL ANTHROPOLOGY OF PARLIAMENTS: THE PRIVATE LIFE OF THE FRENCH NATIONAL ASSEMBLY

My proposal is to consider the actual constitution of a unique instance: the Assembly, the National Representation. It aims to provide a different insight into how democracy in the late 18th and the 19th century was defined, that is, as a space of representation and deliberation, laying claim not only to represent the People, but to be the People.

As shown by the French example, the space of the Parliament must be successively detached from the King, must fear the Emperor and, when the Republic is re-established, must not be confused with the government. It should be stressed that Parliament does not consider itself an inclusive part of the State or the state administration, but like something that is definitely elsewhere. It is apart, it is above, it makes law, it is the law. It is thus an idea, an ideal, a good, a grandeur, something that transcends (that must transcend) the contingent context that makes it possible. Beyond the stage, a theatre-like venue where the people's representatives debate, the *Assemblée* means more in terms of material, social and gender arrangements in order to be, to embody or to re-embody an ideal that is identified as one of the most precious assets of the democratic order.

My proposal would thus be to account for the above enabling arrangements. This requires an account of ordinary labour, of minor issues that need to be solved, of material and administrative activities that need to be carried out. How is such a singular institution concretely established? How can its existence be

stabilized in contexts of political turmoil, made of revolutions and counterrevolutions, successive and often contradictory political regimes? A study of the administrative archives of the French *Assemblée Nationale*, mostly unknown to historians, enables me to shed light on many aspects and raise questions contributing to further discussion in history, sociology and political theory.

Recommended Reading

Gardey, Delphine. Ecrire, calculer, classer. Comment une révolution de papier a transformé les sociétés contemporaines (1800–1940). Paris: la Découverte, 2008.

- —. La dactylographe et l'expéditionnaire. Histoire des employés de bureau, 1890–1930. Paris: Belin, 2001.
- —. "Turning Public Discourse into an Authentic Artefact: Shorthand Transcription in the French National Assembly." In *Making Things Public: Atmospheres of Democracy*, edited by Bruno Latour and Peter Weibel, 836–843. Cambridge, Mass.: MIT Press, 2005.

LUCA GIULIANI

Rektor des Wissenschaftskollegs Dr. phil., Professor für Klassische Archäologie Humboldt-Universität zu Berlin

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

PHILOSTRAT, EIKONES

Die um 200 n. Chr. verfassten Eikones (Bilder) des Philostrat gehören zu den Glanzleistungen der griechischen Literatur der römischen Kaiserzeit. Mit ungeheurer Suggestionskraft beschreibt der Autor in diesem Text eine imaginäre Bildergalerie und führt dabei paradigmatisch die Möglichkeiten rhetorischer Bildinterpretation vor. Man hat in der Vergangenheit oft nach dem Realitätsgehalt dieser Bildbeschreibungen gefragt und dabei den entscheidenden Punkt verkannt: Der Text sagt nicht allzu viel über eine reale Bildergalerie aus, wohl aber Entscheidendes über die reale Praxis der Bildbetrachtung. Es gibt kaum einen anderen antiken Text, aus dem so unmittelbar der zeitgenössische Betrachter und Interpret antiker Bildwerke spricht. Das hängt damit zusammen, dass Philostrat nicht nur ein großer Rhetoriker, sondern auch ein herausragender Kenner der Malerei und Bildhauerei gewesen ist. Dementsprechend erfordert dieser Text, wenn er heute angemessen verstanden werden will, auch eine doppelte Kompetenz: Er bedarf der Zusammenarbeit eines Philologen und eines Archäologen. Der Münchner Gräzist Oliver Primavesi (Fellow 2005/06) und ich arbeiten an einer Neuübersetzung des vielfach missverstandenen Werkes, die zugleich auch mit einem philologisch-archäologischen Kommentar versehen werden soll: ein ausgesprochen langfristiges Projekt.

Lektüreempfehlung

Giuliani, Luca. "Die unmöglichen Bilder des Philostrat: Ein antiker Beitrag zur Paragone-Debatte?" *Pegasos* 8 (2006): 91–116.

STEPHEN GREENBLATT

Permanent Fellow of the Wissenschaftskolleg Ph.D., The Cogan University Professor of the Humanities Harvard University

Born in 1943 in Cambridge, Massachusetts, USA Studied English Literature at Yale University and at Cambridge University

SHAKESPEARE AND THE SHAPE OF A LIFE

My principal new work this year has been a study of "the shape of a life" in Shakespeare (with the core of this study serving as the Tanner Lectures at Princeton). What does it mean for anyone in Shakespeare to think that he or she has a life story? What are the conditions in his works for affirming that human existence can be framed as a narrative, a narrative that can be told and retold by agents who will serve its replication and transmission? To answer these questions I draw on, among other things, the insights of "life history theory" as developed in evolutionary biology. Spin-offs from this project include the planning of two interdisciplinary conferences, bringing together scientists and humanists, one at Harvard and the other at the Wiko. Among other enterprises, I am also overseeing, as General Editor, new editions of both The Norton Shakespeare and The Norton Anthology of English Literature (for which I serve as well as the sixteenth-century period editor). I continue to be involved in the Cardenio project (www.fas.harvard.edu/~cardenio/index.html), with adaptations this year in Serbia and South Africa and a forthcoming adaptation in Taiwan.

Recommended Reading

- Greenblatt, Stephen, with Ines G. Županov, Reinhart Meyer-Kalkus, Heike Paul, Pál Nyíri, and Friederike Pannewick. *Cultural Mobility: A Manifesto*. Cambridge, Mass.: Cambridge University Press, 2009.
- Greenblatt, Stephen. *The Swerve: How the World Became Modern.* New York: W. W. Norton, 2011.
- —. Shakespeare: Freiheit, Schönheit und die Grenzen des Hasses. Frankfurt: Suhrkamp, 2007.
- —. Will in the World: How Shakespeare Became Shakespeare. New York: W. W. Norton, 2004.

JONAS GRETHLEIN

Dr. phil., Professor of Classical Philology Ruprecht-Karls-Universität Heidelberg

Born in 1978 in Munich Studied Greek and Latin Philology and History at the Universities of Göttingen, Oxford and Freiburg

EXPERIENCE AND TELEOLOGY IN ANCIENT HISTORIOGRAPHY

"The Thirty Years War began in 1618". According to Danto, narrative sentences like this, sentences that refer to two events in the past but only describe the first, are characteristic of historiography (1965). The double temporal reference applies not only to individual sentences, but also to historiographical works as a whole. Historians tend to narrate past events from the perspective of a *telos* that is still future for the historical agents, but already past for the historians and their readers. At the same time, historians can try to ignore this "future past" and to adopt the perspective of the historical agents. My book project sets out to explore the narrative strategies through which Greek and Roman historians ranging from Herodotus to Tacitus make use of the advantage of hindsight or try to repress it in order to recreate the presentness of the past.

"Experience and Teleology in Ancient Historiography" stands at the intersection of the theory of history and literary studies, combining theoretical reflections with close readings. My goal is twofold: First, I hope to contribute to the *theory of history* in demonstrating the capacity of narrative to make us reexperience the past. Second, the focus on "futures past" will shed new light on an important aspect of *ancient historiography* that has not yet received due attention. Temporal perspective is far more than a technical question, it is crucial to historiography and expresses an author's idea of history.

Recommended Reading

Grethlein, Jonas. *The Greeks and Their Past: Poetry, Oratory and History in the Fifth Century BCE*. Cambridge: Cambridge University Press, 2010.

—. Littells Orestie: Mythos, Macht und Moral in "Les Bienveillantes". Freiburg: Rombach, 2009.

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 Studium der Rechtswissenschaft und Politikwissenschaft in Frankfurt/Main, Freiburg/Breisgau, Berlin, Paris und Harvard

DIE VERFASSUNG UNTER DEM DRUCK DER GLOBALISIERUNG

Der Konstitutionalismus hat seit den Ereignissen von 1989/90 weltweite Verbreitung gefunden und wird immer stärker durch die – nun ebenfalls weltweite – Verbreitung der Verfassungsgerichtsbarkeit geprägt. Andererseits gerät die staatsbezogene Verfassung durch die wachsende Internationalisierung und Globalisierung unter Druck, ohne dass bisher geklärt wäre, ob und wie sich die konstitutionellen Errungenschaften auf überstaatlicher Ebene bewahren lassen, insbesondere wenn man sie nicht auf ihre rechtsstaatliche Dimension verengt, sondern auch an der demokratischen Komponente festhält.

Lektüreempfehlung

Grimm, Dieter. "The Achievement of Constitutionalism and its Prospect in a Changed World." In *The Twilight of Constitutionalism?* Edited by Petra Dobner and Martin Loughlin, 3–22. Oxford: Oxford University Press, 2010.

- —. Souveränität. Berlin: Berlin University Press, 2009.
- —. Die Zukunft der Verfassung. Frankfurt/Main: Suhrkamp, 3. Aufl., 2002.
- —. Die Verfassung und die Politik. München: C. H. Beck, 2001.
- —. "Braucht Europa eine Verfassung?" Juristenzeitung (1995): 581.

ANGELA M. GRONENBORN

Ph.D., UPMC Rosalind Franklin Professor and Chair and Distinguished Professor of Structural Biology University of Pittsburgh

Born in 1950 in Cologne Studied Chemistry at the Universität zu Köln

REDEFINING MULTI- AND INTERDISCIPLINARY APPROACHES IN BASIC SCIENCE: INTEGRATIVE MULTIDISCIPLINARITY

Some of the most interesting problems in science, and many of the most important facing society, need research at the interfaces of traditional disciplines for their solution. Examples include: understanding life as networks of chemical reactions; interpreting the molecular basis of disease; global stewardship; the production, storage, and conservation of energy and water; and the management of carbon dioxide. Therefore, more and more research will need to be conducted at the interfaces of the once "traditional" disciplines. Such interfaces exist between biology and chemistry, biology and physics, mathematics and biology, pharmacology and chemistry, engineering and biology, material science and biology, and many more. I will research how and to what extent novel concepts and breakthrough discoveries are carried out by teams that comprise scientists who come from different fields, using Structural Biology, which is in practice deeply inter- and multi-disciplinary, as the primary example. I intend to work on making explicit the "bridging concepts" that are required in traversing the traditional disciplinary boundaries that have characterized basic science. If the future of science is one that depends on escaping the restraints of narrowly disciplinary language and frameworks, as I believe it is, then we will need new language to negotiate those boundaries. In Pittsburgh I direct the interdisciplinary Pittsburgh Center for HIV Protein Interactions, dedicated to determining the high-resolution structures of HIV proteins and their host protein interacting partners. The biological theme of our research program seeks to define events, pathways, and host cell factors that are involved in HIV cellular infection after viral-cell membrane fusion and prior to integration of the viral genome into that of the infected cell. The PCHPI engages virologists, cell biologists, and structural biologists in a collaborative effort to push the field of HIV biology forward with the hope that the knowledge gained can be effectively leveraged for developing novel therapeutic strategies. My experiences in this Center will aid in elucidating how disciplinary boundaries can be traversed.

Recommended Reading

- Byeon, I. L., X. Meng, J. Jung, G. Zhao, R. Yang, J. Ahn, J. Shi, J. Concel, C. Aiken, P. Zhang, and A. M. Gronenborn (2009). "Structural convergence between CryoEM and NMR reveals novel intersubunit interactions critical for HIV-1 capsid function." *Cell* 139: 780–790.
- Omichinski, J. G., G. M. Clore, O. Schaad, G. Felsenfeld, C. Trainor, E. Appella, S. J. Stahl, and A. M. Gronenborn (1993). "NMR structure of a specific DNA complex of Zn-containing DNA binding domain of GATA-1." *Science* 261: 438–446.
- Clore, G. M. and A. M. Gronenborn (1991). "Structures of larger proteins in solution: three- and four-dimensional heteronuclear NMR spectroscopy." *Science* 252: 1390–1399.

ULRICH HALTERN

Dr. iur., LL.M. (Yale), Professor of Public Law, European Law and Philosophy of Law Leibniz Universität Hannover

Born in 1967 in Bochum Studied Law at the Universities of Bochum and Geneva, Yale and Harvard Law School

INTERNATIONAL LAW AND VIOLENCE

My starting point is that the *nomos* of international law seems fundamentally out of sync with the narrative of the modern nation-state. While international law expands and proliferates, so does violence. Much of this gets buried under utopian narratives of political and moral progress on the one hand, and an impoverished intellectual discourse shorn of context and history on the other; both attach themselves to international law. I am therefore interested in the symbolic forms of the political and of the law that make such a thing possible.

In my inquiry, I will try to continue my research in "law in context" and connect it to my "cultural study of law". Since the law is, of course, not just a bunch of rules but a whole set of beliefs, I will focus on the "social imaginaries" surrounding and informing the law. That kind of study requires much transdisciplinary awareness, obviously, it will be a major challenge to integrate arguments from such diverse backgrounds as political theory, history of ideas, philosophy, theology, art history etc. Most likely it will also be a major disaster. I will try and avoid the worst by using insights from methodological schools like the New Haven Approach, the *histoire croisée* school of comparative history, and the genealogical approach of cultural studies.

Recommended Reading

Haltern, Ulrich. Obamas politischer Körper. Berlin: Berlin University Press, 2009.

- —. Was bedeutet Souveränität? Tübingen: Mohr Siebeck, 2007.
- —. Europarecht und das Politische. Tübingen: Mohr Siebeck, 2005.

ATAC IMAMOGLU

Ph.D., Professor of Physics Eidgenössische Technische Hochschule Zürich

Born in 1964 in Minneapolis, USA Studied Electrical Engineering and Physics at the Middle East Technical University, Ankara, and at Stanford University

QUANTUM PHOTONICS

Focus Group *Quantum Mechanical Processes in Biological Systems* (see p. 130)

My research focuses on the use of quantum optical techniques for studying mesoscopic physics and solid-state quantum information processing. I am particularly interested in understanding and controlling non-equilibrium dynamics of many-body systems. Even though my research group has a predominantly experimental orientation, I am also actively involved in theoretical work.

