COVID-19: Lessons from History?

By Robin A. Weiss

“The low transmissibility of the virus, combined with infectiousness after the onset of clinical symptoms, made simple public health measures, such as isolating patients and quarantining their contacts, very effective in the control of the SARS epidemic. We were lucky this time round but may not be so with the next epidemic outbreak of a novel aetiological agent.”

The above statement appeared in a chapter by Roy Anderson and colleagues following the 2003 SARS outbreak published in *SARS: A Case Study in Emerging Infections* (Oxford University Press 2005) as the augmented proceedings of a meeting on the topic held at the Royal Society. In the concluding chapter, Angela McLean and I advised that we should “expect the unexpected” and alas, seventeen years later, we are not so lucky with the outbreak of COVID-19. It is caused by a virus formally named as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) because its genetic sequence is closely related to the SARS coronavirus, but it’s more commonly referred to in the media and by the World Health Organization (WHO) as “COVID virus” or “Coronavirus.”
Coronaviruses, cont.

The high rate of virus transmission before symptoms appear has allowed COVID virus to spread much faster in the community than SARS, although its virulence in most infected individuals appears to be lower. At the time of writing (March 8), the global mortality threat appears to be lower than the 1918/19 flu pandemic (the “Spanish” influenza pandemic that claimed ~50 million deaths) but might eventually overtake the 2009 flu pandemic (~280,000 deaths).

During the past 40 years, advances in the technology of virus identification and characterization have proceeded apace. Following the appearance of AIDS in 1981 as a novel affliction it took two years to identify the causative agent, HIV-1, and a further 18 months before its genome was fully cloned and sequenced. With the advent of SARS in 2003, it took only 2 months to characterize it as a member of the Coronavirus family whereas in January 2020, Chinese scientists obtained the full genetic sequence of the newly isolated COVID-19 virus within 3 days. Yet therein lies one of the unlearned lessons: because the genetic sequence turned out to be 70% similar to the SARS virus, investigators in Wuhan initially assumed that the transmission dynamics would also be similar, and they lost a crucial window of opportunity to nip the epidemic in the bud.

Complacency about the spread of COVID-19, together with the desire of local authorities to downplay the significance of the outbreak, has resulted in the international spread of this virus. However, once they realized the gravity of the situation, the Chinese seem to be managing to contain the epidemic at its original epicenter, Wuhan in Hubei province, in contrast to, say, Italy. Mathematical modeling for predicting the course of novel epidemics has also become much more sophisticated since the SARS outbreak and has informed contingency planning. But politicians are reluctant to allocate large budgets for pandemic preparedness against something that hasn’t happened yet; funding to the Centers for Disease Control and Prevention in the USA, and support for the WHO declined in real terms, until this month.

Despite the rapidity of developing genome-based diagnostic tests, it takes time to scale up and distribute them in countries with advanced economies let alone in poor and middle-income nations. An effective vaccine may well be devised based on the virus’s “S” protein since similar constructs have proved effective in pre-clinical tests with the SARS virus, but that will take years rather than months to roll out across the world. In a report on Research in Global Health Emergencies published on January 28, the Nuffield Council on Bioethics emphasizes the
need for clinical trials to proceed ethically even in emergencies.

Antiviral drugs are being investigated that might help to ameliorate severe disease. I favor testing existing, licensed, inexpensive drugs that might be repurposed to fight COVID-19. For instance, we already know that this coronavirus docks onto the same cell surface molecule as the SARS virus, namely, angiotensin converting enzyme type 2 (ACE-2). Drugs such as Valsartan and Losartan are ACE-2 receptor antagonists, taken by millions of people (including myself) to lower blood pressure. But be careful, for while they might help protect against COVID-19, they may exacerbate the situation instead.

What else can we fall back on in the face of this emergency? Well, traditional historic methods: quarantine and personal hygiene. Boccaccio and his friends self-isolated outside Florence against the Black Death in 1348, as did the altruistic villagers of the Eyam in Derbyshire, England during the plague epidemic of 1665. And, as Ignac Semmelweis railed against his unheeding medical colleagues in the 1840s: “Now wash your hands.”

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What the Plague Can Teach Us About the Coronavirus

by Hannah Marcus


The city that gave us the word quarantine nearly 600 years ago is once again facing an epidemic. On Feb. 23, officials in Venice canceled the final days of its Carnival festival, which brings hordes of tourists to the notoriously overcrowded lagoon city. The coronavirus COVID-19 had arrived.

Faced with a novel virus, it’s worth reconsidering Italy’s long experiences with epidemics and heeding the lessons. Though the etiologies of plague and the present coronavirus differ hugely, the social consequences of these outbreaks resonate in alarmingly similar ways.

As a historian of medicine, my research focuses on Italy in the early modern period, from 1400 to 1700. In this period, many of our current public health approaches, including tallying fatalities, emerged in response to outbreaks of plague. The word quarantine derives from the Venetian word for 40 days, the length of the isolation period imposed on ships during times of plague. City officials during the Renaissance, faced with recurring bouts of plague, developed our statistical approach to tracking outbreaks.

Image of a collection of the Bills of Mortality for London in the plague outbreak of 1665, published the same year by E. Cores in London and attributed to a John Graunt. For further information see: https://www.christies.com, from where the image was obtained.

From the 1450s in Milan and the 1530s in Venice, all deaths in these cities were systematically recorded to monitor outbreaks. In 17th-century England, these tallies were printed weekly as broadsheets, which counted plague
deaths by parish under the gloomy headline “Lord have mercy upon us.”

The distant past is not our best source of advice for pathogen containment. But it does offer clear lessons about human responses to outbreaks of infectious disease.

In the Renaissance, Italy was made up of many small territorial states, and travel between them was regularly curtailed because of outbreaks of plague. Travelers moving between regions during these times had to carry health passes issued by local governments testifying that they were traveling from places free of plague.

In the opening to *The Decameron*, the 14th-century poet and scholar Giovanni Boccaccio described reactions in his native Florence to an outbreak. He lamented that “the reverend authority of the laws, both human and divine, was all in a manner dissolved and fallen into decay.” We should take Boccaccio’s account as a warning. Despite Machiavelli’s call in 1513 for Italian unification in the final pages of *The Prince*, Italy only became a single nation in 1861; its deep regional divisions are still felt politically, linguistically, gastronomically and in the infrastructure of its transit systems.

In this time of coronavirus, Italy’s national identity—and that of Europe more broadly—is showing signs of strain. In addition to closing off certain towns with clusters of infections, regional governments are working to isolate themselves from the rest of the country. Most notably, the province of Basilicata has imposed a 14-day quarantine on all citizens entering from Piedmont, Lombardy, the Veneto, Emilia-Romagna and Liguria. These measures are about much more than health controls. They highlight regional identities and emphasize the tensions between local and national actions being taken to contain Italy’s outbreak.

Beyond the exacerbation of regionalism in Italian society, we should be on guard against the ways that outbreaks of disease have historically led to the persecutions of marginalized people. One of the best documented social outcomes of the plague in late-medieval Europe was the violence, often directed at Jews, who were accused of causing plague by poisoning wells.

Since the eruption of the coronavirus, we have witnessed widespread, global anti-Asian discrimination and numerous acts of violence against Asians. We should learn from the past, identify these violent attacks as the scapegoating they are, and condemn them swiftly and harshly.

In Italy, anti-migrant sentiment is also being conflated with anxieties about the new coronavirus. The Italian interior ministry announced that the 276 migrants who were rescued off the coast of Libya last week would be placed in mandatory quarantine in Pozzallo, Sicily, though they had no connection to people or locations affected by the coronavirus. Leaders of the far-right Lega Nord party are stoking the flames of fear and fury, protesting that even in the face of the coronavirus crisis, with cities and towns under lockdown, Italy has not closed its ports to migrants. This kind of slippage from disease to blaming a vulnerable social group, is an outcome that we have seen throughout history—as foreigners, prostitutes, Jews and the poor were blamed for outbreaks of plague.