Recommended Reading

Latta, C., F. Haupt, M. Hanl, A. Weichselbaum, M. Claassen, W. Wuester, P. Fallahi, S. Faelt, L. Glazman, J. Von Delft, H. E. Tureci, and A. Imamoglu (2011). "Quantum quench of Kondo correlations in optical absorption." *Nature* 474: 627–630.

Latta, C., A. Hogele, Y. Zhao, A. N. Vamivakas, P. Maletinsky, M. Kroner, J. Dreiser, I. Carusotto, A. Badolato, D. Schuh, W. Wegscheider, M. Atature and A. Imamoglu (2009). "Confluence of resonant laser excitation and bidirectional quantum-dot nuclear-spin polarization." *Nature* Physics 5: 758–763.

Hennessy, K., A. Badolato, M. Winger, D. Gerace, M. Atature, S. Gulde, S. Falt, E. Hu, and A. Imamoglu (2007). "Quantum nature of a single quantum dot-cavity system." *Nature* 445: 896–899.

AKIHITO ISHIZAKI

two stays of 6 weeks, still to be determined Fellow of the College for Life Sciences (see p. 132) Ph.D., Research Associate Professor of Theoretical and Computational Molecular Science National Institutes of Natural Sciences, Okazaki, Japan

Born in 1977 in Nara, Japan Studied Theoretical Chemistry at Kyoto University

BRIDGING QUANTA, MOLECULES, AND LIFE: THEORETICAL INVESTIGATION OF RESPONSIVE AND AUTONOMOUS BEHAVIORS OF MOLECULAR SYSTEMS

Nature on the scale of human beings exhibits a remarkable performance by harmonizing diverse molecular processes. For example, biological systems perform meso- and macroscopic functions efficiently and robustly even with exposure to severely interfering environmental disturbances. Further, they adapt and even reprogram their functions in response to nonperturbative change in environments. Unveiling the design and working principles of such responsive and autonomous behaviors that molecular systems exhibit is one of today's grand challenge areas.

Such responsive and autonomous behaviors of molecular systems involve a variety of dynamic processes that span an extremely wide range of spatial and temporal scales, exhibiting multiple hierarchy levels in space and time. In many cases, it has been assumed that different levels of the hierarchy are well separated and thus that scale-specific descriptions are sufficient. However, molecular systems in the real world are replete with examples of hierarchically coupled scales. Indeed, biological functions can be conceived as a sequence of structural changes involving chemical reactions triggered by stimuli. Meso- and macroscopic phenomena are sometimes triggered even by quantum mechanical events. In such ways, molecular functions inherently accompany information flow

across different hierarchy levels of temporal and spatial scales. Processes bridging the different scales and hierarchy levels should be essential sources for harmonizing diverse molecular processes. Yet, we are far from being able to uncover and compute such cross-scale or cross-hierarchical events on a firm molecular basis.

To address these issues of molecular functioning, we will tackle the development of cross-scale simulation methodologies and cross-hierarchical concepts with the aid of *ab initio* electronic structure calculations, quantum dissipative theories, and nonequilibrium statistical mechanics.

Recommended Reading

Ishizaki, Akihito and Graham R. Fleming. "Quantum coherence in photosynthetic light harvesting." *Annual Review of Condensed Matter Physics* 3 (2012): 333–361.

Ishizaki, Akihito, Tessa R. Calhoun, Gabriela S. Schlau-Cohen, and Graham R. Fleming. "Quantum coherence and its interplay with protein environments in photosynthetic electronic energy transfer." *Physical Chemistry Chemical Physics* 12 (2010): 7319–7337.

Ishizaki, Akihito and Graham R. Fleming. "Theoretical examination of quantum coherence in a photosynthetic system at physiological temperature." *Proceedings of the National Academy of Sciences of the United States of America* 106 (2009): 17255–17260.

EMILY I. JONES

from March to June 2013 Fellow of the College for Life Sciences (see p. 132) Ph.D., Ecology and Evolutionary Biology Washington State University

Born in 1982 in Washington D.C. Studied Biology at Rice University and Ecology and Evolutionary Biology at the University of Arizona

COEVOLUTION THROUGH INDIRECT INTERACTIONS

Biotic interactions - such as predation, parasitism, competition, and mutualism – play a critical role in shaping the diversity of life. These interactions affect species' population sizes and distributions, as well as selection on a wide spectrum of behavioral and physical traits. Research on the ecology of biotic interactions has traditionally focused, for simplicity, on isolated pairs of species. Similarly, studies of reciprocal evolution between traits of interacting species, i.e., coevolution, tend to be limited to pairs of directly interacting traits. However, in reality, pairs of species are embedded in larger ecosystems, forming complex networks of direct and indirect interactions. These indirect interactions have the potential to drive coevolution through a number of currently overlooked mechanisms, including 1) indirect trait interactions between directly interacting species mediated by population densities or correlated traits, 2) indirect interactions between species mediated through the biotic environment, and 3) indirect interactions between species mediated through the abiotic environment. Although more subtle than direct coevolution between interacting traits, such indirect coevolution can have an important role in generating patterns of species abundance, species coexistence, and trait diversification. Additionally, accounting for indirect interactions in coevolutionary studies may provide insight into how native communities with a long coevolutionary history respond to disruption caused by habitat loss, climate change, and species invasions. My aim is to review the potential mechanisms of indirect coevolution and, through this synthesis, to suggest improved methods for modeling coevolution and for identifying different forms of coevolution in nature.

Recommended Reading

- Jones, E. I., J. L. Bronstein and R. Ferrière (2012). "The fundamental role of competition in the ecology and evolution of mutualisms." *Annals of the New York Academy of Sciences 1256, The Year in Evolutionary Biology*: 66–88. DOI: 10.1111/j.1749-6632.2012.06552.x
- Jones, E. I. and R. Gomulkiewicz (2012). "Biotic interactions, rapid evolution and the establishment of introduced species." *The American Naturalist* 179: E28-E36. DOI: 10.1086/663678.
- Jones, E. I., R. Ferrière and J. L. Bronstein (2009). "Eco-evolutionary dynamics of mutualists and exploiters." *The American Naturalist* 174: 780–794. DOI: 10.1086/647971

BRUCE M. KOGUT

Ph.D., Sanford C. Bernstein & Co. Professor of Ethics and Leadership Columbia University

Born in 1953 in New York Studied Political Science at the University of California, Berkeley, International Relations at Columbia University, New York, and International Business and Finance at the Massachusetts Institute of Technology

1. HISTORICAL DIFFUSION OF ORGANIZATIONAL TECHNOLOGY

2. ECONOMIC NETWORKS: HISTORICAL AND FUTURE

Ad 1. This project is to write a book using published and unpublished work that I have written, historical vignettes of the diffusion of organizing practices among firms and across countries. The project starts from an analysis of data that shows the contribution of major organizational innovations, e.g. the factory system, mass production, and lean production, on economic growth and firm productivity. Through a series of case studies, the main ideas of the increasing ease with which ideas are learned across borders make for more rapid diffusion and convergence, while deep differences in national institutions still play important roles in the political economy that frames how new practices are adopted.

Ad 2. Much of the work I do falls under the label of complexity or the new science of networks. This area of work engages many fields, natural and social sciences included, and it is likely that many of the Fellows will have correlated interests in this regard. The specific project that I will be working on is the emergence of economic and financial markets and the challenges such markets pose regarding their stability and regulatory implications. This work encompasses the field research that I am doing in India, in cooperation with the IFMR,

on microfinance, looking at the performance of banking for the poor and the problems of stability, which are quite similar to the sub-prime crisis in the US. At the other end of the spectrum is the emergence of a far more diverse financial web consisting of multinational and national firms and global investors whose properties are now open to analysis because of the advantages that "big data" offer and the statistical and algorithmic advances made in the past decade. It is my hope to be able to extend this research historically, perhaps in cooperation or in dialogue with other Fellows.

Recommended Reading

Kogut, Bruce M., ed. *Small Worlds of Corporate Governance*. Cambridge, Mass., MIT Press, 2012.

Kogut, Bruce M., Pietro Urso, and Gordon Walker. "Emergent Properties of a New Financial Market: American Venture Capital Syndication, 1960–2005." *Management Science* 53 (2007): 1181–1198.

Kogut, Bruce M. "National Organizing Principles of Work and the Erstwhile Dominance of the American Multinational Corporation." *Industrial and Corporate Change* 1 (1992): 285–326.

MARIANNE KOOS

Dr. phil. habil., Kunstgeschichte Université de Fribourg, Schweiz

Geboren 1968 in Wien Studium der Kunstgeschichte und Philosophie an der Universität Wien und an der Goethe-Universität Frankfurt am Main

OBERFLÄCHENMETAPHERN IN KUNST UND KUNSTTHEORIE, 1500–1900

Mein Forschungsprojekt untersucht die Metaphorisierung von materialen Bildoberflächen in der historischen Kunstliteratur und Kunstkritik mit Begriffen wie "Haut" (pelle / buccia / cutis / peau / épiderme), "Fleisch" ([in]carnazione / carne / chair), "Leibfarbe" (lyffverwe), "tote Farbe" (dootverwe / death colour), "Schminke" (empiastrare / tingere bene / farder / teindre) etc.; Metaphern, die nicht nur mimetische Bildkonzepte eines Mehr oder Weniger an Farbe beschreiben, sondern auf eine Konzeption des Bildes als eines gleichsam atmenden, organischen, lebendigen und vergänglichen Körpers verweisen. Zur Frage steht, welche künstlerischen Phänomene diese Metaphern jeweils bezeichnen sollten, in welcher Relation die ausgeführten Bildoberflächen und im Bild illusionierten Körper zu diesen sprachlichen Metaphern stehen und welche Bildkonzepte und ästhetischen Problemstellungen entlang dieser Metaphern verhandelt und reflektiert worden sind.

Den Ausgangspunkt meiner Untersuchung bilden eingehende Studien zur Begrifflichkeit, Funktion und Bedeutung organischer ("somatischer", den Körper betreffender) Oberflächenmetaphern in den historischen Quellenschriften der wichtigsten europäischen Sprachkulturen im Vergleich sowie zum Wandel dieser Begrifflichkeit zwischen Renaissance und anhebender Moderne. Im Zentrum jedoch stehen konkrete Analysen zur künstlerischen Semantisierung von Werkoberflächen und der damit verbundenen Konzeption von Bildlichkeit als medialer Verkörperung. Um die Vielfalt der möglichen Untersuchungen

einzugrenzen, konzentrieren sich die Werkanalysen auf ausgewählte Beispiele der europäischen Malerei im Zeitraum zwischen 1500 und 1900, die in exemplarischer Form eine programmatische Reflexion von Bildlichkeit erkennen lassen. In Fortsetzung meiner Studien zu Caravaggio und Liotard soll das Projekt am Wissenschaftskolleg zu Berlin mit Analysen zum Werk von Rembrandt, Chardin und Manet weiterentwickelt und methodologisch verdichtet werden.

Lektüreempfehlung

Marianne Koos. "Malerei ohne Pockenspuren": Oberfläche im Werk von Jean-Étienne Liotard." *Zeitschrift für Kunstgeschichte* 70 (2007): 545–572.

- —. "Haut als mediale Metapher in der Malerei von Caravaggio." In *Weder Haut noch Fleisch: Das Inkarnat in der Kunstgeschichte*, herausgegeben von Daniela Bohde und Mechthild Fend, 65–85. Berlin: Mann, 2007.
- —. Bildnisse des Begehrens: Das lyrische Männerporträt in der venezianischen Malerei des frühen 16. Jahrhunderts Giorgione, Tizian und ihr Umkreis. Berlin und Emsdetten: Ed. Imorde, 2006.

CRISTINA LAFONT

Ph.D., Wender-Lewis Research and Teaching Professor of Philosophy Northwestern University, Evanston, Ill.

Born in 1963 in Valencia, Spain Studied Philosophy at the Goethe-Universität Frankfurt am Main

DELIBERATIVE DEMOCRACY BEYOND BORDERS

My research project aims at articulating a book-length defense of the ideal of a deliberative democracy that addresses the possibilities of its implementation beyond the borders of nation-states. This project requires working on three thematic fronts: first, a plausible account is needed of the normative presuppositions of political deliberation and public reason. Such an account must explain which features of political deliberation can confer legitimacy to its outcomes. Second, it must be shown that these features are compatible with the political integration of all democratic citizens in pluralistic societies. In this context, the difficult topic of whether and to what extent religious and secular arguments can be included in political deliberation works as a litmus test for the plausibility of any conception of public reason that aims to find application under conditions of pluralism. Third, a plausible account is needed of how a deliberative democracy could operate beyond the borders of nation-states even in the absence of a world state. Here the focus of my research is on the legal and normative resources available to enhance the democratic accountability of global institutions.

Recommended Reading

Lafont, Cristina. "Accountability and Global Governance: Challenging the State-Centric Conception of Human Rights." *Ethics & Global Politics* 3, 3 (2010): 193–215.

- —. "Religion and the Public Sphere. What are the Deliberative Obligations of Democratic Citizenship?" *Philosophy & Social Criticism* 35, 1–2 (2009): 127–150. Reprinted in Calhoun, Craig and Eduardo Mendieta, eds. *The Limits of Secularism: Engagements with Jürgen Habermas on Religion and the Public Sphere*. Forthcoming.
- —. The Linguistic Turn in Hermeneutic Philosophy. Cambridge, Mass.: MIT Press, 1999.