The predictable turn to xenophobia, racism and persecution represents the breakdown of our society’s laws and morals in the face of fear and disease. It, too, is a symptom of disease, if not a biological one.

In the coming months the coronavirus may continue to spread. We will need to be on guard against contagion, but we will also need to be on guard against our own human instincts.

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Why Food Matters

by Emma Spary and Anya Zilberstein

[Editor’s note: The HSS Newsletter is pleased to offer our readers a sneak peak into the upcoming (2020) volume of Osiris, titled Food Matters. Issue editors Emma Spary, Reader in the History of Modern European Knowledge at the University of Cambridge and Anya Zilberstein, Associate Professor of History at Concordia University, Montreal, offer insights about the exciting synergies between our discipline and the burgeoning field of food studies, as well as an idea of what we can look forward to. Stay tuned for the announcement of the release of the issue.]

Our interest in the history of food in relation to the history of science stemmed from our previous inquiries into the history of natural history, which led us to various eighteenth-century scientific forays into perfecting foods, experimenting with novel foodstuffs, and dramatically expanding what counted as appropriate or desirable nourishment. This pervasive interest in subjecting food to scientific scrutiny prompted many questions. What counted as an “improvement” in a given foodstuff? Why did certain foods, like the breadfruit, become iconic objects of state investment to secure, cultivate, and perfect them? Who was positioned to prescribe foods for particular categories of body, in decades when industrialization was proceeding in parallel with expanding European consumption of imported, particularly colonial, foods? What even was a food in the late eighteenth century, and what epistemic debates did it provoke before the emergence of the modern sciences of nutrition? Secondary literature on food history had scarcely engaged with these issues, particularly in relation to problems of labor, power, skills, expertise, race and globalization that historians of science were addressing for other disciplinary domains. The essays in Food Matters constitute a set of explorations around such questions, for example Lu’s reflection on the caterpillar fungus as a boundary object; Pohl-Valero’s study of chicha in Bogotá; Chaplin’s exploration of the imperial-scientific transformation of “waters” into the chemical object “water”; and Guerrini’s investigation of the kitchen as a liminal space between eating and natural history.

While food has emerged as an autonomous area of historical inquiry, it still remains largely outside the history of science, medicine, and technology. Yet even many canonical scientific figures—Boyle, Lavoisier, and Ampère to name just three—experimented on food. We want to argue that the history of food and the sciences does not simply boil down to the history of dietetics or “nutrition science,” nor to the reinsertion of food within histories of “great men” or ideas. Rather, the historian of food enters a terrain that resists reduction to the positivist “scientific method.” The neglect of food by earlier generations of scholars is perhaps...
Why Food Matters, cont.

explained by the assumption that because food preparation and consumption occurs outside the laboratory, knowledge-claims over food were not commensurate with knowledge-claims about elementary particles or complex instruments. Eating and drinking have long been viewed as too individual, sensuous, or irrational to be observed and measured, or based on imponderables such as taste or custom. Yet as shoppers, cooks, and eaters ourselves, we all know that our dietary choices and habits are powerfully shaped and constrained not only by socioeconomic status and geography, but also by the range of forms of expertise and regulatory regimes, which become entangled in subjectivity. Even when we eat alone, we eat as a collective.

Food Matters is intended to signpost some future research directions. The essays progress through a series of conjunctures, moments, or spaces where the making of knowledge was linked to food and drink in non-trivial ways—from the links between cannibalism and the Eucharist in early modern Rome (Bouley) to the centrality of breakfast meetings at an iconic Silicon Valley diner in shaping technoscientific innovation today (Shapin). Food is thus an excellent interface for the historian of science seeking to explore how knowledge-claims travel among laboratory, field, factory, and table. From the perspective of the historian of science, food underscores that knowledge does not have to be “pure” in order to travel in this way, or to reshape our bodies and identities. In fact its very hybridity and mundanity is what gives food its peculiar epistemological purchase: an entrapment into our selves via the mouth.

Although we still know too little about how new knowledge-claims about food find an audience or secure authoritative status, it is clear (for example in the essays of Thoms, Treitel, and Fitzgerald) that certain transformations were facilitated by increasingly tight linkages between political power and scientific expertise after the eighteenth century. Attempts to regulate, reform, and “improve” public diet were integral to scientific programs undertaken within a governmental framework from the early modern period (McCormick, Treitel, Simmons). But industrial culture and attendant transformations in food production, processing, preservation and transportation offer equally profound moments of change and rupture in foodways. During the nineteenth century, the laboratory became an important site for producing new foods, even while it was also the site of emergence of entirely new kinds of food knowledge (Cobbold, Woods, Wurgaft). So the history of food offers a critical site for constructing arguments about how, when, and where forms of expertise and knowledge have interacted.

Yet who was expert about food? Our diets are structured by earlier regimes of knowledge, such as humoral medicine, in ways we no longer articulate or recognize. The invisibility of this process reflects the fact that multiple actors—home cooks and professional food preparers, family members and friends, as well as politicians, bureaucrats, and military officials—possess food expertise. Even as each generation takes on or rejects new foods and claims about them, these sources of expertise serve to perpetuate past practices, tacit skills, or prejudices of taste. In the process, it is rare for one body of food knowledge
to displace another completely, as Mukherji’s essay underscores.

Food is also, and perennially, an object of deep disquiet. Epistemological controversy and public concern have long characterized attempts by knowledge experts to intervene in the food supply. Scientific encounters with food offer salient case studies of the contestations attendant upon the transformations of everyday life produced by the alliance of centralized state power or corporate culture with scientific expertise. And it is no accident that we begin the volume with the troubling topic of entomophagy. As a food, insects have hovered on the boundary between edible and inedible, pure and polluted for Western eaters over many centuries, yet they are a dietary staple in other cultures. Food Matters demonstrates that it is only by examining the sources and expressions of our own stubborn prejudices about or willingness to self-experiment with food do the stakes of producing normative knowledge about what and how others should eat become clearer.
Editor’s Note: The HSS Newsletter is pleased to feature an interview with Megan Raby, author of American Tropics: The Caribbean Roots of Biodiversity Science, winner of the second annual Philip J. Pauly Prize, which was established in 2018 for the best first English-language book on the history of science in the Americas. For what the prize committee had to say about the book click here; read on to see what Megan has to share.

What is the main thing you would like readers to take away from your book?

Many scholars have explored the effects of the biodiversity paradigm on conservation priorities in recent decades. In the Global South, some have critiqued biodiversity conservation as a new form of “green” imperialism for the way it has served as a rationale for U.S. involvement in tropical countries. But the starting point for these discussions is usually 1985, when the term “biodiversity” was coined. There is actually a much deeper history at work. My book traces the relationship between field ecology, the expansion of U.S. hegemony in the circum-Caribbean during the 20th century, and the emergence of the modern concept of biodiversity.

Tropical field stations are central to this story. They enabled U.S. biologists to develop place-based research practices and a deep knowledge of local ecologies that was never possible through expeditions alone. At these stations, self-styled “tropical biologists” developed a range of practices for documenting and theorizing the diversity of life that we take for granted today. At the same time, however, these stations also tied tropical biologists to U.S. colonial and neocolonial interests. These institutions depended on ongoing, long-term access to land and patronage—from U.S. plantation owners in Cuba, for example, or authorities in the Panama Canal Zone. These ties shaped how tropical biologists framed the diversity of tropical life as a potential resource to be developed.

Ultimately, stations made “tropical nature” accessible, but only in certain ways and only to certain classes of people. Ironically, tropical biology has been a place-based science traditionally practiced by people from outside that place—one that until recently developed largely in isolation from local and national...
Scientific communities within the Caribbean and Latin America. The legacies of this history remain embedded in how and what we know about the global environment today.

What drew you to this project in the first place?

It was a bit of a winding road. This book grew out of my dissertation research, but it took me a long time to decide what that should be. (So, now I have a lot of patience for grad students at that stage right before writing the dissertation proposal!) I knew I wanted to work on the history of field science—that idea grew out of my original undergraduate training, not in ecology, but in paleontology and the earth sciences. While doing research for my master's degree at Montana State University, I had become interested in the intersection of place, practice, and ideas. Working in the U.S. West, I was also concerned with the relationship between U.S. imperial expansion and science. I wanted to find a new project when I moved to the University of Wisconsin to complete my PhD, but I was still interested in similar questions.

I flailed around for a while, but then a few random encounters got me interested in tropical field stations as a sites of scientific research. Reading Stuart McCook's *States of Nature*, I came across his discussion of Harvard's station at Soledad in Cuba, which expanded from being a plant experiment station to a station for a range of biological research. McCook's book focused on the agricultural side, but I wondered about what this other biological research had looked like—in terms of the styles of field practice, local collaborations, and research problems. It also made me realize how the literature on the history of biology in the U.S. really treated tropical research as marginal, even research by U.S. scientists in colonial territories like Puerto Rico or the Panama Canal Zone. Early on, I ran into a few very brief references to Barro Colorado Island, in Rob Kohler's work, for example, but it seemed to me that the political context of tropical stations like this must be more significant. If place really matters in field science, then this was not just going to be the story of MBL transplanted to Panama (which, by the way, is what one NSF reviewer wrote when rejecting funding for my dissertation!). When I realized that the stations at Soledad and Barro Colorado Island had been directed by the same person, the Harvard zoologist Thomas Barbour, during the 1920s–1940s, I knew I had something. Here was not just a scattering of institutions, but a network. And it was a network connected by a community of people who came to call themselves tropical biologists.

So, I did not come to this project from a question about the origins of the idea of biodiversity. That aspect emerged much later, after tracing this network of sites and the people who visited and worked at them. Maybe I came at it backwards! Anyway, I’m glad I did, because I think a more traditional intellectual history approach would have missed these connections.

What is at stake in placing the Caribbean at the center of global environmental science and popular ecological narratives?

This is an important question. The Caribbean, and the Global South more generally, is too often assumed to be a region where science is applied rather than where it emerged and continues to take place. Although the idea of biodiversity has many different roots, the main champions of biodiversity conservation in the 1980s, including E. O. Wilson, all had very direct institutional connections to tropical stations—particularly Soledad, Barro Colorado Island, and the Organization for Tropical Studies' stations in Costa Rica. This connection had been overlooked. Their alarm about biodiversity loss at that moment developed not only out of immediate environmental changes, but also as a response to political and institutional developments that had been in the works for the previous two decades. Including, importantly, local objections to U.S. imperialism that threatened the institutional stability of long-standing stations. Biodiversity is very flexible as a conservation ethic, as many other scholars have shown, but centering on the Caribbean makes it clear that form the start it was never neutral.
What are the main ideas about ecological science and tropical biology that emerge from the work of your historical actors in the Caribbean?

Much like field stations in the temperate United States and Europe, tropical stations played a key role both in the rise of experimental biology and in the development of place-based ecological methods. But, in part because the researchers who visited these stations were, overwhelmingly, foreigners who traveled from the comparatively species-poor temperate zones, their experiences working at tropical stations led them to focus especially on investigations into the ecological and evolutionary causes of the great numbers and variety of species they encountered in tropical environments.

Working in situ at field stations allowed researchers from the United States to intensively study living tropical plants and animals in their natural environments for the first time during the early 20th century. Stations allowed researchers to combine lab and field practices. But in addition, focused, in situ research also enabled researchers to develop new, intensive practices for monitoring and census-taking in nature. These practices, in turn, revealed longer-term changes, such as population fluxes, which were significant because tropical forests were initially assumed to be ancient, stable, and unchanging. Place-based research also enabled very fine-scale taxonomic work; it seemed that the closer biologists looked, the more species they found—such as William Beebe’s census of hundreds of species in just four square feet of rainforest floor.

After World War II, biologists including Robert MacArthur, H. T. Odum, and Theodosius Dobzhansky began to use species diversity as a quantitative index, comparing it with other variables in order to try to explain global patterns. These three men are famous figures in the history of biology—much more so than most of the people I wrote about. Although their ideas are not usually placed in the context of their fieldwork, they worked at long-standing U.S. tropical field stations, as well as newer stations in Costa Rica, Puerto Rico, and Brazil. This is the context out of which “species diversity”—the most direct intellectual predecessor to biodiversity—emerged as a central theoretical concern for biologists, and not just tropical biologists. Tropical studies fueled a theoretical turn in the 1960s and 1970s toward explorations of the ecological and evolutionary mechanisms driving global patterns of species diversity.

Who do you see as your main audience, within the HSS community and more broadly as well?

Within the HSS community, I see this book, as first, contributing to the history of the field sciences and place-based environmental research—a literature that began just a few decades ago in reaction to our previous focus on science in laboratory settings. I’m excited about how the field of “science in the field” is really exploding, and how it brings us into conversation with work in environmental history. My other intention was also to connect the vast literature on the history of science and empire to more recent scholarship on U.S. Empire.

This book also connects with the rapidly growing field of Latin American and Caribbean environmental history, specifically by tracing the intellectual and cultural history of the relationship between environmental ideas about tropicality and the modern discourse of biodiversity.

Finally, I’ve been enormously gratified to find that ecologists and conservationists are interested in this book. I think it can give them some deeper historical context to think about their field sites and practices. This includes the colonial legacies that remain today. Where ecologists do their fieldwork, and what countries these researchers are from—there are geographic patterns and biases that we can only really understand by looking at these questions more historically. And this should matter to anyone who cares about conservation and equity.
**What was the most enjoyable part of working on this project?**

Despite the environmental angle, most of my research time was indoors. But when I'm working through archival material, there is a sense of tracing out connections and events, and personalities—I'm driven by curiosity and I really find it hard to stop when it is closing time! Then again, I was also lucky that my research also took me to places that were very nice outside of the reading room. It is hard to beat seeing toucans, howler monkeys, leaf cutter ants, and blue morpho butterflies in Panama! Walking in the Arnold Arboretum or the Fairchild Tropical Garden after a day of research was certainly not bad either!

**What were some of the biggest challenges or hurdles that you faced while doing research for this book?**

The biggest hurdles were probably organizational. Focusing on research stations was fantastic not only because of the questions they raise about the nature of scientific practice and place, but also because, as institutions, they can produce lots and lots of archival records. But that's a double-edged sword! When I was at the Smithsonian Institution Archives, I had the luxury of really immersing myself in these records, but it is also way too easy to get drowned in details. I'm grateful for conversations with my mentor there, Pam Henson, who reminded me to start writing and organizing my thoughts early while working through the material.

But I also just want to acknowledge a challenge that wasn't necessarily specific to this book, but to writing any book: writing is hard. I'm a pretty slow writer, and writing under the time pressure of the tenure track wasn't easy. But slow and steady wins the race, I guess. I couldn't have gotten through it without good mentorship, writing groups, and a supportive partner.

The Pauly Prize is awarded for a “first book,” which begs the question, what do you have in mind for your next book?

I'm currently researching the biologist and environmental writer Marston Bates. I'm considering his life and fieldwork as a way to trace the changing role of science and environment in U.S. relations with the Global South during the 20th century.