SHAKTI LAMBA

from September to December 2012 Fellow of the College for Life Sciences (see p. 132) Ph.D., Anthropology and Biology University of Exeter

Born in 1982 in New Delhi Studied Zoology at the University of Delhi, Biology at the University of Oxford, and Biological Anthropology at University College London

BANKING ON COOPERATION: TESTING
EVOLUTIONARY THEORIES OF COOPERATION BY
EXAMINING THE REAL-LIFE COOPERATIVE DILEMMA
CREATED BY MICROFINANCE

Understanding the fundamental patterns and determinants of human cooperation is a challenge across disciplines. A substantial body of theory has focused on explaining the evolution of cooperation. Yet there has been relatively little empirical work evaluating the extent to which existing theory explains the behaviour of individuals facing real-life cooperative dilemmas. I will test the validity of evolutionary models of cooperation by studying how individuals behave in the high-stakes, real-life cooperative dilemma created by microfinance and cooperative banking.

Microfinance initiatives provide loans to groups of individuals who are jointly liable for their repayment. This form of lending creates a cooperative dilemma, because if any member of a loan-group defects and does not repay his share of the loan, the other members of the group are liable to repay it for him. Thus, maintaining cooperation amongst borrowers is crucial to ensure loan repayment. My study has three aims: 1) to identify factors that influence the degree of cooperation and loan repayment in microfinance loan groups, 2) to reduce the gap between theory and empirical knowledge on the evolution of cooperation and 3) to translate my findings into social impact. Combining perspectives from evolu-

tionary biology, anthropology and economics, my project aims to synthesise findings from the natural and social sciences to shed light on factors that foster cooperation between humans in the real world.

During my time at the Wissenschaftskolleg zu Berlin I will write a review paper synthesising the economic literature on microfinance and the evolutionary literature on cooperation to identify the overlap and differences in their findings so far.

Recommended Reading

Lamba, S. and R. Mace (2011). "Demography and ecology drive variation in cooperation across human populations." *Proceedings of the National Academy of Sciences* 108: 14426–14430.

Lamba, S. and R. Mace (2010). "People recognise when they are really anonymous in an economic game." *Evolution and Human Behavior* 31: 271–278.

Lamba, S., Y. Claire Kazi, S. Deshpande, M. Natesh, A. Bhadra, and R. Gadagkar (2007). "A possible novel function of dominance behaviour in queen-less colonies of the primitively eusocial wasp *Ropalidia marginata*. *Behavioural Processes*." 74: 351–356.

WOLF LEPENIES

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

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

MARSHALLPLAN UND MITTELMEER

Unter aktuell-politischen und historischen Gesichtspunkten beschäftige ich mich mit dem Projekt der Mittelmeerunion (Union pour la Méditerranée). Dazu will ich mit der sogenannten "Union latine" und der "Anglosphäre" zwei Vorhaben vergleichen, innerhalb der globalen Welt geopolitische Subsphären zu schaffen, die sich durch gemeinsame politische Ziele und vergleichbare kulturelle Überzeugungen auszeichnen. Mit Blick auf die gegenwärtige, kritische Situation der Europäischen Union schlage ich in diesem Zusammenhang einen "Marshallplan für das Mittelmeer" vor. Dabei ist der Rückgriff auf Schriften Hannah Arendts aus den Vierzigerjahren des 20. Jahrhunderts aufschlussreich. Arendt setzte sich nicht nur für die Bildung eines jüdischen und eines palästinensischen Staates ein, sondern befürwortete eine Förderation beider Staaten, die wiederum Teil einer Mittelmeerföderation sein sollten. Und diese Mittelmeerföderation war für Hannah Arendt die Vorstufe einer Europäischen Union. Heue gibt es eine Reihe von Gründen, die Europäische Union, die im Augenblick im Wesentlichen mit Reparaturarbeiten und Krisenmanagement beschäftigt ist, zu einer Politik auf lange Frist zu ermuntern: Ein Marshallplan für das Mittelmeer könnte das Kernstück einer solchen Politik sein.

Lektüreempfehlung

Lepenies, Wolf. Qu'est-ce qu'un intellectuel européen? Les intellectuels et la politique de l'esprit dans l'histoire européenne. Paris: Editions du Seuil, 2007.

AVI LIFSCHITZ

Dr., Lecturer in European History University College London

Born in 1975 in Haifa, Israel Studied European History at Tel Aviv University and at the University of Oxford

1. SPEAKING APES AND MUTE CHILDREN: TEST CASES OF ENLIGHTENMENT ANTHROPOLOGY

2. A FIRST SCIENTIFIC EDITION IN ENGLISH OF FREDERICK II'S PHILOSOPHICAL WRITINGS

Ad 1. This project re-assesses the field that eighteenth-century authors explicitly defined as anthropology. Against the usual tendency to see this genre as consisting in the study of distant cultures, I shall argue that what contemporaries actually called "anthropology" was a unique set of physiological-psychological investigations. Rather than comparing different human groups across the globe, self-styled anthropologists were much more interested in the cognitive instincts and capacities of the deaf and the mute, feral children, higher primates and even spiders and bees. The focus will be mainly on French, Scottish and German authors. The project will start with works published in the last decade of the seventeenth century and end in the 1790s.

Ad 2. There is currently no modern English edition of the philosophical works of Frederick the Great. The fullest edition was printed in 1789 (translated by Thomas Holcroft); since then only extracts have been published alongside one modern (out-of-print) translation of the Anti-Machiavel. This project aims to expose Anglophone students and teachers of history, philosophy, political science, and literature to the multifaceted character of Frederick's literary output. Beyond essays on politics and military affairs, this volume will include

some of Frederick's works on metaphysics, ethics, the history of philosophy and historiography.

Recommended Reading

Lifschitz, Avi. *Language and Enlightenment: The Berlin Debates of the Eighteenth* Century. Oxford: Oxford University Press, 2012.

Leddy, Neven and Avi Lifschitz, eds. *Epicurus in the Enlightenment*. Oxford: Voltaire Foundation, 2009.

Lifschitz, Avi. "Language as a means and an obstacle to freedom: The case of Moses Mendelssohn." In *Freedom and the Construction of Europe*, edited by Quentin Skinner and Martin van Gelderen, 2 vols. Cambridge: Cambridge University Press, forthcoming in late 2013.

USSAMA MAKDISI

Ph.D., Professor of History Rice University, Houston, Texas

Born in 1968 in Washington, D.C. Studied History at Princeton University

THE ORIGINS OF SECTARIANISM IN THE MODERN MIDDLE EAST

My project aims to provide a concise explanation of the problem of sectarianism in the modern Middle East. It disputes a prevailing notion that sectarianism reflects an age-old religious atavism, or the simple resurgence of supposedly traditional religious solidarities. It also disputes the idea that sectarianism represents a failure on the part of the Middle East to modernize. Instead, this project argues that sectarianism in the Middle East actually reflects the intersection of three interlocking factors: first was the rise of Western imperial humanitarianism that aimed to save the supposedly subjugated minorities of the East; second was the "decline" of the Ottoman Empire and with it the unraveling of a complex system of imperial Islamic discrimination; third was the emergence of a discourse of equality and liberation in the Middle East.

To illustrate this thesis, this project will delve into three different examples: first, the foundational case of nineteenth century Ottoman Lebanon in which the struggle between the European self-proclaimed Great Power mandate for the liberation of Oriental Christians and Ottoman imperial reform led to the emergence of the first models of a sectarian form of government, that is, the division of public office along explicitly sectarian lines as a mechanism to guarantee equality of representation; second, the twentieth century case of the British mandate of Palestine in which the British imperial authorities sought to "equitably" balance Arab and Jew, albeit within the framework of the Balfour Declaration, which called for the establishment of a Jewish National Home in Palestine and thus within the framework of European Zionist settler-colonialism;

third, the contemporary case of Iraq in which belligerent American forces took the lead in destroying an oppressive, but once ostensibly secular, Arab nationalist Iraqi government. In its place, the American occupation forces reconstructed authority by explicitly privileging ethnic and religious Sunni, Shiʻa, and Kurdish identities. In each of these cases, Western intervention has shaped the context within which unprecedented scenes of intercommunal violence occurred and new sectarian identities emerged.

Taken together, these cases will help develop a core thesis about how sectarianism is the uneven, and often violent, manifestation of a modern discourse and politics of liberation and equality. It will explore precisely how a discourse of equality is itself tied to Western imperialism and imperial humanitarianism, which intervened in and reshaped different pluralistic Middle Eastern societies, and how these interventions attempted the transformation of religious communities into political communities. At the same time, however, this book will also show how sectarianism has almost always been represented in the West as if it were an age-old Middle Eastern problem, and as if sectarianism itself were somehow a more real and stable category than secularism. Finally, it will underscore the degree to which there are, and have always been, local Middle Eastern actors who are ready to play an indispensable part in the embodiment of modern sectarianism. Neither entirely foreign nor purely local, sectarianism is the quintessential artifact of the vexed relationship between an ascendant, politically and militarily aggressive West and a subordinate and subordinated Middle East.

Recommended Reading

Makdisi, Ussama. Faith Misplaced: The Broken Promise of US-Arab Relations: 1820–2001. New York: Public Affairs, 2010.

- —. Artillery of Heaven: American Missionaries and the Failed Conversion of the Middle East. Ithaca: Cornell University Press, 2008.
- —. The Culture of Sectarianism: Community, History and Violence in Nineteenth-Century Ottoman Lebanon. Berkeley: University of California Press, 2000.

JOANNA MASEL

D. Phil., Associate Professor of Ecology and Evolutionary Biology University of Arizona, Tucson

Born in 1974 in Melbourne Studied Genetics at the University of Melbourne, Mathematical Biology at the University of Oxford, and Theoretical Population Genetics at Stanford University

BUYING DARWIN: CAPITALISM AND HOW COMPETITION WORKS

I am a theoretical biologist. Most of my recent work uses theoretical population genetics and bioinformatics approaches to study the robustness and evolvability of biological systems. Molecular and developmental errors in the present (e.g. skipping a stop codon during translation of a gene into a protein) can mimic the effects of mutations in the future (e.g. a mutation that destroys a stop codon). Selection for genotypes that are more robust to such errors leads to the evolution of genotypes that are more able to tolerate dramatic mutational changes. These genotypes are preadapted and highly evolvable.

My major sabbatical project is to take a break from this work in order to write an accessible book for a crossover audience, using the perspective of evolutionary biology to provide insights into economics. The central theme is the tension between zero sum and non-zero sum competitions (as they are known in economics), which parallels the tension in evolution between relative and absolute fitness, or between soft and hard selection.

I will first examine the tension between money and wealth. Saving money for retirement is a good strategy for an individual, but is a zero sum game within a population, unless that money is successfully invested to become true wealth. Originally, wealth consisted of stores of grain, livestock, and tools: these items are genuinely useful in the future. They are not simply tokens that can be exchanged for food later because others want them. Today, more important

stores of wealth include the creation and improvement of infrastructure, such as roads and power plants, and of effective institutions, including private, governmental, or non-profit organizations. As the baby boomers retire, it will become apparent how much of the money "invested" in their pension schemes has been converted into true wealth, and how much has simply inflated asset prices. Reviewing ways of storing wealth, I will conclude that human capital is a large, essential part of the solution.

I will then consider how the signaling function and the human capital function of the education system can be in conflict. In other words, when students aim to get an "A", this is not the same as students aiming to learn something. Finally, I will consider factors that affect the outcome of this conflict, and will conclude with recommendations for society. For example, there is usually a tradeoff between precision and accuracy. Students and instructors can be evaluated more accurately if society is willing to forego precision. I will describe how such evaluations may be conducted.

Recommended Reading

Masel, J. and M. Trotter (2010). "Robustness and evolvability." *Trends in Genetics* 26: 406–414.

Masel, J. (2007). "A Bayesian model of quasi-magical thinking can explain observed co-operation in the public good game." *Journal of Economic Behavior & Organization* 64: 216–231.

Masel, J. and V. A. A. Jansen (2000). "Designing drugs to stop the formation of prion aggregates and other amyloids." *Biophysical Chemistry* 88: 47–59.

CHRISTOPH MÖLLERS

Permanent Fellow of the Wissenschaftskolleg Dr. iur., LL.M., Professor of Public Law and Legal Philosophy Humboldt-Universität zu Berlin Judge at the Supreme Administrative Court for Berlin-Brandenburg

Born in 1969 in Bochum Studied Law and Comparative Literature in Tübingen, Munich und Chicago

1. A PRIMITIVE CONCEPT OF NORMATIVITY AS A SOCIAL PRACTICE

2. META-RIGHTS: HUMAN DIGNITY, PROPORTIONALITY AND THE LEGAL CLAIM TO THE FUNDAMENTAL

Ad 1. While the dominant philosophical discourse today tends to identify normativity with good reasons for action, such an approach seems to be less promising as a conceptual basis to describe normativity as a social practice. Such a practice cannot be reduced to actions, it cannot be identified with any form of reasonableness or rationality and it takes a form that is different from mere arguments. What is needed instead is a non-normative, i.e. cognitive, concept of normativity that helps to explain how normativity functions. Therefore, I want to develop a primitive concept of normativity that is made up of two elements: the definition of a state of affairs and a marker that endorses its realisation. Such a model may shed some light on underestimated but practically relevant features of normative practices: its temporality and its need for a material form that keeps normativity distinguishable from the social context it claims to evaluate or to change. The study will illustrate these features by looking at several cases, including the written form of constitutions and the performative effect of majority rule.

Ad 2. Immanuel Kant's "einziges Menschenrecht" and Hannah Arendt's formula of the "right to have rights" are only the most important examples of the idea of a meta- or super-right, a right that serves as a basis for all other rights. In many modern national and international legal orders, this claim has been identified with the idea of human dignity. Other scholars see the basis of such a right in the proportionality principle. My project does not want to give yet another theory of what Human Dignity and proportionality could or should mean. Instead, it will analyse the claims of a meta-right and its potential dangers for the variety of freedoms.

Recommended Reading

Möllers, Christoph. "Jenseits von Naturalisierung und Moralisierung: H. L. A. Harts klassisch-moderne Theorie des Rechts." Afterword to H. L. A. Hart. *Der Begriff des Rechts*. Frankfurt/Main: Suhrkamp, 2011 (new edition).

- —. "Legalität, Legitimität und Legitimation des Bundesverfassungsgerichts." In Das entgrenzte Gericht: eine kritische Bilanz nach sechzig Jahren Bundesverfassungsgericht, edited by Matthias Jestaedt, Oliver Lepsius, and Christoph Möllers, 281–419. Frankfurt/Main: Suhrkamp, 2011.
- —. "Multi-Level Democracy." ratio iuris 24 (2011): 247–266.

FRANCO MORETTI

Professor of English and Comparative Literature Stanford University

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

MURDER AND FORM: AN ANALYSIS OF TRAGIC STRUCTURE

Tragedy arises from a paradoxical conjunction: the most brutal of actions – conveyed by the most rigorous of forms. I would like to understand how this meeting of opposites has come into being, how it managed to survive for twenty-five centuries in very different cultures, and what it says about the foundations of social power.

I plan to work on a large comparative corpus, ranging from Greek and Roman tragedy to (more or less) the present, and to use network theory as my main analytical tool. Network theory provides a set of concepts that allow me to "translate" traditional notions like those of character, interaction, scene, and so on into a more precise system of relations (nodes, edges, density, clustering, etc.), within which dramatic structure becomes at once more intuitively visible and more open to explicit conceptual analysis. In particular, the theory is great at articulating the differences among the various "regions" of dramatic networks, offering a good starting point for that comparative morphology of tragic structures which is one of the objectives of my research.

On the other hand, what arguably constitutes the very essence of tragedy – conflict, and conflict to death – seems to escape the traditional categories of network theory: great at analyzing the growth and diversification of complex systems, those categories have less to say about what can generate a crisis within their structure. In this part of my work, I will turn to the "network semantics" recently developed by a number of us at the Stanford Literary Lab, to explore

how semantic flows introduce a radical instability within dramatic networks, precipitating their self-destruction.

I am not sure how the two parts of my research – the establishment of network solidity, and the discovery of semantic instability – can be reconciled. But a contradictory research plan seems appropriate for a paradoxical form; and then, I have an entire year to figure it out.

Recommended Reading

Moretti, Franco. *Graphs Maps Trees: Abstract Models for Literary History*. London: Verso, 2005.

- —. The Way of the World: The Bildungsroman in European Culture. London: Verso, 1987.
- —. "Network Theory, Plot Analysis." New Left Review 68 (2011).

EDGAR MORIN

Avril 2013

Dr., Directeur de recherches émérite Centre National de la Recherche Scientifique (CNRS)

Né en 1921 à Paris

Études de sciences politiques, philosophie, histoire et sociologie

MES EXPERIENCES DES METAMORPHOSES DE BERLIN JUIN 1945 JUSQU'A 2012

Officier dans la première armée française qui occupait une partie de l'Allemagne, ma fascination pour Berlin (livres et films d'avant-guerre) m'a fait prendre le premier avion militaire qui s'est rendu à Tempelhof en juin 45. J'ai parcouru en tous sens la ville en ruines, j'ai déjà fait un premier récit de mes impressions dans la préface à mon livre *Penser l'Europe* traduit en allemand (*Europa denken*). Depuis j'y ai fait d'innombrables séjours, passant d'une zone à l'autre, puis de Berlin-Ouest au Berlin de la DDR, notamment en 1950 où j'ai résidé à l'Est. J'ai vu une ville se dissocier en deux villes appartenant chacune à une planète culturelle différente, puis après la chute du mur, une nouvelle métamorphose, notamment à l'Est. Je n'y suis pas retourné, sinon trop brièvement ces dernières années et je compte y rester un mois pour compléter et terminer ce livre. J'aimerais qu'il soit illustré de photos.

Lectures recommandées :

Hessel, Stéphane et Edgar Morin. *Le Chemin de l'espérance*. Paris : Fayard, 2011. Édition allemande: *Wege der Hoffnung*. Berlin : Ullstein, 2012.

Morin, Edgar. La Voie. Pour l'avenir de l'humanité. Paris : Fayard, 2011.

Morin, Edgar. *Pour une politique de civilisation*. Paris, Arléa, 2002. Réédition : Arléa, 2008.

Morin, Edgar. *Penser l'Europe*. Paris : Gallimard, 1987. Collection Folio Actuel. Édition allemande : *Europa denken*. Frankfurt/Main : Campus, 1991.

MARTIN MULSOW

Dr. phil., Professor für Wissenskulturen der europäischen Neuzeit Universität Erfurt

Geboren 1959 in Buchholz/Nordheide Studium der Philosophie, Germanistik und Geschichte in Tübingen, Berlin und München

ISLAMISCHES CHRISTENTUM: GESCHICHTE EINER UTOPIE

Das Buchprojekt soll die Annäherung von antitrinitarischem Christentum einerseits und Islam andererseits in all seinen frühneuzeitlichen Facetten und Kontexten beschreiben – von theologischen Brisanzen bis zu politischen Komplikationen. Es geht aus von einem abenteuerlichen Fall solcher Annäherung im London des Jahres 1682 und folgt dann den Spuren der Dokumente zurück in die Vergangenheit. Der Kontext 1682: beginnende kritische Bibelwissenschaft, Unitarismus, Deismus (Stubbe, Toland), frühe Islamwissenschaft. Die Spuren führen ins Jahr 1611, in das Milieu der Moriscos in Spanien und Marokko. Der Kontext hier: Fälschungen (Bleibücher, Barnabasevangelium, antichristliche Texte von vertriebenen Moriscos, diplomatische Beziehungen nach Holland). Weiter zurück führt die Spur (über den möglichen Autor des Barnabasevangeliums) ins Istanbul der Jahre 1570–1600. Der Kontext hier: Moriscos, "trinitarische" Sufis, antitrinitarische Exulanten (Adam Neuser). Adam Neusers Geschichte wird mit neu gefundenen Dokumenten aufgerollt. Von dort aus geht es zurück zum frühen Antitrinitarismus (Michel Servet) und seinen Islamkontakten (um 1540), ins arabische Mittelalter, bis hin zur Pauluspolemik im Islam und bei Judenchristen.

Lektüreempfehlung

Mulsow, Martin. Die unanständige Gelehrtenrepublik: Wissen, Libertinage und Kommunikation in der Frühen Neuzeit. Stuttgart: Metzler, 2007.

- —. Moderne aus dem Untergrund: Radikale Frühaufklärung in Deutschland 1680–1720. Hamburg: Meiner, 2002.
- —. "Socinianism, Islam and the Radical Uses of Arabic Scholarship." *Al-Quantara. Revista de estudios árabes* 31 (2010): 549–586.

JOHANNA NICHOLS

from January to July 2013 Ph.D., Professor (emer.) of Slavic Linguistics and Affiliate Professor (emer.) of Linguistics University of California, Berkeley

Born in 1945 in Iowa City, Iowa Studied French, Russian, Music, and Linguistics at the University of Iowa and Linguistics at the University of California, Berkeley

NOUN/VERB DISTINCTIONS IN COMPARATIVE PERSPECTIVE

In some languages, nouns are basic and verbs derived; in others, verbs are basic and nouns derived. (There are also many languages of intermediate or neutral types.) In some languages, the morphological and syntactic difference between nouns and verbs is very clear; in others it is arguably nonexistent. Based on preliminary cross-linguistic research, I hypothesize that the verb-based type and the minimal noun/verb distinction correlate with lower overall complexity of languages and therefore with the sociolinguistic factors favoring low complexity (chiefly, contact and language shift). I will carry out large cross-linguistic surveys of structural grammatical properties of languages and wordlist comparisons to test for co-occurrence of these factors. The null hypothesis, consistent with what has long been received view in linguistics, is that there is no correlation. I will also do etymological and quantitative studies of the evolution of these properties, and of various structural sets of verbs, in a number of language families, to shed light on their stability and any tendencies in their overall evolutionary direction. If, as hypothesized, there proves to be a correlation between a minimal noun/verb distinction, overall structural complexity, and verbs as a closed class, we will have evidence bearing on the basicness and coevolutionary history of noun/verb distinctions and therefore on our understanding of the coevolutionary history of language and cognition. This project is designed to complement the project of William Foley, who will be at the Wissenschaftskolleg at the same time.

Recommended Reading

Nichols, Johanna. *Ingush Grammar*. Berkeley: University of California Press, 2011. (University of California Publications in Linguistics 143.)

- —. "Monogenesis or Polygenesis: A Single Ancestral Language for All Humanity?" In *The Oxford Handbook of Language Evolution*, edited by Maggie Tallerman and Kathleen R. Gibson, 558–572. Oxford: Oxford University Press, 2011.
- —. Linguistic Diversity in Space and Time. Chicago: University of Chicago Press, 1992.

ANNE PETERS

Dr. iur., LL.M. (Harvard), Professor of International and Constitutional Law University of Basel

Born in 1964 in Berlin

Studied Law, Modern Greek, and Spanish Literature and Language at the Universities of Würzburg, Lausanne, and Freiburg/Breisgau and at Harvard Law School

INTERNATIONAL HUMAN RIGHTS AND GLOBAL ANIMAL WELFARE LAW - REFLECTION, ACTION, AND CODIFICATION

Animalité, égalité, fraternité

Between 1879 and 1935, the Basel public was entertained with "Völkerschauen" (ethnic exhibitions) in the Basel Zoo. In these shows, mostly non-European persons were displayed, equipped with (makeshift) huts and dressed in their traditional clothing. These shows clearly attracted more visitors to the Zoo than the non-human animals.

The project starts from the shock that is felt when learning about this display of humans in zoos, which was not so long ago, and the ensuing reflection on why this apparently was not shocking 75 years ago (just as most people have no problem with animals in zoos today) and why we do not question showing animals in zoos. The starting point is thus the recognition of, first, the great mutability of societal attitudes about human dignity, and, second, the clearly diverging societal attitudes towards human and non-human animals.

The latter divergence is reflected in a strikingly disparate state of both domestic and international law. Today a very extensive body of international human rights law contrasts with an almost total lack of international regulations concerning animal welfare. This contrast calls for a (juridical, but also political and sociological) explanation (positive analysis) and also for normative suggestions for filling what I perceive as a lacuna.

The project seeks to furnish both explanations and reform proposals through a comparison of the legal discourse on international human rights (from the 1920s until the present) with the political-legal discourse on animal welfare and rights that began to flourish in the 19th century, mainly in Europe.

Method: I will analyze ideas, arguments, and discourse (reflection), social movements (action), and the product of both, the legal norms (codification).

The main academic discipline is international law (and comparative law), but the project necessarily involves history, philosophy, and political science and needs insights from philosophical anthropology and zoology.

Recommended Reading

Peters, Anne. *Elemente einer Theorie der Verfassung Europas*. Berlin: Duncker & Humblot, 2001.

—. "Humanity as the A and Ω of Sovereignty." European Journal of International Law 20 (2009): 513–544.

Klabbers, Jan, Anne Peters, and Geir Ulfstein. *The Constitutionalization of International Law*. Oxford: Oxford University Press, 2011 (expanded paperback edition).

ANDREI G. PLEŞU

von Mai bis Juni 2013

Dr. Drs. h.c., Professor der Religionsphilosophie Rektor, New Europe College, Bukarest Ehemaliger Kulturminister (1989–1991) und Außenminister (1997–1999) Rumäniens

Geboren 1948 in Bukarest Studium der Kunstgeschichte in Bukarest

DIE GLEICHNISSE JESU: EINE POLEMIK GEGEN DAS IDEOLOGISCHE

Die riesige exegetische Literatur, die sich auf die Gleichnisse des Evangeliums bezieht, neigt – mit einigen, wenigen Ausnahmen – dazu, aus diesen Texten eine kohärente Doktrin, ein System moralischer Regeln, prophetischer Ankündigungen und weiser Maximen zu ziehen, die zusammengenommen die Substanz einer christlichen "Philosophie" ausmachen würden, einer Philosophie, die oft in eine Ideologie mündet.

Was ich in meiner Forschung zu zeigen versuche, ist, ganz im Gegenteil, die subtile und vielsagende "doktrinäre Inkohärenz" der Gleichnisse in ihrer Gesamtheit. Sie fördern eher die hermeneutische Flexibilität, die Freiheit der Lektüre, die Fähigkeit des Denkens, sich an die unendliche Vielfalt der einzelnen Fälle und Gegebenheiten anzupassen.

Es gibt Gleichnisse, die Wert auf die Tat legen, und andere, die Kontemplativität empfehlen. Einige regen die Radikalität des Verhaltens an, andere die Diskretion, einige legen Umsicht nahe, andere Risikofreude, einige bevorzugen die kindliche Unschuld, andere die Reife des Urteilsvermögens. Die angedeuteten "Modelle" sind in der Regel außerhalb der geläufigen Kategorie des "Exemplarischen" angesiedelt. In den Gleichnissen ist nichts vorhersehbar.

Ihre "Philosophie" ist, meiner Meinung nach, der erste große europäische Versuch, das Ideologische zu unterminieren, die oberflächlichen Konsequenzen

und die vereinfachende Militanz zu demontieren. Ein Versuch, den die institutionalisierte Kirche anscheinend nicht gänzlich auf sich zu nehmen bereit ist.

Lektüreempfehlung

Pleşu, Andrei. *Das Schweigen der Engel* (aus dem Rumänischen von Georg Aescht). Darmstadt: Wissenschaftliche Buchgesellschaft, 2008.

- —. Eliten Ost und West. Berlin: de Gruyter, 2000.
- —. Wer in der Sonne steht, wirft Schatten. Ostfildern vor Stuttgart: Ed. Tertium,
- —. Reflexion und Leidenschaft: Elemente einer Ethik des Intervalls. Wien: Deuticke, 1992.