**What advice would you offer to junior scholars starting projects in US-Caribbean/Latin American histories of science?**

First, please do work in this area! There are so many important stories to tell! I feel like I just scratched the surface. And there were so many things I had to leave out to keep a tight narrative. The most obvious thing is that I followed U.S. biologists and ecologists who traveled to work in the region. While one of my main original goals was to examine collaboration and exchange between U.S. and Latin American scientists, the historical reality on the ground at these stations ended up making such interactions unfortunately rare. Although there were some important exceptions, these stations were, until recently, quite exclusionary. Focusing on other communities and other kinds of sites of knowledge production would illuminate different kinds of relationships and interactions.

Second, read work by historians of this region, and read well beyond the history of science. Historians of the Caribbean and Latin America have been dealing with questions about power, as well as about flows and migrations of people, ideas, and commodities for a very long time. This is work that can inform how historians of science think about how knowledge travels and how science is embedded in power structures at various scales. Work on the Caribbean and Latin America demands attention to the transnational and to asymmetries of power. I’m looking forward to the continued growth of this field and its increasing visibility within the history of science community.
Bill Clark or the Ironic Analyst of *homo academicus*

*by Alix Cooper and Wolf Feuerhahn*

Editor’s note: In this tribute to the late Bill Clark (1953-2017), Alix Cooper (Stony Brook University, New York) and Wolf Feuerhahn (CNRS, Centre Alexandre Koyré, Paris) reflect on the scholarship and career of their late mentor. As a service to HSS members and indeed, historians of science everywhere, they have also provided access to a full bibliography—supplemented with abstracts where available—of his works.

Humboldtallee! This street name—evoking the famous von Humboldt brothers, Alexander and Wilhelm—seemed to us to be just the perfect address!

During the academic year 1994-95, the two of us had the incredible luck to be hosted at number 11, Humboldtallee under the roof of an institute for the history of science in Göttingen, Germany. The host was not an old and strict German mandarin, but a young, humorous and brilliant Californian researcher: William—better known as Bill—Clark. Despite his youth, he knew, perhaps more than anybody else, about the historical figure of the German “Prof. Dr.” He was able to bring this figure to life, to sketch out all the rituals, habits, and practices of this odd type of human being: not in order to caricature it, but to understand it better and, of course, to understand himself and help us understand ourselves better.

As Bill’s work showed so clearly, given how the German academic system became a model on a global scale during the 19th century, looking at its practices is crucial in understanding how it has continued to structure our own manners, customs, and unconscious behaviors or taboos. One of the lessons he taught was, therefore, that it is not actually possible for one to be a “serious” historian of science. That is, one cannot reproduce the academic manners one analyzes without any distance or irony. A seminar on the history of the seminar has to be of a different type; the same for a PhD, an article, a book on the topic…. A historian of science has to be able to look ironically at his or her own productions.

Bill didn’t overtly theorize on this methodological and ethical question, preferring to suggest it more obliquely. He nevertheless mentioned in a sentence of his book *Academic Charisma and the Origins of the Research University* (2006), that, “irony is for me, moreover, an essential academic attitude about academia, that is, the essence of reflexivity.” And at the end, the question remains: Was it not in order to promote another kind of academic sociability that he scrutinized the history of the academy in the way he did? Bill would probably have smiled at such a “serious” conclusion. But indeed, the preface of *Little Tools of Knowledge* suggests it:

One fine evening in the autumn of 1992, finding that they had not only made too much pasta and dessert, but also had more than enough wine, Becker and Sabean called up Clark. Though usually resisting invitations entailing he be somewhere within fifteen minutes, Clark found this offer he could not refuse, as Sabean was departing Göttingen the next day for Ithaca. Unused as they all were to wine, much of the evening quickly became a blur. Two things however still stand out. First was Becker’s dessert, which Clark and Sabean, with heavy hearts, had to admit was the only truly inedible dessert they had ever encountered (and, worse, for a good
time thereafter they had other suspicions). Second, were the plans they all laid that eventually led to this volume.

This wasn’t just a rhetorical flourish; indeed, with his co-editor, Peter Becker, he invited an anthropologist (Heidrun Friese) to the conference to study it as a field and published the latter’s article at the end of the book, making the volume doubly reflexive.

In 2006, he added in his magnum opus Academic Charisma that:

“This book contains criticism of the sort of academic life and labor that has descended upon us from the German university system. Part of this critique may be motivated by a vague nostalgia for a golden age of college life. Such nostalgia can perhaps lead one to the antipodes of the Germanic university as potential resources to help remedy the ills of contemporary academia. But that is another matter and exceeds the rationale of this book, albeit desiring to offer a history of the present, but still a history, and not a manual of action. Nostalgia must thus be leavened with irony.

As a result of enormous archival labors, to help us be able to laugh together about our academic habits: this is maybe one of the key contributions of William Clark’s work, echoing that of David Lodge.

Bill excelled in the seminar, that form of teaching whose origins he probed in one of his earliest articles, “On the Dialectical Origins of the Research Seminar.” Grinning widely, he would hold up his mug of coffee and ask us and the assembled students to provide an Aristotelian analysis of it, working out its material, formal, efficient & final causes, so that we could prove we understood a text we had just read. Or he might request that we explicate the reasoning of an eighteenth-century German author who posited that there might be varying numbers of lawyers on different planets in the solar system, based on the degree of heat and agitation of particles on that planet. The experience was spellbinding. Both of these examples come from a seminar he taught on “Cosmology and Anthropology in the German Enlightenment.” With his colleague Michael Hagner from the Institute for the History of Medicine, he also co-taught a seminar on “Mad Scientists,” where the texts read ran the gamut from the sixteenth-century Faust-Buch to the twentieth-century shamanic intellectual outsider Carlos Castaneda. Was the mad scientist an outlier from the academic norm, he asked, or rather the personification of it? Seminar meetings were intense. Outside the seminar room, he gave generous and earnest counsel on the rites and rituals of academic life, for example, on the relationship between orality and literacy in the conference talk. The entire time, he was simultaneously within and without the university, taking part in its rites and rituals (like that of the seminar) while also serving as an ironic guide to them.

In some ways, the objects of his study seemed to be very traditional and canonized ones: the history of the German research university, of the research seminar, of the doctor of philosophy, of “the death of metaphysics.” Working on the history of the German university and of academics and that during the Enlightenment? What a traditional topic! How could he manage not to make it boring? The answer is that Bill had read a lot: not only his primary sources—the famous as well as the much less well known, the philosophical as well as the ministerial—but also an enormous number of volumes on the social sciences: Friedrich Nietzsche, Max Weber, Norbert Elias, Michel Foucault, Pierre Bourdieu, Bruno Latour, Clifford Geertz, and Gérard Genette, to name but a few. But here again, he didn’t take them as gurus. He was not Weberian, Foucauldian, or Bourdieuxian; he read them all, but he also read literature and watched TV series. As a result, he had a very singular and self-educated gaze. So the main thesis in Academic Charisma was in no way a Weberian one. In contrast to Robert Merton, who tried to decipher the Protestant ethic of seventeenth-century English science, Bill showed that bureaucratization of science didn’t produce the end of charisma in academia but on the contrary, fixed charisma as a norm. The “modern” type of homo academicus was no mere bureaucratic
Bill Clark, cont.

officer, but rather, a charismatic and original figure. No orthodox Weberian would have accepted such an iconoclastic thesis.

Thanks to what we call with caution his deep learning or “culture”—here again he would probably have laughed at such a serious word, which itself affords an historical undertaking in order to deflate it—he was able to read differently not only the Gesammelte Werke of Kant or Fichte, but also the ministerial registers like Vorlesungsverzeichnisse or course catalogs (which he called “little tools of knowledge”) as epistemic genres.