UWE PÖRKSEN

von Januar bis März 2013 Dr. phil., Professor (em.) für Sprache und Ältere Literatur Albert-Ludwigs-Universität Freiburg

Geboren 1935 in Breklum, Kreis Husum Studium der Germanistik, Geschichte und Philosophie in Freiburg/Breisgau, Göttingen und Kiel

DIE ANFÄNGE DES WISSENSCHAFTSKOLLEGS

Ich plane ein Porträt des ersten Fellow-Jahrgangs am Wissenschaftskolleg zu Berlin 1981/82, fragmentarisch versteht sich, aber doch so, dass die Anfänge der Institution sichtbar werden und manches von der ersten Stunde im Gedächtnis bleibt. Ich habe diese Zeit als ungemein intensiv erlebt und vom Oktober 1981 bis zum Juli/August 1982 eineinhalb Tagebücher vollgeschrieben. Der Gedanke, diese Zeit in einem schmalen Buch festzuhalten und dazu das Archiv des Wissenschaftskollegs zu nutzen, reizt mich sehr.

Der Stoff liegt mir vor Augen; da gab es die Eröffnung des Kollegs und eine erste heftige Auseinandersetzung mit der Freien Universität und einer weiteren Öffentlichkeit, die Herausbildung einer umstrittenen Tagesordnung und des Stils des Hauses. Es gab den Rektor Peter Wapnewski, das Haus und die Stadt und eine Gruppe von siebzehn extrem verschiedenen Fellows. Die Geschichte spielte herein, die Stadt zur Zeit der Mauer. Die Gruppe unserer vier polnischen Fellows rückte zusammen, als Jaruzelski in Warschau Staatschef wurde; es gab die Debatte über den atomaren Raketenschirm auf deutschen Boden und den Ausflug Englands zu den Falkland-Inseln. Das Eigentliche aber war die Möglichkeit, sich die Themen, Vorgehensweisen und Standorte anderer Fellows vor Augen zu führen und mit den eigenen Schritten zu vergleichen – eine sprungartige Horizonterweiterung. Einige damals von uns diskutierte Themen sind mit erhöhter Brisanz wiedergekehrt. Ich erinnere mich lebhaft an Gershom Scholem und den israelischen politischen Systemanalytiker Yehezkel Dror, an

Mazzino Montinari, Ivan Illich, Hartmut von Hentig, Helga Nowotny, Rudolf zur Lippe und Dietz Bering.

Die Form des Ganzen muss sich entwickeln. Etwas locker Fragmentarisches, zusammengehalten durch Erzählung – so stelle ich es mir im Augenblick vor.

Lektüreempfehlung

Pörksen, Uwe. Riß durchs Festland. Roman. Heide, Holst.: Boyens Buchverlag, 2011.

- —. *Plastikwörter: Die Sprache einer internationalen Diktatur*. Stuttgart: Klett-Cotta, 2011.
- —. Die politische Zunge: Eine kurze Kritik der öffentlichen Rede. Stuttgart: Klett-Cotta, 2002.

ANDRII PORTNOV

Dr., History Editor-in-Chief of www.Historians.in.ua Kiev, Ukraine

Born in 1979 in Dnipropetrovsk, Ukraine Studied History at Dnipropetrovsk University and Cultural Studies at Warsaw University

ALMOST CAPITAL WITHOUT HISTORY: YEKATERINOSLAV-DNIPROPETROVSK, 1795-2005

The principal aim of my project is to finish the book on Yekaterinoslav-Dnipropetrovsk "Almost Capital Without History" (together with my sister Tetyana Portnova). The basic idea is to put local events and realities into a broader historical, sociological, and cultural context and to look beyond the national narratives and various popular interpretations of Ukrainian, Russian, Soviet, and Eastern European history. Special attention will be devoted to the issues of changing cityscape and competing self-definitions and self-perceptions of the city dwellers. The coexistence of the rural and the urban, of huge factories and city infrastructure with the agrarian areas including private livestock and private gardens, and the interrelations of the two lifestyles within the same city is another focus of the research. The history of Dnipropetrovsk allows us to gain new insights into the revolutions on the peripheries (the Russian and Ukrainian revolutions of 1917-1921, the collapse of the Soviet Union, the "Orange Revolution" of 2004, which in Dnipropetrovsk differed substantially from the same events in other parts of "Eastern Ukraine"). Yekaterinoslav-Dnipropetrovsk is also a great laboratory for studying various modes of the coexistence, conflicts, and interrelations of different ethnic and religious groups (the history of the Jewish community as well as the stories of the local German, Polish, Karaite groups). The paradoxes of the city's "closeness" in Soviet time and the forms of dissident movements (from Ukrainian nationalists to Zionists and neo-Baptist activists) are no less important. The paradoxes of post-Soviet pluralism in the symbolic, economic, political, social, and cultural life of the city, its self-representations and images will be analyzed in the last part of the book.

Recommended Reading

Portnov, Andrii. *Istorii istorykiv. Oblychchia j obrazy ukrainskoji istoriohrafii XX stolittia*. Kyiv: Krytyka, 2011.

- —. Uprazhnenia s istorijej po-ukrainski. Moscow: Memorial, 2010.
- —. "Post-Soviet Ukraine and Belarus Dealing with 'The Great Patriotic War'." In 20 Years After the Collapse of Communism: Expectations, Achievements and Disillusions of 1989, edited by Nicolas Hayoz, Leszek Jesie, and Daniela Koleva, 369–381. Bern: Peter Lang, 2011.

QUATUOR DIOTIMA

de Septembre à Décembre 2012 Yun-Peng Zhao (1er Violon) Guillaume Latour (2nd Violon) Franck Chevalier (Viole) Pierre Morlet (Violoncelle)

Quatuor français, résidant à Paris

PROJET BEETHOVEN - SCHÖNBERG - BOULEZ

Nous avons eu la grande chance, avec notre quatuor, de pouvoir venir séjourner à trois reprises au Wissenschaftskolleg. Ces séjours, pour brefs qu'ils furent, nous permirent de découvrir un endroit exceptionnel. Dans l'activité frénétique d'un quatuor à cordes, il est extraordinaire de pouvoir s'offrir le luxe de décrocher de la spirale des engagements, de la carrière. Ainsi, notre souhait premier est de nous poser, de pouvoir prendre le temps de travailler, d'approfondir, et surtout de pouvoir échanger avec les autres *fellows*. Le monde musical est une sorte de vase clos, et il nous paraît essentiel de s'ouvrir et de s'enrichir des autres disciplines représentées au Wissenschaftskolleg. Dans le travail quotidien de notre groupe, il y a trois axes notamment que nous souhaiterions développer pendant notre résidence.

Notre projet Boulez/Schönberg/Beethoven

Partant de la création du *Quatrième Quatuor* de Schönberg, nous allons reprendre les programmes du Quatuor Kolisch de janvier 1937 à Los Angeles et ainsi jouer les quatre quatuors de Schönberg associés à quatre des derniers quatuors de Beethoven (op. 127, op. 130, op. 131 et op. 132).

Nous y ajouterons des mouvements du *Livre pour quatuor à cordes* de Pierre Boulez, que celui-ci réécrira à cette occasion. Nous créerons aussi la quatrième partie du *Livre*, inédite à ce jour.

Nous souhaiterions que Pierre Boulez puisse intervenir au Wissenschaftskolleg dans cette perspective. Ce projet est pour nous au cœur de notre identité: d'abord dans l'héritage des quatuors Kolisch et Lasalle (nous avons étudié il y a de nombreuses années une partie de ce programme avec Walter Levin), mais aussi dans la création contemporaine.

Alberto Posadas

Parmi nos rencontres musicales, l'une s'est imposée comme l'une des plus fécondes et des plus abouties, celle avec Alberto Posadas. Ce jeune compositeur espagnol nous semble être l'un des plus intéressants de sa génération.

Nous avons déjà créé un cycle pour quatuor à cordes *Liturgia Fractale*, que nous avons enregistré chez Kairos. Posadas écrit depuis 2010 un nouveau cycle pour quatuor qu'il a prévu d'achever en 2013. Nous aimerions travailler au montage de ces nouvelles pièces au Wissenschaftskolleg et l'inviter, si possible, à présenter son travail.

Mark André

La rencontre avec Mark André est une sorte de prolongement naturel du travail entrepris au tout début de notre formation avec Helmut Lachenmann. Helmut Lachenmann est sans aucun doute la personnalité qui a le plus marqué de son empreinte notre quatuor, et contribué à notre identité.

Sachant que Mark André sera *composer-in-residence* au même moment, nous souhaiterions en profiter pour jeter les bases d'une collaboration avec lui, dans la perspective de la création de son premier quatuor.

À écouter

Janacek: Quatuors à cordes n°1 et 2.

Webern, Schönberg & Berg: Quatuor à cordes.

ANTHONY REID

Ph.D., Professor (emer.) of History Australian National University, Canberra

Born in 1939 in Wellington, New Zealand Studied History at the University of Wellington and at the University of Cambridge

A NEW (NOT "OVER-STATED") HISTORY OF SOUTHEAST ASIA: LANDS BELOW THE EMPIRES

Historians of the current post-nationalist era are increasingly aware that their profession arose with modern nation-states and made its principal business the chronicling of those states. Our fixation on the spectacular successes (and failures) of those states in modern times has led us to look for comparable institutions in times and places where they played no such dominating role and to marginalize themes and actors that cannot be narrated in state terms. Not only have stateless societies thereby become "People without History", but systems of social organization based on kinship, religion, and ritual or economic reciprocity are classified as primitive and doomed, when not wholly ignored. The challenge is how to do better. In seeking to write beneath and beyond the state, Southeast Asia is an excellent place to start.

In this region of forest and water, the legal-bureaucratic state with which we are familiar has been an alien intruder, with little purchase over its peoples until the twentieth century. I have shown for Sumatra that the stateless highlands accounted for around 80% of its population as late as the early nineteenth century, even though all the history found in existing texts relates to the other 20% (Reid 1998). A similar distortion can be shown for most of Southeast Asia except Vietnam (which adopted deltaic agriculture very early) until the nineteenth-century era of colonial settlement of the littoral and drainage of the swampy deltas. The highlands were freer of diseases, easier than the densely forested

lowlands to tame for agriculture, and free from the incipient state structures of the coastal river mouths.

Populations appear to have consciously opted for their own pattern of social organization through kinship and ritual, evading the trade-based river states to practice "the art of not being governed", as James Scott (2009) puts it. His book makes it unnecessary for me to belabour this point further; rather the question is the degree to which history can be responsibly rewritten in the balanced mode his manifesto invites.

Recommended Reading

Reid, Anthony. *Imperial Alchemy: Nationalism and Political Identity in Southeast Asia*. Cambridge: Cambridge University Press, 2009.

—. Southeast Asia in the Age of Commerce, 1450–1680. Vol. I: The Lands Below the Winds. 1988. Vol. II: Expansion and Crisis. 1993. New Haven, Yale University Press.

ALESSANDRA RUSSO

Ph.D., Assistant Professor of Art History Columbia University, New York

Born in 1972 in Forlì, Italy Studied Historical Anthropology and Art History at the École des Hautes Études en Sciences Sociales, Paris

A NEW ANTIQUITY: LITERATURES OF ART AND IBERIAN EXPANSION (1400–1600)

At the Wissenschaftkolleg I will work on a new book project tentatively entitled A New Antiquity. Literatures of Art and Iberian Expansion (1400-1600). During the Iberian expansion in America, Africa, Asia and Europe, between the 15th and 17th centuries, the discourses on the aesthetic sphere faced a double movement: they become more and more shaped in terms of Ancient and Renaissance categories (such as Proportion, Imitation, Antiquity, Idolatry, etc.), and yet profoundly renewed after the encounter with new ways of theorizing about the artistic practices. We can trace this double movement in the numerous texts written by missionaries, conquistadors, and functionaries of the Iberian crowns of Portugal and Spain, but also by a variety of other authors, such as traders, soldiers, naturalists, or missionaries from other countries who traveled to these parts of the world, and even by artists, ambassadors, and collectors who wrote thoughtful testimonies in their diaries, treaties, or inventories. Based on a substantial corpus of sources, I will study the origin and transformation of these multiple aesthetic discourses and categories in Early Modernity as an unpredictable result of the expansion projects of Portugal and Spain. The broader challenge of this book project is to construct and analyze this corpus as a new Kunstliteratur, remained completely outside the Schlosserian canon and yet in lively dialogue with it.

Recommended Reading

Russo, Alessandra. "Cortés's Objects and the Idea of New Spain: Inventories as Spatial Narratives." *Journal of the History of Collections* 23, 2 (2011): 229–252.

- —. "Figuras, Mosaicos y Queros ... otras 'artes de la pintura' en los reinos." Pintura de los Reinos. Identidades Compartidas. Territorios del Mundo hispánico, siglos XVI–XVIII, edited by Juana Gutiérrez, 775–819. Fomento Cultural BANAMEX, 2009, vol. III (English and Portuguese editions).
- —. El realismo circular: Tierras, espacios y paisajes de la cartografía novohispana. Siglos XVI–XVII. Mexico: IIE- UNAM, 2005.

PAUL SCHMID-HEMPEL

Permanent Fellow of the Wissenschaftskolleg Dr. phil., Professor of Experimental Ecology Swiss Federal Institute of Technology, Zürich

Born in 1948 in Zürich Studied Biology, Physiology and Ecology at the Universität Zürich

PARASITES AS THE SELECTIVE FORCE GENERATING DIVERSITY IN NATURE

Given their ubiquity and impact, parasites are thought to be the key drivers of diversification in organismic evolution. But biologists still do not yet understand exactly what processes affect the co-evolution between hosts and parasites and how, for example, it unfolds at the genetic level. But the possible consequences for the hosts might vary considerably. Rapidly co-evolving parasites, for example, should select for complex mechanisms that generate diverse offspring. Similarly, most parasites have evolved numerous ways of evading immune defences, which in turn forces hosts to evolve responses that are robust against manipulation.

The project therefore investigates the role that parasites play in nature and what strategies organisms use to defend themselves against this threat. Empirical data and theoretical concepts are the building blocks of such a framework, which should lead to better insights, for example, into why some parasites are harmful and others are not, or what the costs and benefits of efficient immune defence might be. An understanding of these issues is important for top human priorities such as medicine or the control of infectious diseases, as well as for some deep questions about the evolution of life itself.

Recommended Reading

- Richner, H. and P. Schmid-Hempel. (2006). "Grundlagen der Parasit-Wirt-Koevolution." In *Allgemeine Parasitologie*, edited by T. Hiepe, R. Lucius, and B. Gottstein, 69–79. Stuttgart: Parey-Blackwell.
- Schmid-Hempel, P. (2008). "Immune evasion by parasites a momentous molecular war." *Trends in Ecology and Evolution* 23, 318–326.
- Schmid-Hempel, P. (2003). "Variation in immune defence as a question of evolutionary ecology." *Proceedings of the Royal Society London* B 270: 357–366.

GUSTAV SEIBT

von September 2012 bis Februar 2013 Dr. phil., Historiker, Publizist München

Geboren 1959 in München Studium der Geschichtswissenschaft und der deutschen, lateinischen und italienischen Literatur in Konstanz, München, Bielefeld und Rom

GOETHE UND DIE DEUTSCHE GESCHICHTE

Nachdem mir der Aufenthalt als Gast am Wissenschaftskolleg im Winter 2007/08 die Fertigstellung einer detaillierten Studie über Goethe und Napoleon ermöglichte, möchte ich nun versuchen, das Feld zu erweitern und Goethes Verhältnis zur Politik seiner Zeit insgesamt in den Blick zu nehmen. Dabei will ich der in Goethe und Napoleon erprobten Vorgehensweise treu bleiben: Es soll zuerst um Goethes eigene, sehr reiche zeitgeschichtliche Erfahrungen gehen, erst danach um seine (oft wechselnden) politischen Meinungen und den Niederschlag der Zeitgeschichte in seinen Werken. Auch hier sollen nicht die oft überschätzten Tätigkeiten als Weimarer Staatsbeamter im Mittelpunkt stehen, sondern Goethes direkte Einblicke in die großen Umbrüche seiner Epoche, beispielsweise bei seinem Berlin-Besuch 1778 oder im ersten Koalitionskrieg 1792 oder beim Aufkommen eines politischen Terrorismus in Deutschland zwischen 1817 und 1819. Goethe selbst hat sich als Zeitgenosse Friedrichs des Großen, der Amerikanischen und der Französischen Revolution verstanden, er hat bis in die Schlussphase seiner Arbeit am "Faust" auf zeitgenössische Politik reagiert. "Goethe und sein Jahrhundert" mag - in Anlehnung an die Winckelmann-Schrift - der Arbeitstitel lauten. Des weiteren will ich diese Bemühungen verbinden mit Überlegungen zu einer elementaren deutschen Geschichte - als Antwort auf überholte, aber nicht ersetzte Sonderwegsthesen -, die mich seit vielen Jahren beschäftigen; von der Gesprächsatmosphäre des Wissenschaftskollegs erhoffe ich mir ideale Voraussetzungen zur Erprobung der dafür nötigen einfach-kühnen Argumente.

Lektüreempfehlung

Seibt, Gustav. *Goethe und Napoleon: eine historische Begegnung*. München: Deutscher Taschenbuch-Verlag, 5. Aufl., 2010.

—. Deutsche Erhebungen: das Klassische und das Kranke. Springe: zu Klampen, 2008.

RICHARD SENNETT

from March to July 2013 Ph.D., Professor of Sociology New York University and The London School of Economics

Born in 1943 in Chicago Studied Sociology at Harvard University

HABITAT: THE CRAFT OF URBAN DESIGN

This is the third volume in my study, *Homo Faber*. The first volume, *The Craftsman*, dealt with the making of things; the second volume, *Together: The Rituals, Pleasures and Politics of Cooperation*, dealt with the making of social relations, this volume explores the making of places.

Recommended Reading

Sennett, Richard. The Craftsman. London: Lane, 2008.

- —. Flesh and Stone: the Body and the City in Western Civilization. London: Faber and Faber. 1994.
- —. The Fall of Public Man. New York: Knopf, 1977 (several new editions).

SURESH SHARMA

from April to July 2013 Senior Fellow, History and Anthropology Centre for the Study of Developing Societies, Delhi.

Born 1945 in India Studied History and Chinese Civilisation, Delhi University.

WORD AND IMAGE: AN ENQUIRY CONCERNING THE NATURE OF MEANING

Lessing's neat demarcation (*Laokoon*, 1766) of word as the artefact of "time" and painting or image as the artefact of "space" seems to prevail. The concern foremost in "word and image" studies have been to mark and consider the interplay of images in texts, and of words in images: in the words of Homem, "word and image nexus in literature and the visual arts" (*Writing and Seeing: Essays on Word and Image*, edited by Rui C. Homem, Amsterdam, New York, 2006).

My attempt is to look at word and image as signifiers of meaning along two distinct cardinals of linguistic possibility. Image, in instructive contrast to word, cannot be represented or spoken of in terms of another image or images. Each image could be said to abide as a thing unto itself, complete and sovereign. Its boundary is absolute. Beyond it is pure space, undifferentiated, pristine, akin to the void. An image may evoke myriad associations of sounds, smells, words, forms, colours, as also other images. But image, unlike word, does not dwell with other images. True, dwelling or rather indwelling with other words even in the case of word is suffused with the deepest ambiguity. It is an ambiguity born of inhabiting, as it were, liminality all around. For a word, that is its way of being and source of meaning. A word gathers meaning in its indwelling with other words. A word unto itself is an empty sign, signifying nothing.

Both these linguistic cardinals mark and garner meaning in continual subtle reference to something beyond the immediate and evident. My concern is with the profound protean tension between reference and representation and its implications for meaning. Specifically, word and image need have no resemblance at all to what they seek to or come to signify. Does that seeming unrelatedness, complete and near absolute at times, signify the presence of a certain deep universality as the predicate of meaning?

I plan to write the results of my research and reflection on the Word-Image thematic in the form of a book.

Recommended Reading

Sharma, Suresh. *Tribal Identity and the Modern World*. Tokyo: United Nations Univ. Press, 1994.

Sharma, Suresh and Tridip Suhrud. M. K Gandhi's Hind Swaraj: a Critical Edition. New Delhi: Orient Blackswan, 2010.

Sharma Suresh. *Adhunikta aur Pagan Sabhyatein* [Modernity and Pagan Civilistions]. New Delhi: Samas 6, Vani Prakashan, 2012.

MAURICIO SOTELO

von September bis Dezember 2012 Professor für Komposition Escola Superior de Música de Catalunya, Barcelona

Geboren 1961 in Madrid Studium der Komposition an der Universität für Musik und darstellende Kunst Wien

"EL PÚBLICO. ÓPERA BAJO LA ARENA" (OPERNPROJEKT NACH EINEM TEXT VON FREDERICO GARCÍA LORCA)

Ich beabsichtige, die bereits im vergangenen akademischen Jahr am Wissenschaftskolleg begonnene Komposition meiner Oper "El Público" nach einem Drama von Frederico García Lorca im Particell abzuschließen.

Gérard Mortier, der Intendant des Teatro Real, hat diese Oper in Auftrag gegeben, sie soll 2015 uraufgeführt werden. Mortier hofft, dass diese Oper der Beginn einer Reihe moderner spanischer Opern ist. Bislang hat es in Spanien keine der Oper in anderen europäischen Ländern wie Deutschland, Frankreich, Italien oder Russland vergleichbare Tradition gegeben. Bei dieser unmöglichen Aufgabe wird mir, so hoffe ich, das Gespräch mit anderen Fellows nützlich sein. Aus diesen Begegnungen können Anregungen entspringen, die wie verborgene Energiequellen die Komposition vorantreiben, ohne dass ich dies im Einzelnen erklären könnte. Wenn ich über das kompositorische Denken reflektiere, so beginnt das Objekt meiner Untersuchung zu vibrieren, innerlich zu klingen, zu "singen". So entsteht durch Austausch ein fruchtbarer – "singender" – Dialog, der zu einem Resonanzkörper – *Teatro della Memoria* –, zu einem verinnerlichten Theater meiner Oper wird.

Lese- und Hörempfehlung

Partituren:

"De Magia", "Chalan", "Arde el Alba" (alle bei Universal Edition, Wien)

CDs:

"Wall of Light Sky." Kairos, 2006.

MICHAEL SQUIRE

Ph.D., Klassische Altertumswissenschaft King's College London

Geboren 1980 in Aylesbury, Großbritannien Studium der Klassischen Altertumswissenschaft am Trinity College, Cambridge, und der Komparatistik an der Harvard University

SICHT UND UNSICHTBARKEIT IN DEN *EIKONES* PHILOSTRATS DES ÄLTEREN

Die *Bilder* Philostrats des Älteren sind ein griechischer Text aus dem 3. Jahrhundert n. Chr., der sich mit dem grundlegenden Problem der Kunstgeschichte befasst: Wie kann man visuelle Bilder in verbalen Diskurs übersetzen und umgekehrt? Philostrat benutzt eine (vorgebliche) Galerie an der Küste Neapels, um die Mittel zu erforschen, mit denen wir Bedeutung in dem finden, was wir sehen. Die resultierende Abhandlung hat unmittelbare Bedeutung für den künstlerischen, kulturellen und intellektuellen Horizont der Spätantike (und auch der griechisch-römischen Archäologie davor). Aber sie besitzt auch unbedingte Relevanz für die Kunstgeschichte als wissenschaftliche Disziplin, denn Philostrat deckt die spielerischen Zwischenräume auf, die immer und notwendigerweise die Sphären des Visuellen und des Verbalen verbinden.

Ich möchte das Jahr am Wissenschaftskolleg zu Berlin dazu nutzen, eine thematische Monographie zu Philostrats *Bilder* zu schreiben, wobei ich ihre Bedeutung nicht nur für Klassische Philologen und Archäologen, sondern auch für alle diejenigen erkläre, die sich mit der Bildwissenschaft überhaupt beschäftigen. Mein Ziel ist es zu zeigen, wie Philostrats Unternehmen, Bilder in Worten heraufzubeschwören, einer überlegten Intervention innerhalb spätantiker Diskurse über Ikonizität, Form und Repräsentation gleichkommt – Debatten, die, wie die *Bilder* selbst, sowohl verbal wie visuell vermittelt wurden und die eine intellektuelle Bedeutung besitzen, welche weit jenseits ihres ursprünglichen kulturhistorischen Kontextes liegt. Das Buch wird einerseits historisch

ausgerichtet sein: Es wird den Text innerhalb älterer Diskussionen um Bilder, Worte und das Verhältnis zwischen den beiden verorten, wobei Philostrats beschriebene Malereien vor dem Hintergrund des Übergangs von mimetischen und naturalistischen Darstellungsformen zu den sehr stilisierten visuellen Ausdrucksweisen der späteren römischen Kaiserzeit gelesen werden. Andererseits wird die Monographie die Frage stellen, wie dieses Werk aus dem 3. Jahrhundert weitaus aktuellere Diskussionen um die Interaktionen zwischen Bild und Text bereichern könnte.

Das Buch wird genaue literarische und kunsthistorische Lesarten des Textes mit einer ausgewogenen Reflexion der Kunstgeschichte und ihrer Geschichte als Disziplin kombinieren. Dabei ist es meine Absicht, neue intellektuelle Brücken nicht nur zwischen den (allzu oft abgegrenzten) Fächern "Klassische Philologie" und "Klassische Archäologie", sondern auch zwischen den Klassischen Altertumswissenschaften und der Kunstgeschichte im Allgemeinen zu schlagen.

Lektüreempfehlung

Squire, Michael. *The Iliad in a Nutshell: Visualizing Epic on the Tabulae Iliacae*. Oxford: Oxford University Press, 2011.

- —. The Art of the Body: Antiquity and its Legacy. Oxford: Oxford University Press, 2011.
- —. *Image and Text in Graeco-Roman Antiquity*. Cambridge: Cambridge University Press, 2009.

TANJA STADLER

from October to December 2012
Fellowship awarded in connection with the John Maynard Smith Prize of the European Society for Evolutionary Biology
Dr. rer. nat., Biology and Mathematics
Swiss Federal Institute of Technology Zurich

Born in 1981 in Stuttgart Studied Mathematics at the Technische Universität München

INFERRING POPULATION DYNAMICS OF BIOLOGICAL SYSTEMS THROUGH PHYLOGENETIC APPROACHES

Genetic sequences of organisms are related through their evolutionary past. Therefore, genetic sequences cannot be treated as independent measurements, but their evolutionary past – i.e., the phylogenetic tree – has to be considered in order to draw biological conclusions.

I am developing more realistic evolutionary models and more efficient computational tools to make it possible to infer and analyze phylogenies based on the large amount of sequence data becoming available. The methods are developed such that we can answer questions on both the macroevolutionary and the epidemiological level, which may lead e.g. to a better understanding of potential future extinction events, as well as of the effectiveness of public health interventions

On the macroevolutionary level, my aim is to obtain a better understanding of which macroevolutionary processes shape the tree of life. So far, all commonly used models fail to explain the data in the sense that model trees differ significantly from the empirical trees. In the era of a vast amount of sequence data, we have the unique opportunity to use the sequence data to verify or reject novel macroevolutionary models.

On the epidemiological level, I am aiming to use the large amount of virus sequence data, which is obtained by routine drug resistance testing, to under-

stand epidemiological and evolutionary dynamics of viruses in more detail. My future aim is to merge epidemiological and evolutionary models, such that both epidemiological and evolutionary parameters can be estimated on the basis of viral sequence data.

Addressing these open questions in macroevolution and epidemiology requires defining appropriate models for the different processes, which then need to be formalized in an inference framework. During my stay at the Wissenschaftskolleg, I am looking forward to broad discussions with evolutionary biologists, ecologists, and epidemiologists, which I expect to lead to more realistic models and testable hypotheses at the interface of these disciplines.