Bill would almost certainly have read our text with an ironic eye. Is our text a vain undertaking? In its failure to grant him tenure, the academic world revealed itself to be unable to see the importance of having, within its walls, such a clever and distant man, able to be simultaneously serious and funny. But Bill’s gaze should be known, and his writings should be read and re-read. Not like Tablets of the Law, but rather as propositions and therefore to be discussed, debated, and engaged with. We very much hope that even though he never found a tenured position within academia, his writings will continue to spark the recognition they deserve.

A complete bibliography of Clark’s publications, some annotated by Drs. Cooper and Feuerhahn, is available here on the HSS website.

Seeking HSS Ombudsperson Successor

As previously announced, HSS seeks a successor to Sally Gregory Kohlstedt, the first Ombudsperson, whose term will expire in June 2020.

The Ombudsperson is a volunteer position for an HSS member whose main task will be to receive inquiries and complaints relating to HSS’s Respectful Behavior Policy. Speaking with the ombudsperson about an issue in no way obligates any further action (as is the case at some university campuses) and the intention is to provide information. Thus, the ombudsperson will also serve as a resource to meeting attendees regarding respectful behavior and general questions regarding the Society’s support of, and advocacy for, diverse constituencies of its membership, especially students and early careerists. The ombudsperson’s role is to

(i) review with any interested member of HSS or meeting attendee the Respectful Behavior Policy, to which every meeting registrant agrees during the registration process;
(ii) listen to the concerns brought forward by a person, and review with them the formal complaint process;
(iii) carry out a formal complaint investigation if the complainant so desires, which includes interviewing both the complainant and the accused party or parties; and
(iv) present to the Respectful Behavior Review Committee the findings. The ombudsperson shall prepare an annual report for the HSS Council, detailing activity (or lack thereof) over the previous year, being careful to maintain anonymity of all persons. The ombudsperson is not intended to substitute for a complainant either making use of their affiliated institution’s mechanisms for addressing complaints of discrimination or for consulting expert legal advice. Moreover, it is not the role of the HSS ombudsperson to assist individuals through their institution’s internal mechanism for pursuing a complaint of discrimination.

The ombudsperson contributes to HSS efforts in informing/educating HSS’s membership about the HSS’s Respectful Behavior Policy. The ombudsperson consults, as needed, with the Executive Director, Council, and the Respectful Behavior Review Committee, and also serves ex-officio on the Diversity and Inclusion Committee. The ombudsperson should, if necessary, be able to consult with a complainant rapidly, within a 24-hour period, and therefore is expected to attend the annual conference. The duties of the ombudsperson concerning discrimination and sexual harassment, as well as contact information (a secure email address) will appear on the HSS website. The ombudsperson will be appointed by the HSS Council for a 3 year term (July 2020 to June 2023, or extended by at least 60 days after an HSS annual meeting), on the recommendation of the Executive Committee, which shall solicit input from the Respectful Behavior Review Committee, Graduate and Early Career Caucus, Diversity and Inclusion Committee, and Women’s Caucus.

If you are interested in serving as ombudsperson, please contact HSS Executive Director, Jay Malone (jay@hssonline.org) to express interest. You may also contact the outgoing ombudsperson Dr. Kohlstedt, who has very kindly agreed to share information.
Editor's note: This contribution about the creative use of our very own Current Bibliography (CB), which is published regularly in Isis, actually serves a dual purpose. Not only does it fit nicely into this column about innovations in education—as you will see, Stephen Weldon, HSS Bibliographer and associate professor of history of science at the University of Oklahoma, has provided several innovative ways to integrate this valuable resource into the classroom—it also kicks off a brand new column about Isis CB and related matters.

Teaching with the Isis Bibliography
by Stephen P. Weldon

I am the Society's Bibliographer, but I also teach undergraduate and graduate classes in history of science. I have integrated the CB into my classroom in several ways and would like to encourage more of you to do the same. In a survey that I co-developed last year, we asked HSS members to tell us how useful they found the Isis CB in both its print and online forms. The questions about pedagogical use were divided into three distinct activities: course preparation, encouraging student use, and actual use by students.

The survey showed that a lot of you who do use the Bibliography do not do so for teaching. Only a minority of respondents found the CB “very useful” or “essential” in pedagogy. Moreover, I discovered that even the teachers who do use it seldom employ it the way I do. Most commonly, people turn to it for course prep (see chart 1), which in most cases probably means finding sources to help prepare a lecture or locating items for the syllabus.

Less common is using the CB as an in-class resource to train students (see charts 2 & 3), yet it is in this latter use where I think the CB can shine. Say, for instance, your students are working on a research paper with history of science content. There are great advantages to telling them to go there first. Let me be even more radical: Tell your students to bookmark the “IsisCB Explore” (and any other go-to sources you have!) on their cell phone. I do it myself, and more than once it has been a lifesaver in answering a question at a reception or helping me connect the dots when I’m listening to a paper at a conference.

Two resources students should know about are IsisCB Explore, which is free, and the HSTM database hosted by EBSCO—if your library has a subscription. “Explore” is the easiest to
access and work with, so I take students there first. There is no required login and it has powerful search features that make it fast and easy to use. Moreover, it is updated daily, so you are getting the latest material we have. If your library has a subscription to EBSCO’s HSTM database, students with history of medicine and history of technology topics may find that to be a more comprehensive starting point, although even “Explore” can get you a lot of those same citations. Also EBSCO is usually tied in to your academic library’s other databases, making it part of the bigger information ecosystem. If your library does not have a subscription, remember that HSS members receive complimentary access to the HSTM database.

But what lessons can you teach?

First, you can introduce students to the discipline. Explain how important it is to find reliable, peer-reviewed material that is historical. I don’t need to tell most of you that far too few students—even advanced undergraduates and, dare I say, some graduate students—can navigate their way to reliable historical sources online. And when they lose their way, Google becomes their default search and it’s usually downhill from there.

Second, you can explain the difference between full-content indexes like JSTOR and Google Scholar and metadata-only indexes like the CB, which only has titles and abstracts. It is tempting to think that full-text searches will always be better because they pick up everything that is discussed in articles and books, whereas resources like the CB cannot. But that’s not what I find. Although these full-text searches have their place in the research process, I find that many students who start with these databases often get disappointing results. This is primarily because they can’t find the historical work that is so often buried under scientific papers and non-historical articles.

JSTOR is a case in point. It is a go-to source for many students, but it seldom gives them more than a list of works with historical content. You can look in JSTOR or Google Scholar for Isaac Newton or influenza of 1918, and you are presented with hundreds of hits, but many are not suitable for a historical research paper. Start in the IsisCB space, however, and nearly everything you find is potentially relevant. Not only that, the CB shows you what’s hot in the field by featuring the most recent items. At the very least, if your students start here, your work as a teacher is drastically reduced when you look at their bibliography; there’s less of a chance you’ll have to reorient them to an entirely different set of literature.

Third, you can use the CB to encourage another good practice: organizing around evidence. Citations are the historians’ bricks and mortar, and there are several good tools out there that help students work with them. Bibliographic managers—Zotero and Endnote are the two most common—do a lot of work. With the touch of a button, you can grab citations from the IsisCB, HSTM, or pretty much any other reference database. Not only do these apps format citations, which is a great time-saver, they also build up a personal library on your computer and help you organize it. Of course, students using these tools need to be wary. The data they grab is not always in good form, so they must learn to be active users. They must, for example, proofread the data that is collected.

The IsisCB remains limited in some ways—it only has the metadata content, non-English scholarship is underrepresented (though I am in the process of changing that), and the CB doesn’t have the huge swaths of material that the big databases get. So, I am the last person to say that you should do all your research with the CB. And students need to learn this as well. Tracing footnotes and using other databases helps them become independent researchers. Good research involves a lot of footwork. My point, however, is that the CB can get students started on the right foot because it puts the leading scholarship of the history of science community at your fingertips.

This is only the beginning of what you can do with the CB. In the next issue of the Newsletter, I will get down into the weeds and explain how to take advantage of its many useful features.
Ellen Abrams (Cornell University) has won the British Society for the History of Mathematics Taylor and Francis Early Career Prize. The prize is awarded every two years to the author of an essay on any aspect of the history of mathematics. The winning essay, “An Inalienable Prerogative of a Liberated Spirit: Postulating American Mathematics,” was commended for “its combination of strong research and accessible style, noting in particular the author’s ability to contextualize mathematics without loss of readability.”

Somaditya Banerjee (Austin Peay State University) will publish The Making of Modern Physics in Colonial India (Routledge, 2020).

Jean De Groot (Catholic University of America) will spend the academic year, 2020–2021 as a Fellow at the Dumbarton Oaks Libraries and Collections in Washington DC writing a book on the history of mechanics in antiquity.

David DeVorkin, Steven J. Dick, Stephen McCluskey, Sara Schechner, Woodruff, Sullivan, and Virginia Trimble, all members of the History of Science Society, were recently appointed as Fellows of the American Astronomical Society.

The American Astronomical Society (AAS), the major organization of professional astronomers in North America, has established a new accolade, Fellow of the AAS, to honor members for extraordinary achievement and service. AAS Fellows will be recognized for original research and publication, innovative contributions to astronomical techniques or instrumentation, significant contributions to education and public outreach, and noteworthy service to astronomy and to the Society itself.

An initial group of more than 200 Legacy Fellows has been designated by the AAS Board of Trustees. These include past recipients of certain awards from the AAS or its topical Divisions, distinguished AAS elected leaders and volunteer committee members, and previously unrecognized individuals with long histories of outstanding research, teaching, mentoring, and service.

Edward Gosselin (Emeritus Professor, California State University, Long Beach) completed papers on “‘You Barbarous Dog’: Bruno’s Opening Poem to ‘The Ash Wednesday Supper’ as a Guide to The Meaning of Bruno’s Italian Dialogues” and “Starry Messengers: Chapters and ‘Excursi’ on Exact Mathematical Astronomy from 350 BCE to 1905 CE, with a Look into the State of Earth under Peril and the Future of the Human Condition.”

Judy Grabiner (Professor Emerita, Pitzer College) and her work were celebrated in an article: Dumbaugh, Della and Adrian Rice. “A Template for Success: Celebrating the Work of Judith Grabiner.” Notices of the American Mathematical Society 67, no. 3 (March 2020): 336–44.
Margaret Jacob (University of California, Los Angeles) co-edited *Clandestine Philosophy: New Studies on Subversive Manuscripts* (University of Toronto Press).

Gladys Kostyrka (Independent scholar, Paris) and Neeraja Sankaran (editor, *HSS Newsletter*), published “From Obstacle to Lynchpin: The Evolution of the Role of Bacteriophage Lysogeny in Defining and Understanding Viruses,” in *Notes and Records of The Royal Society*. The paper is currently available online and is slated to appear in December as part of a special issue on bacteriophages, which grew out of a session held at the 2017 HSS meeting in Toronto.


Pamela O. Long’s *Engineering the Eternal City: Infrastructure, Topography, and the Culture of Knowledge in Late Sixteenth-Century Rome* (University of Chicago Press, 2018) has been awarded the Sidney M. Edelstein Prize from the Society for the History of Technology; the Bridge Book Award (category American non-fiction) by the Casa della Letteratura (Rome) and the Center for Fiction (New York); and the Howard R. Marraro Prize awarded by the American Catholic Historical Association.


Joris Mercelis (Johns Hopkins University, Department of History of Science and Technology) published *Beyond Bakelite: Leo Baekeland and the Business of Science and Invention* (Cambridge, MA: MIT Press, 2020).

Tiffany Nichols (Harvard University) was awarded a National Science Foundation NSF Doctoral Dissertation Research Improvement Grant for her research on the history of the Laser Interferometer Gravitational-Wave Observatory (LIGO) and the epistemology of gravitational wave signals. Tiffany was also awarded a 2020 American Physical Society (APS) Five Sigma Physicist Award for her advocacy work in support of the passage of the Combating Sexual Harassment in Science Act of 2019 in the U.S. House of Representatives.


Frank W. Stahnisch (University of Calgary) received the 2020 Dimitrije Pivnicki Award in Neuro and Psychiatric History from McGill University, Montreal, PQ, Canada.

He also published an encompassing monograph, titled A New Field in Mind: A History of Interdisciplinarity in the Early Brain Sciences (McGill-Queen’s University Press, 2020), which examines the neglected organizational and research origins of the first interdisciplinary centers for the brain sciences.

Simon Werrett (University College London) has won the Paul Bunge Prize.

The following in an excerpt from the official Press Release:

Simon Werrett convinced the jury with his work Thrifty Science: Making the Most of Materials in the History of Experiment, which calls for a rethink of the way experimental science deals with materials and equipment. The author looks at the history of scientific instruments and apparatus in a new way and describes the material cycles of the early modern period (“thrifty science” — “economical and economical natural research”). Back then, science reused materials, repaired or rebuilt equipment, and used instruments and materials for purposes other than intended. Werrett presents the contrasting cycle of instruments and materials of industrial equipment today—devices are supplied ready for use and instruments that are no longer required are discarded.

In Memoriam

Marilyn Gaull
We regret to inform readers that Marilyn Gaull, who had been a research professor at the Editorial Institute at Boston University, died on August 14, 2019 at the age of 81. A personal remembrance by her colleague, Archie Burnett, co-director of the Institute, may be found via this at bu.edu.

Aaron S. Moore, 1972-2019
by John DiMoia and Hiromi Mizuno

Aaron S. Moore was Associate Professor at Arizona State University, in the history of technology in Modern Japan, and more than that, to many of us, a trusted friend and exciting intellectual partner. In the more formal venue of an éloge in the journal Isis, we have detailed his scholarship and academic profile. Here, we’d like to share a more personal side of Aaron, with stories as the co-editors of Engineering Asia (Bloomsbury 2018), his last publication. Working closely with him over its production from 2009 to 2018 gave us many memories to cherish and share.

The collaborative book project took Aaron and us to many places: his home institution in Arizona, Seoul National University in Korea, the National University of Singapore, and the Max Planck Institute for the History of Science in Berlin, Germany to name just a few. We also met regularly at various academic conferences including the Association of Asian Studies, History of Science Society, and Society for the History of Technology. Indeed it is extremely difficult for us to imagine AAS and HSS without Aaron, having met at their annual conferences almost every single time for the past nine years.

Our editorial meetings for Engineering Asia took many shapes at many places around the globe. For instance, in February 2015, we met in Seoul where Aaron was spending his sabbatical year. What was intended as a short briefing over breakfast at Seoul National University’s Hoam Faculty House restaurant, with two contributors Manyong Moon and Tae-ho Kim, turned out to be a 10-hour work meeting. Under the restaurant staff’s rather weary gaze, the breakfast turned into lunch, then progressed to a coffee order in the afternoon, and finally to dinner. Aaron had a quiet but contagious excitement for ideas, a very patient approach to gathering everyone’s ideas, and the energy to keep going, in addition to many interesting and funny stories to share. This restaurant episode was just one example of how work time with Aaron was simultaneously a joyful, stimulating, and food-rich experience. In addition to being a real foodie—attested by photos he posted from all over the world—he himself was an excellent cook; we can enthusiastically testify to his culinary talent.