Recommended Reading

Stadler, Tanja (2011). "Mammalian phylogeny reveals recent diversification rate shifts." *Proc. Nat. Acad. Sci.* 108, 15: 6187–6192.

Stadler, Tanja, R. Kouyos, V. von Wyl, S. Yerly, J. Böni, P. Bürgisser, T. Klimkait, B. Joos, P. Rieder, D. Xie, H. Günthard, A. Drummond, and S. Bonhoeffer (2012). "Estimating the basic reproductive number from viral sequence data." *Molecular Biology and Evolution* 29, 1: 347–357.

ULRICH KARL STEINER

from September to December 2012 Fellow of the College for Life Sciences (see p. 128) Ph.D., Evolutionary Ecology INSERM U1001, Centre de Recherche Interdisciplinaire, Paris

Born in 1973 in Ulm Studied Evolutionary Ecology at the Universities of Göttingen and Zürich

VARIABILITY IN INDIVIDUAL FITNESS COMPONENTS

Humans and other species often differ greatly in age at death and in lifetime reproduction. For example, the standard deviation of human age at death was ~40% of life expectancy (~35 years) in the early 1800s and ~20% in the late 1900s even with a much higher life expectancy (~70 years). This leads to the question why there is so much variability and where does it come from. Does it have a genetic component, is it driven by the fluctuations in the environment, or is it simply chance that determines the course of life? To date, we have no good expectation of variability in fitness components and patterns across species and populations and we are far from quantifying underlying causes of this variability. The large variation in fitness components that is found on all levels, from bacteria to humans, has substantial implications for evolutionary and ecological population dynamics. It confronts us with major challenges in accurately forecasting population dynamics, including forecasts under climate change scenarios and major shifts in the demographic structure human societies face in the near future. I will review existing patterns across the tree of life using neutral theories of life histories to reveal potential unifying or diverging features in observed variability in fitness components among individuals. I will use a neutral theory of life histories that estimates expected neutral variability in individual fitness components within age- and stage-structured populations, assuming a single genotype. If expectations of large neutral variability (non-genetic variability) hold, life courses are mostly be determined by chance and we need not worry; we only need to be lucky.

Recommended Reading

Steiner, U. K. and S. Tuljapurkar (2012). "A neutral theory for life histories and individual variability in fitness components." *PNAS* 109, 12: 4684–4689.

Tuljapurkar, S., U. K. Steiner, and S. H. Orzack (2009). "Dynamic heterogeneity in life-histories." *Ecology Letters* 12, 1: 93–106.

SONIA E. SULTAN

Ph.D., Professor of Biology Wesleyan University, Middletown, Conn.

Born in 1958 in Massachusetts, USA Studied History and Philosophy of Science at Princeton University and Organismic and Evolutionary Biology at Harvard University

ORGANISM AND ENVIRONMENT

I will be working on a new scientific book that aims to explore the relationship between organisms and their environments and how this relationship shapes the process of evolution. In a conventional neo-Darwinian view, genes dictate the form and function of individual animals and plants, which then either succeed or fail in various environments. In this view, the organism itself all but disappears from the evolutionary process, which is seen to simply match different DNA sequences with various types of external conditions. Over the past decade, advances in (a) the molecular basis of development and (b) the evolutionary ecology of natural populations have suggested an updated view of organisms as dynamic systems interacting with their environments. These organism-environment interactions occur in two key ways. First, the individual's development is directly affected by its environmental circumstances, often in ways that are specifically suited to those circumstances. This area of study is known as "ecological development". Second, the organism's own body, physiology, and behavior shape its ecological niche, and consequently influence its subsequent evolutionary change under natural selection. This complex ecological feedback has been termed "niche construction". I hope to develop an integrated understanding of the organism-environment relationship in the light of current information from these two emergent biological disciplines. This synthesis is particularly timely as biologists seek a unified contemporary framework in which to investigate the developmental outcomes, ecological success, and evolutionary prospects of organisms in rapidly changing environments. The book is under contract with Oxford University Press.

Recommended Reading

Sultan, Sonia E. (2010). "Plant developmental responses to the environment: eco-devo insights." *Current Opinion in Plant Biology* 13: 96–101.

- (2007). "Development in context: the timely emergence of eco-devo." *Trends in Ecology and Evolution* 22: 575–582.
- (2000). "Phenotypic plasticity for plant development, function and life-history." *Trends in Plant Science* 5: 537–542.

ROBERT TRIVERS

from January to May 2013 Ph.D., Professor of Anthropology and Biological Sciences Rutgers, The State University of New Jersey

Born in 1943 in Washington, D.C. Studied History and Biology at Harvard University

PEDIATRIC GROWTH DISORDERS IN HUMANS, SPECIES SURVIVAL IN ANTS AND PERSONAL MEMORIES

I intend to pursue three lines of work in parallel while at Wiko during the spring of 2013.

On the one hand, I plan to finish a paper with David Haig on pediatric growth disorders – so-called Syndromes: Angelman's, Beckwith-Wiedemann's, Silver-Russell and Prader-Willi. These can be arranged by degree of genomic imprinting dysfunction – from single inactivating mutations to small duplications to entire uni-parental disomies.

The curse of medicine, in turn, is Syndromes, clusters of symptoms with no underlying logic (e.g. AIDS before the connection to HIV was established). By organizing the data according to underlying genetic defects that can be precisely defined, we hope to make a contribution to medicine, both in explication and prediction.

I would also like to finish a manuscript with Koos Boomsma on species selection, an important topic that has received very little attention outside of asexual species and birds. I would like to concentrate on ants, according to the degree of (worker-induced) female-biased ratios of investment. The greater the bias, the longer the species or larger group is expected to survive. This notion appears to have been completely neglected for the past 35 years, but may be of considerable importance in explaining an ecological dominance (perhaps one percent of all terrestrial animal tissue).

Finally, I hope to complete a personal book on exceptional people I have known (Ernst Mayr, Huey Newton), exceptional field experiences (lizards, birds, monkeys, and chimpanzees), and exceptional personal experiences (robbed at gunpoint in East Kingston, surviving an armed home invasion robbery). The book is now about half-written and should be ready for completion by the spring of 2013.

Recommended Reading

Trivers, Robert. The Folly of Fools: the Logic of Deceit and Self-deception in Human Life. New York: Basic Books, 2011.

Burt, A. and R. Trivers. *Genes in Conflict: the Biology of Selfish Genetic Elements*. Cambridge, Mass.: Harvard University Press, 2006.

Trivers, R. and H. Hare (1976). "Haplodiploidy and the evolution of the social insects." *Science* 191: 249-269.

ALIPASHA VAZIRI

from April to July 2013 Fellow of the College for Life Sciences (see p. 132) Ph.D., Professor of Physics Max F. Perutz Laboratories (MFPL), University of Vienna

Born in 1974 in Teheran Studied Physics at the University of Vienna

QUANTUM EFFECTS IN BIOLOGICAL SYSTEMS

Focus Group *Quantum Mechanical Processes in Biological Systems* (see p. 130)

My lab has two broader research themes: the development of new structural and functional bio-imaging tools, mainly by using concepts from classical and quantum optics, to study biological function and structure at higher resolution and speed; and the question of the extent to which quantum dynamical effects in biological systems might be present and have a biological relevance. The observation of coherent energy transfer in the photosynthetic complex has recently triggered a critical evaluation of the possible presence and role of coherence in other biological systems. In this context we are currently experimentally investigating the underlying dynamics in the selectivity filter of ion channels that are responsible for the high throughput of ions coupled with the high ion selectivity and the possible involvement of coherence in that mechanism. While our current studies are mainly focused toward experimentally identifying the presence of coherence, a longer-term key question of interest, in the case that coherence is found, is whether its potential role in biological functioning can be understood by asking whether there are any signatures of coherence on a functional level. As a Fellow at the Wissenschaftskolleg, by interacting with colleagues with backgrounds in quantum information theory, quantum solid states physics, and external guests with a background in neuroscience, I would like to work toward possible generalizations of these questions and to initiate theoretical investigations on a few new systems and topics related to quantum coherence and biology and their experimental feasibility.

Recommended Reading

- Vaziri, A. and M. Plenio (2010). "Quantum coherence in ion channels: resonances, transport and verification." *New Journal of Physics* 12 (085001).
- Ganim, Z., A. Tokmakoff, and A. Vaziri (2011). "Vibrational excitons in ionophores; experimental probes for quantum coherence-assisted ion transport and selectivity in ion channels." *New J. Phys.* 13 (113030).
- Andrasfalvy, B. K., B. V. Zemelman, J. Tang, and A. Vaziri. (2010). "Two-photon single-cell optogenetic control of neuronal activity by sculpted light." *Proc. Natl. Acad. Sci. USA* 107 (26): 11981–6.

JOHN H. WERREN

from January to July 2013 Ph.D., Professor of Biology University of Rochester, New York

Born in 1952 in Monroe, Wisconsin, USA Studied Biology at the University of Utah

COOPERATION, CONFLICT, AND THE EVOLUTION OF NETWORKS

Networks of interacting entities occur throughout the natural world and at all levels of biological and physical organization. Examples include genetic and biochemical networks within cells and organisms, networks of interacting cells (in colonies and multicellular organisms), neural networks, social and economic networks among interacting organisms (animal and human), communities of interacting organisms including symbioses, and ecosystems of interacting biotic and abiotic factors influencing weather, climate, nutrient cycling, and other geochemical processes. How do networks "evolve"? Are there unifying principles and also key differences that shape the evolution, stability, and dynamics of networks at different levels of organization? These are the questions that I wish to explore during my stay at Wiko. More specifically, I wish to investigate (a) the role of conflict and cooperation in shaping network structure and function, (b) the extent to which selection at different levels of organization (gene, individual, social group, species community, ecosystem) shapes network evolution, and (c) how parasitism and mutualism at these different biological levels shape the function, stability, and evolution of networks.

Recommended Reading

- Loehlin, D. W. and J. H. Werren (2012). "Evolution of shape by multiple regulatory changes to a growth gene." *Science* 335: 943–947. DOI: 10.1126/science.1215193
- Werren, J. H. (2011). "Selfish Genetic Elements, Genetic Conflict, and Evolutionary Innovation." *Proc. Natl. Acad. Sci.* 108: 10863–10870.
- Werren, J. H., S. Richards, C. A. Desjardins, O. Niehuis, J. Gadau, J. K. Colbourne, et al. (2010). "Functional and evolutionary insights from the genomes of three parasitoid Nasonia species." *Science* 327: 343–348.

KATHARINE BIRGITTA WHALEY

from October to December 2012 Ph.D., Professor of Chemistry University of California, Berkeley

Born in 1956 in Barnehurst, UK Studied Chemistry at Oxford University and Harvard University and Chemical Physics at the University of Chicago

QUANTUM COHERENCE IN BIOLOGY

Focus Group *Quantum Mechanical Processes in Biological Systems* (see p. 130)

My research within the quantum biology focus group will address the characterization and elucidation of quantum dynamical effects in biological systems with the overall goals of understanding both the mechanism and the role of such unusual quantum manifestations. We shall use methods of quantum control and quantum measurement to enhance coherence sensitive tools of quantum physics and to develop new probes for quantum dynamic phenomena such as excitonic energy transfer in photosynthesis and magnetic field-dependent spin dynamics in cryptochromes. For example, the role of the protein environment in quantum coherent energy transport during light harvesting will be studied by analyzing features of the protein dynamics that are coupled to electronic energy transfer by adapting techniques such as quantum control, quantum tomography, and parameter estimation to the exploration and refinement of environmental enhancement factors for finite temperature coherence. We will draw on our experience in the fields of chemical physics, quantum information, and quantum information processing to develop a molecular level understanding of when, where, and why quantum dynamics are to be found in biological systems and to characterize these both in vivo and in vitro. These dynamical quantum phenomena pose fundamental questions to the quantum

physics and chemistry communities as well as to the biology community. By their nature, they demand an interdisciplinary approach of study that combines and unites all three scientific communities. Our goal is to develop and apply such an approach in order to gain new insights into the quantum aspects of biological processes, insights that go beyond the notions of the structure, energetics, and stability of biomolecules to address the influence of quantum dynamics.

Recommended Reading

Sarovar, M., A. Ishizaki, G. R. Fleming, and K. B. Whaley (2010). "Quantum entanglement in photosynthetic light harvesting complexes." *Nature Physics* 6: 462.

DiVincenzo, D. P., D. Bacon, J. Kempe, G. Burkard, and K. B. Whaley (2000). "Universal quantum computation with the exchange interaction." *Nature* 408: 339–342.

Lidar, D. A., I. L. Chuang, and K. B. Whaley (1998). "Decoherence-Free Subspaces for Quantum Computation." *Phys. Rev. Lett.* 81: 2594–2597.

MENAHEM E. YAARI

from September to October 2012

Ph.D., Professor (emer.) of Economy, The Hebrew University of Jerusalem, and President (emer.), Israel Academy of Sciences and Humanities

Born in 1935 in Jerusalem

Studied Economics and Philosophy at the Hebrew University of Jerusalem and Economics and Statistics at Stanford University

RATIONALIZING COOPERATION

As is well known, the extent to which people tend to cooperate with one another in interactive situations greatly exceeds the degree of cooperation predicted by the various theories of rational behavior, notably by the Theory of Games. Today's orthodoxy deals with this phenomenon in one of two ways: 1) Tinker with the agents' utility functions, e.g. by introducing an "affinity for altruism". 2) Abandon rationality and declare the observed behavior to be merely "boundedly" rational. I contend that both of these "solutions" are deplorably unsatisfactory and that, in any event, a theoretical framework should exist under which cooperation is fully rational even as agents' utilities are kept undisturbed. I propose to devote my stay at the Wissenschaftskolleg to formulating such a theory and, if at all possible, to collaborate with German colleagues in testing this theory experimentally.