More than anyone we know, Aaron was a close follower of the English Premier League (EPL)—football or soccer for those among us less in the know—and a devoted fan of Arsenal, almost always looking for a game to attend or watch, whether in Europe, Asia, or North America. During the editorial meetings in summer 2014 in Singapore, we ended up watching a good deal of the World Cup, including the Germany-Argentina final, which took place in the middle of the night (or morning, if you prefer) given the time difference. We stayed up all night in my (John’s) apartment, watching as the game went until nearly dawn. In 2017, as we held the final editorial meetings for the volume in Arizona over two-and-a-half days, Aaron and John took a
short break to watch the second half of the Super Bowl—and we have Hiromi and his wife, Nila, to thank for permitting this indulgence—in which the Patriots came back to defeat Atlanta. Aaron was not pleased. In sport as in his scholarship, we remember, he was rarely a fan of the dominant power, the hegemon, and sought instead, to root for the alternative, the new, the unexpected reframing.

A graduate of University of Virginia before undertaking graduate studies in history at Cornell, Aaron followed the UVA basketball team closely and to this day, remains the only academic in our knowledge, to possess an abiding interest in the post-up abilities of Olden Polynice (center for the 1984 UVA NCAA Final Four team), not to mention Ralph Sampson. Aaron was overjoyed when UVA won the NCAA tournament in 2019 and immediately bought a commemorative t-shirt, which he then wore to a talk he gave at Virginia Tech. It is unclear how the Virginia Tech community responded to this, but they probably recognized Aaron's genuine joy in a UVA victory after many years of waiting.

Aaron was a tireless traveler and researcher. It was during these meetings as well as at post-panel dinners at conferences that we would hear updates on his research for his second book, *Damming Asia: The Cold War and Japanese Post-Colonial Overseas Development*. He often talked about “groundedness,” the favorite word of wartime Japanese engineers and scientists to differentiate their approach from what they saw as Western engineers’ and scientists’ bookish and elitist approach. Aaron did not share their polemics but was certainly one of most “grounded” historians we know. Not only to archives in various countries, he also traveled to many of the dam and construction sites he was researching, as evidenced by the numerous photographs of him wearing a hard hat at these locations. In South Korea, he frequently visited the Seoul water company’s library, where the holdings spanning from the colonial to post-independence periods were displayed in open shelf style.

When visiting overseas archives and sites, he made every attempt to understand the local scholarship and perspectives (and of course, food). Sometimes, such efforts resulted in funny consequences. While in Seoul 2014, Aaron visited the Park Chung Hee Museum at the advice of SNU Professor Park Tae-gyun. When the curators informed him that the library was, unfortunately, not open, he took advantage of the opportunity to tour the museum. The museum was filled with wonderful images of President Park and South Korea’s growth through the 1960s and 1970s, a genre Aaron named “Pictures of Park Chung Hee Pointing at Things”—buildings, construction sites, mountains, rivers. At the end of the tour, he was asked to sign the guestbook, a standard gesture, and was surprised when asked to pose for a picture. Several months later, this picture appeared in the Park Chung Hee foundation’s newsletter, with a caption emphasizing the significance of foreign scholars coming to pay homage to Park’s legacy. Aaron had to hear many a joke about this incident from his colleagues, as his scholarly aims were so clearly distinct from those of the museum.

At the memorial event held in Aaron's honor at ASU in November 2019, Hiromi talked about how Aaron was like her intellectual twin brother, whose research interest overlapped closely, who shared a vision and ambitions for the future directions of the field, and who even developed a Global WWII course at the same time without knowing about the other’s course. Furthermore, one would not easily find someone who could immediately email back at 5AM sharing the same excitement about an obscure engineer magazine. Another speaker at the memorial event, John Kim—a personal friend of Aaron from his graduate-school days and a professor of German literature and philosophy—then piped up to say that he was a triplet sibling as he felt the same way. But it was not just us. What is amazing about Aaron is that so many people indeed felt this way about him. We discovered that this feeling of Aaron being the special intellectual and/or personal ally was shared by very many people who knew him well. There is something
deeply comforting about this realization. Those of us who worked with Aaron, we think, understand.

With his increasing number of publications, Aaron attracted great attention from younger scholars, and was frequently asked to serve on conference panels, to read dissertations and manuscripts, and to act as a referee for various journals. The list of individuals he worked with in these tasks is lengthy, and included graduate students from Johns Hopkins University, Seoul National University, Stanford University, Virginia Tech University, and of course, his home institution. Given his home in Arizona, he interacted frequently with colleagues in California at UC Irvine, UCLA, and Stanford, and when traveling internationally, he held extensive personal networks in Japan (Kobe, Tokyo), Singapore, South Korea (Seoul, Jeonju), and Germany (Tübingen). In 2014, along with Lisa Onaga of the Max Planck Institute in Berlin, he organized a workshop at ASU, which became the basis for a special issue in Technology and Culture.

What is more remarkable is that Aaron had many friendship circles like this beyond the academic world, for example around his interest in human rights activism in Sri Lanka, as well as around music, sports, to name just a couple of others. Aaron cherished and nurtured rich human connection more than anyone we know. He had a truly global network of friends and families, reflecting his cosmopolitan upbringing, his culturally rich family, and his companionship with Nila, with whom he traveled all over the world.

All these connections nourished Aaron’s scholarship and methodology. Comfortable in at least four languages at a high degree of proficiency—English, Japanese, Korean, and German—Aaron brought this diverse background to his work, visiting and giving presentations at numerous international sites, and doing the administrative work necessary to get Korean Studies on a stronger footing at his home institution, Arizona State. For work in Japan, moreover, he reached out to government agencies, and was invited to present at the Japan International Cooperation Agency, which he criticized in his work, as the representatives there hoped to learn from his historical work.

Aaron was a true friend, intellectual collaborator, and above all, someone who lived fully in all things, whether books, food, sports, or politics. A scholar who left his mark on all those whom he encountered, Aaron’s work is well-known across a range of fields. But he will also be remembered as a beautiful person whose life was so full and rich. That sense of him always being there for you meant the whole world to many of us. We will deeply miss receiving reading lists at random moments, exchanging e-mail about colonial water records or obscure engineers’ career at wee hours, sharing food, music, ideas, and laughter, and seeing his shy and warm smile.

John DiMoia is Associate Professor of Korean History at Seoul National University and Hiromi Mizuno is Associate Professor of Japanese History at University of Minnesota.
HSS@Work: A Personal Appeal from Jay

Shortly after receiving my PhD, I worked as a freelancer, unable to land the tenure-track job that had been my goal during my graduate life. Having a supportive spouse helped tremendously but with our second child on her way, we knew that I needed work that promised more stability. I was on the cusp of dropping out of the history of science altogether, when my advisor encouraged me to apply for the new position of HSS Executive Director. Somehow, I landed that job, and I have had the privilege of working with some of the most talented people on the planet these past years. I was lucky, but I still remember the despair those many years ago, that after having given myself to the history of science, that there would be nothing to show for it (which, on the other hand, might have offered some relief in that I would no longer have to explain to my mother what a historian of science actually does).

I wish that there had been a group to which I could have turned during those times and so was delighted when in 2013 Tania Munz and Carin Berkowitz helped us launch HSS@Work, our caucus devoted to those who had fully embraced the history of science but who then faced the prospect of doing something outside of academia. After a successful initial run, HSS@Work is now at a crossroads. We have been unable to find individuals who are willing to lead the caucus and organize events at the annual meeting. If this disinterest continues, we will have to close the caucus, and that saddens me. So, if you believe that we still need HSS@Work, please volunteer your time to help it succeed. I can guarantee you that it will pay dividends to the HSS and to the profession. Please contact me at jay@hssonline.org.
EASTS: An Intellectual Bridge from the History of Science to Science Studies and East Asia

Science and technology have played active roles in the making of modern East Asia and its transformations. Founded in 2007 with the support of Taiwan’s National Science Council (now the Ministry of Science and Technology), *East Asian Science, Technology and Society: An International Journal* (EASTS), the first English-language journal dedicated to this exciting field, has attracted Asia specialists and experts from many disciplines.