Recommended Reading

- Yaari, Menahem E. and Maya Bar-Hillel. *On Dividing Justly*. Jerusalem: Center, University, 1982.
- Yaari, Menahem E. "The Dual Theory of Choice Under Risk." *Econometrica* 55, 1 (1987): 95–115.
- —. "Endogenous Changes in Tastes: A Philosophical Discussion." *Erkenntnis* 11, 1 (1977): 157–196.

LIAN YANG

Poet, Prose Writer, Essayist Member of the Board of PEN International London

Born in 1955 in Bern, educated in China

THE POETICAL OTHER IN THE NEW WORLD

The latest developments in the Middle East and in China provided widely divergent contexts for our "New World". To me, the "new" here means "the deep"; every culture and even every person has to address some deeper questions: where will the fast-changing global politics and the economic landscape take us? What value and principles can we hold onto in this stormy situation? Actually, who am I?

China is not only a political and economic case, but also one of profound cultural transformation. As a poet, I experienced the nightmare of the Cultural Revolution; then, during the 1980s and layer by layer, introspections on Chinese history and tradition; the Tiananmen Massacre in 1989; and since then, being a Chinese poet and thinker in exile and turning "exile" positively into a grammar to share and understand other cultures with their thinkers. The question "What did we gain from exile?" is still the basis of the internal journey in my literary writings and helps me to observe the world.

In 2003, when I met the great Arabic poet Adonis at the Poetry International Jordan, it opened up a direct exchange between interdependent thinkers in the Chinese and Arabic worlds. I also began my series of projects of discussions with international poets, especially with Eastern European poets, since we shared some common historical experiences that could be understood as important references of our situation today but which, sadly, have been ignored by the world. My essay "The contemporary significance of Cold War experiences" expressed this thought.

During my stay at the Wissenschaftskolleg, I would like to continue the projects of my own writings, mainly poetry and essays, to draw a map of thinking of China, to show how China has been transformed from a Cold War version of a Communist state into a much more complex part of the global capitalist system, whose ideology (or even religion) is selfishness and cynicism. This theme will also become the meeting point to continue discussions with the poet-thinkers from Eastern Europe. We shall try to discover what the "New World" means to us as people and as poets and how to respond to it with the depth and creative quality of poetry. We will translate the poems ourselves, like other poets' translating projects I have been engaged in with poets from other languages (but not with German poets yet); the profound and rich discussion throughout all layers of poetry, from the very linguistic to literary concepts and realistic attitudes, will be documented as an ever-growing living book.

I shall also try to follow the model of the *Jade Ladder*, the anthology of contemporary Chinese poetry in English translation based on poets' translations and to organize a German-Chinese poets' translation project to create multi-voice translations between contemporary German and Chinese poetry.

Finally, I shall write a book titled *Unique Mother Tongue*, based on a wonderful sentence "Poetry is our unique mother tongue", to show how poets can respond to the challenge of the New World.

Recommended Reading

Yang, Lian. *Aufzeichnungen eines glückseligen Dämons*. Frankfurt/Main: Suhrkamp, 2009.

- —. Where the Sea Stands Still. Newcastle upon Tyne: Bloodaxe Books, 1999.
- —. Concentric Circles. Tarset: Bloodaxe, 2005.
- -... Jade Ladder. Tarset: Bloodaxe, 2012.

FROMA I. ZEITLIN

Ph.D., Ewing Professor of Greek Language and Literature and Professor (emer.) of Comparative Literature Princeton University

Born in 1933 in New York Studied Classic Literature at Harvard University and at Columbia University

VISION, FIGURATION, AND IMAGE FROM THEATER TO ROMANCE IN THE ANCIENT GREEK WORLD

I explore certain facets of visual culture in ancient Greece through some persistent themes and preoccupations found in literary genres from the archaic and classical periods (particularly Homer and the dramatic stage) to the world of late antiquity (prose fiction), as these intersect with the figurative arts, notably sculpture and painting. There is an enduring fascination with the power of images, the feats of artisans, and the prestige of the figurative arts, with a premium placed on the quality of the "beautiful" - in social, political, ethical, aesthetic, rhetorical, psychological, and, increasingly, in erotic terms. Yet each aspect must be viewed against changing horizons of expectations, not just regarding the development of artisanal techniques and the expansion of visual fields in both public and private life, but also in theoretical terms, even with respect to the nature and functions of representation itself and the conceptualization of such notions as appearance, imitation, resemblance, image, and counterfeit or copy, as these relate to each other and to an idea of "reality" itself. Despite Plato's resistance, Greek culture remains until the end one of spectatorship, public performances, and visual display of every sort. All these activities increase, in fact, in scale and significance from the Hellenistic period on, reaching extravagant heights of material splendor and developing new concepts and practices, such as phantasia (imagination) and a growing conviction that while art imitates nature, nature also imitates art. My own interest is directed towards exploring the uncanny powers of imaging and of figuration through a

whole range of visual experiences that, beside works of art, also includes dreams, visions, phantoms, epiphanies of gods, and theatrical scenes of mimetic reenactment. What draws these disparate phenomena into the same force field is primarily their role as agents of mediation that derive from an enduring set of imaginings in a culture, which gave gods human form and used the image of the body both to separate and cross the ontological lines that distinguish the animate from the inanimate, the illusion from reality, the dream from the waking state, the evanescent from the eternal, the self from the other, the living from the dead, the mortal from the immortal, and the past from the present.

Recommended Reading

Zeitlin, Froma I. *Playing the Other: Gender and Society in Classical Greek Culture*. Chicago, University of Chicago Press, 1996.

- —. "Visions and Revisions of Homer in the Second Sophistic." In *Greek Identity in the Second Sophistic*, edited by Simon Goldhill, 195–266. Cambridge: Cambridge University Press, 2001.
- —. "The Artful Eye: Vision, Ekphrasis, and Spectacle in Euripidean Drama." In *Art and Text in Ancient Greek Culture*, edited by Simon Goldhill and Robin Osborne, 138–96. Cambridge: Cambridge University Press, 1994.

SCHWERPUNKTGRUPPE QUANTENMECHANISCHE PROZESSE IN BIOLOGISCHEN SYSTEMEN

Die Quantenmechanik hat unser Verständnis der Natur verändert und ermöglicht uns, ein sehr breites Spektrum an Phänomenen zu erklären, angefangen von einzelnen Atomen und Molekülen bis hin zum Ferromagnetismus und zur Supraleitfähigkeit. Dennoch erfordern einige der spektakulärsten Vorhersagen der Quantenmechanik - einschließlich der Superposition von Zuständen, die nach klassischer Definition verschieden sind, etwa im Gedankenexperiment "Schrödingers Katze", und der Quantenverschränkung, die zu nicht-lokalen Korrelationen zwischen entfernten Objekten führt - eine fast vollkommene Isolation der untersuchten Systeme, die nur in Laboren für Tieftemperaturphysik möglich ist. Dennoch haben die experimentellen Fortschritte – insbesondere auf dem Gebiet der Spektroskopie und der Dynamik in kondensierten Phasen – in den vergangenen Jahren gezeigt, dass Quantenphänomene auch in einigen biologischen Systemen eine Schlüsselrolle spielen. Zu den Beispielen dafür gehört die Energieübertragung in photosynthetischen Lichtsammelkomplexen, der Tunneleffekt von Elektronen und Wasserstoffatomen bei Enzymreaktionen, die Wahrnehmung magnetischer Felder durch Vögel und andere Tiere und die molekulare Grundlage des Geruchssinns.

Diese Beobachtungen werfen quälende Fragen nach der biologischen Bedeutung der Quantenphänomene auf. Sind diese Phänomene einfach nur Überbleibsel jener zugrundeliegenden quantenchemischen Struktur der Moleküle, aus denen lebende Organismen bestehen, oder dienen sie einem biologischen Zweck? Diese Probleme gehören zu den faszinierendsten Fragekomplexen auf einem im Wachstum begriffenen Forschungsfeld, und bisher haben wir keine klaren Antworten. In unserer Schwerpunktgruppe wollen wir uns mit diesen Fragen beschäftigen – teils anhand der Analyse eines breiteren Spektrums biologischer Prozesse, bei denen Quantenkohärenz vielleicht eine Rolle spielt, und teils durch die Entwicklung neuer Experimente, die vielleicht ein anderes Licht auf die Existenz der Quantenverschränkung werfen können.

FOCUS GROUP QUANTUM MECHANICAL PROCESSES IN BIOLOGICAL SYSTEMS

Quantum mechanics has revolutionized the way we understand nature, enabling us to explain a very wide range of phenomenology ranging from stability of individual atoms and molecules to ferromagnetism and superconductivity. Yet, some of the most spectacular predictions of quantum physics, including superposition of classically distinct states, a.k.a. Schrödinger's cat, and quantum entanglement leading to non-local correlations between distant objects, require a near-perfect isolation of the systems under investigation that is only possible in low-temperature physics laboratories. Nevertheless, experimental advances in recent years, in particular in the fields of spectroscopy and condensed phase dynamics, have shown that quantum phenomena may also play a key role in some biological systems. Examples include energy transfer in photosynthetic light harvesting complexes, tunneling of electrons and hydrogen atoms in enzyme reactions, sensing of magnetic fields by birds and animals, and the molecular basis of olfaction.

These observations have raised tantalizing questions concerning the biological significance of the observed quantum phenomena. Are these manifestations merely remnants of the underlying quantum chemical structure of the molecules of which living organisms are made, or do they serve a biological purpose? These are some of the most fascinating larger questions in this growing area of research, to which there are so far no clear answers. The goal of our focus group is to address these questions, partly by analyzing a broader spectrum of biological processes where quantum coherence may play a role, and partly by identifying potential new experiments that could shed new light on the existence of quantum entanglement.

Whaley, K. B. et al. (2011). "Quantum entanglement phenomena in photosynthetic light harvesting complexes." *Procedia Chemistry* 3, 1: 152–164.

Engel, G. S. et al. (2007). "Evidence for wavelike energy transfer through quantum coherence in photosynthetic systems." *Nature* 446: 782–786.

Ritz, T. et al. (2004). "Resonance effects indicate a radical-pair mechanism for avian magnetic compass." *Nature* 429: 177–180.

Birgitta Whaley and Atac Imamoglu

COLLEGE FOR LIFE SCIENCES

Mit dem *College for Life Sciences* will das Wissenschaftskolleg jungen Forschern (Post-Docs) aus den Naturwissenschaften Gelegenheit geben, drei Monate 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, aus dem vorgegebenen Rhythmus des Labors auszusteigen, Umschau zu halten, und dabei je nach Umständen mit Wissenschaftlern und Intellektuellen verschiedenster Fachgebiete und Traditionen zu interagieren.

Die Fellows des *College for Life Sciences*, die nach Begutachtung durch ein Expertengremium für drei Monate eingeladen werden, sind im übrigen den Fellows des Wissenschaftskollegs gleichgestellt und haben dieselben Rechte und Pflichten. Das Institut erwartet, dass sie für die Dauer ihres Fellowships in Berlin arbeiten und an der Gemeinschaft der Fellows teilnehmen (am internen wöchentlichen Colloquium sowie an den Mahlzeiten). Das Wissenschaftskolleg stellt Stipendium, Unterkunft und Dienstleistungen zur Verfügung.

Den Fellows des *College for Life Sciences* ist es freigestellt, in ihrer Gruppe zusätzliche Aktivitäten zu betreiben. Ein Wissenschaftlicher Koordinator steht bereit, Hilfestellungen und Anregungen zu geben, gemeinsame Unternehmungen zu organisieren und Verbindungen zu Berliner Institutionen und Kollegen zu schaffen.

Längerfristig ist geplant, das *College for Life Sciences* als Einheit "auf halber Distanz" zum Wissenschaftskolleg selbständiger zu etablieren und in einem eigenen Gebäude unterzubringen.

COLLEGE FOR LIFE SCIENCES

With the *College for Life Sciences*, the Wissenschaftskolleg wants to provide post-doc researchers in the natural sciences the opportunity to work for three months in the stimulating atmosphere of an international and multidisciplinary Institute for Advanced Study. Depending on the personal situations of the se-

lected Junior Fellows, the residency should serve to gain new orientation, develop ideas, project research plans, rethink earlier work or empirical data – at any rate, for a limited time to drop out of the routine of daily work and the predetermined rhythm of the laboratory, to take a look around, and thereby, in accordance with circumstances, to interact with scientists and intellectuals from the widest possible spectrum of fields and traditions.

The Fellows of the *College for Life Sciences*, who will be invited to come for three months after evaluation by a group of experts, will otherwise be on equal terms with and have the same rights and duties as the Fellows of the Wissenschaftskolleg. The institute expects them to work in Berlin for the duration of their fellowships and to take part in the community of Fellows (at the weekly internal Colloquium and at meals). The Wissenschaftskolleg provides the stipend, accommodations, and services.

The Fellows of the *College for Life Sciences* are free to engage in additional activities in their group. A Research Coordinator is ready to provide assistance and suggestions for organizing common undertakings and for establishing connections with Berlin institutions and colleagues.

The long-term plan for the *College for Life Sciences* is that it should establish itself in greater independence as a unit "at half-remove" from the Wissenschaftskolleg and to accommodate it in a building of its own.

Fellows des College for Life Sciences 2012/13:

Akihito Ishizaki Chemie Okazaki

Emily I. Jones Ökologie Washington State University

Shakti Lamba Anthropologie London Ulrich Karl Steiner Biologie Paris Alipasha Vaziri Physik Wien

Scientific Committee des College for Life Science:

Raghavendra Gadagkar Ökologie, Indian Inst. of Science, Bangalore
Constance Scharff Verhaltensbiologie, Freie Universität Berlin
Roger Nitsch Molekulare Psychiatrie, Universität Zürich
Nikolaus Rajewsky Systembiologie, Max-Delbrück-Centr. Berl.-Buch

Paul Schmid-Hempel Experimentelle Ökologie, ETH Zürich