Compared to the intellectual orientation of its Western counterpart, STS in East Asia has deep intellectual roots on the history of science, a point well-recognized in Volume 13 of *Osiris*, titled “Beyond Joseph Needham: Science, Technology, and Medicine in East and Southeast Asia.” Historically, whereas STS in Japan began with socialistic criticisms of Cold War science and now directs attention to alternative forms of social organization grounded in ideological pluralism, STS in China embraced traditions of natural dialectics and is backed up by state ideology. Taiwan and Korea take yet different disciplinary orientations. Influenced by Joseph Needham’s account of science and civilization, and developing their research agendas from the history of Chinese science, scholars in both these countries have structured their criticism of science as a necessary step toward democratization.

As a collective effort to make East Asia visible to mainstream scholarship, EASTS has integrated all the traditions it inherited. Founding editor-in-chief Daiwie Fu specializes in the history of Chinese science, and the current editor-in-chief Wen-Hua Kuo works on the history of public health and Asian medicine. In just its first decade, EASTS has invited such renowned historians of science as Warwick Anderson, Francesca Bray, Pingyi Chu, Gregory Clancey, Fa-ti Fan, Sungook Hong, Sean Lei, and Togo Tsukahara to serve as associate editors. Through its editorial board, EASTS has also succeeded in building a global intellectual network that incorporates leading authorities both within and outside of East Asia and encourages conversations between the history of science and other disciplines, as well as the history of science in East Asia and beyond. A full list of the current editorial board can be found on the journal’s webpage.

A quarterly publication, the majority of whose issues are thematic, EASTS continues to contribute to the study of history and science, technology, and medicine in East Asia. In the past five years, for example, it has produced issues on the following themes:

- Transnational psy-science in East and Southeast Asia
- Population control and reproductive politics in Cold War Asia
- Science and politics in Indonesia
- Post-colonial medicine and sub-imperial formations of Taiwan and Korea
News from the Profession, cont.

- Medicine and public health in the twentieth century, and
- Science and technology in Mao-era China

It has also actively engaged in discussions on the history of science in non-Western societies, including a forum on language and science; research notes and their responses on science fictions in East Asia; and the methodological contribution of Southeast Asia to STS.

Though our journal is still young, we as editors are committed to high-quality scholarship, and our efforts have been recognized by winning the Infrastructure Award given by the Society for the Social Studies of Science (4S) and by inclusion in key academic metrics, notably the Arts and Humanities Citation Index and the Social Sciences Citation Index. We analyze contemporary science and society while paying equal attention to how it was created and has transformed East Asia. We are always looking out for more scholarly collaborations, in particular those on the history of science, to help us accomplish this. So, please join us in contributing your own work to the living archive that is EASTS!

Information about EASTS was provided by the current editor Wen-Hua Kuo, who teaches social studies of medicine and public health at National Yang-Ming University, Taiwan.

**Physicist Roland Eötvös’s PhD Thesis Unearthed**

Henk Kubbinga (University of Groningen) made an interesting discovery while preparing a “Tribute to Roland Eötvös (1848-1919)” for the European Physical Society. At the Hungarian Academy of Sciences and in the Eötvös Museum, both in Budapest, he studied surviving materials (publications, instruments, photographs, bullae, etc.) to find out that a crucial item was lacking, namely Eötvös’ PhD dissertation, defended in 1870 at the Ruprecht-Karls University of Heidelberg. The doctor’s bulla signed by none less than Gustav Kirchhoff, is still there, however, so some kind of misunderstanding seemed to prevail. Kubbinga subsequently contacted the Board of the Ruprecht-Karls University explaining the situation and asking for eventual souvenirs of Eötvös’ student days at Heidelberg. As it became clear in due course, he had hit bull’s eye. As the oldest University of today’s Germany, the Ruprecht-Karls University was lucky enough to survive two World Wars virtually undamaged, and its Archives preserved in a perfect state. Kubbinga was graciously received and quickly found out that in 1870, a PhD-ceremony in Heidelberg, was not a tradition. Indeed, presenting a dissertation was the exception rather than the rule. Like most of the other candidates, Eötvös was subjected to a 2-3 hour oral examination in German before the

Presentation of the Eötvös file from the Archives of Ruprecht-Karls University, Heidelberg, on 23 January 2020. In the middle: the University’s Prorector Matthias Weidemüller, himself a distinguished physicist; on the right Ingo Runde, Director of the Archives; on the left: Henk Kubbinga (EPS-History of Physics Group). Picture: Oliver Fink (Press-Department)

staff of the Faculty of Philosophy, all assembled formally gowned. His results, on that July 7th, were quite impressive: indeed, he received the distinction *summa cum laude*. The complete PhD file is there. It features the original request by Eötvös to be admitted to the examination, with an enclosure—fully unexpected—of an autographed curriculum vitae covering his three years at Heidelberg, of which one semester was spent in Königsberg (today, Kaliningrad).
The three examiners—Bunsen, Königsberger, and Kirchhoff—added their impressions of the candidate’s answers; Kirchhoff, as Dean of the Faculty, specified the judicium. After the examination, each of the staffers in the audience signed the proceedings of the ceremony. The file concludes with a copy of the doctor’s bulla, dated July 8. With Eötvös’ detailed curriculum vitae and all the other papers on the table, a revised biography seems imperative.

New Consortium for the History of Science, Technology and Medicine Working Group

Penelope Hardy, Daniella McCahey, and Katharina Steiner are pleased to announce the formation of a new working group in the history of ocean science, technology, and medicine under the aegis of the Consortium for the History of Science, Technology and Medicine (CHSTM) in Philadelphia. The group will meet monthly beginning in Fall 2020 to discuss recent publications and workshop papers in progress. The conveners invite anyone interested in participating to sign up.

2020 HIST Award of the American Chemical Society Recipient: Lawrence M. Principe

Lawrence M. Principe, Drew Professor of the Humanities, with Chairs in both Chemistry and the History of Science, at Johns Hopkins University was named the recipient of the 2020 HIST Award of the History of Chemistry (HIST) Division of the History of Chemistry of the American Chemical Society. The HIST Award recognizes outstanding achievement in the history of chemistry and is international in scope. This award is the successor to the Dexter Award (1956-2001) and the Sydney M. Edelstein Award (2002-2009), also administered by the Division of the History of Chemistry (HIST) of the American Chemical Society. The award consists of an engraved plaque and a check for $1500 and will be presented to Prof. Principe at the fall national meeting of the American Chemical Society in San Francisco in August 2020. Read the press release. Additional information about the award can be found on the HIST website.

Announcing the Newly Digitized Dr. Robert Matz Hospital Postcard Collection

The New York Academy of Medicine Library is very pleased to announce the launch of the Dr. Robert Matz Hospital Postcard Collection, a pilot digitization project that provides access to 118 hospital postcards from the five boroughs of New York City. Spearheaded by Dr. Robin Naughton, Senior Digital Program Manager, the collection offers a window into the history of hospitals in the New York area as well as some of the visitors to those hospitals. Many of the postcards have messages and postmarks, allowing the viewer to ascertain the time period when the cards were created. View the Matz Collection.

Quantum of Interest

The University of Notre Dame recently restored a cache of letters featuring debates on matters of physics among scholars. Read the full story, complete with illustrations in HSS Member News.
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