In the Global Spotlight

As director of LIS, an international data archive and research center, Janet Gornick enables researchers to compare socioeconomic outcomes around the world, and to study the institutional factors that shape those outcomes.

It has become a dominant theme in media reports: the rich are getting richer, while the poor are struggling—and often failing—to stay afloat.

The attention follows four decades of increasing income inequality in the United States and across much of the world. And when the United Nations sought an authority to address the topic, it turned to Professor Janet Gornick.

In October, Gornick, a professor of political science and sociology who also serves as the director of LIS, an international research institute, delivered a keynote address to the UN General Assembly. Her talk, “High and Rising Inequality: Causes and Consequences,” presented to senior delegates from 193 member states, was billed as the centerpiece of the opening of the General Assembly’s work on economic and financial issues.

The talk was informed by Gornick’s work with LIS (formerly known as the Luxembourg Income Study), which is based in Luxembourg and has a satellite office at the Graduate Center, both directed by Gornick, who joined the research institution in 1990 and recently expanded the satellite office by bringing in noted economists Branko Milanovic and Paul Krugman.

LIS is a unique resource in the information world: it gathers datasets from many countries—now over 50—and harmonizes these data so that they can be meaningfully compared across nations and over time. LIS’s “claim to fame” is its microdata: the records available at the level of households and the persons in those households. A dataset might include tens of thousands of households, and, for each, detailed data are available on each person’s earnings, as well as how much they receive in social benefits such as retirement pensions and unemployment insurance, and the amount of taxes paid. The datasets also include information on household members’ gender, age, ethnicity, partnership status, and level of education, as well as detailed data on each person’s employment. (Names, Gornick notes, are not included.)

These records are coded into an enormous database, which has been used by more than 5,000 researchers, students, and policymakers, who can’t get this information anywhere else. “You could go to the websites of organizations such as the World Bank or the International Labour Organization and get country-level indicators, even on inequality or poverty or employment,” Gornick says. “But, through those organizations, researchers can’t get their hands on the original microdata that underlie those indicators. There’s a long tradition of countries being protective of their microdata. Fortunately, data producers in many countries trust LIS to both protect and share their data.”

Developing and improving the LIS database has become more than a full-time job for Gornick, who spends about three months a year abroad, negotiating with government and private data producers around the world, and raised the funding that enables LIS to carry out its work. And though interest in income inequality has surged in recent years, that topic represents just a fraction of what the LIS data reveal about the state of the world. Gornick has drawn on the database to research topics such as the gender wage gap and the relationship between having children and employment. Other scholars have used LIS data to examine a vast array of topics, including earnings gaps between college and high school graduates, the economic success of immigrants compared to natives, and the anti-poverty effects of targeted versus universal social programs.

In addition to its value to the international community, LIS serves as an invaluable training venue for students at the Graduate Center. “LIS’ visibility has grown tremendously, which has given our students access to research that receives worldwide attention,” Gornick says. “For a growing number of our students, it has also shaped their research agendas.” About a dozen students are working with the LIS microdata, under Gornick’s supervision; most of them began their studies in 2008, the year that she came to the Graduate Center. “There’s a whole little cohort whose studies have been shaped by working with me, with the LIS staff, and with each other.”
"If you have the luxury of communicating with people, you really should give them something beyond what they think they should be getting."

Robert Reid-Pharr

Pushing Boundaries, Within the Academy and the World

Robert Reid-Pharr, distinguished and presidential professor of English and American Studies, broadens our understanding of African American and American culture.

As a young scholar, Robert Reid-Pharr came across a body of literature that few people had ever read: a set of novels, political writings, plays, and poetry, all written by African American intellectuals in the early national and antebellum period. Though Reid-Pharr had intended to become a historian, he ended up as a literary critic, driven by a desire to make this underexposed literature available to a wider audience. "I always had this sense that I would have to do two things at once," says Reid-Pharr, now a distinguished and presidential professor of English and American Studies at the Graduate Center. "I wanted to do the archival work of bringing materials into the public purview. And I wanted to do theoretical work, guided by a sense of ethics, that pushes people to new levels in terms of their understanding of what culture is, what politics is."

Reid-Pharr is about to broaden our understanding of African American Studies and American Studies once again. He is currently finishing his latest book, which examines the deep connection between African Americans and Spain—a connection that has been largely forgotten in the post-Franco era. "I wanted to talk about African American cosmopolitanism, but outside of Anglophone and Francophone circuits, which have been the two dominant circuits by far," says Reid-Pharr, who is also the director of the GC's Institute for Research on the African Diaspora in the Americas & the Caribbean (IRADAC).

The relationship between African Americans and Spain dates to 1898, the start of the Spanish-American War, in which African Americans fought outside of the United States for the first time: the Rough Riders that charged San Juan Hill in Cuba were largely composed of African American men, he notes. In the early 20th century, many prominent African American intellectuals—including Paul Robeson, W.E.B. Du Bois, Richard Wright, and Chester Himes—traveled extensively in Spain, and were drawn to the country's leftist political movements. "They thought, and said explicitly, that Spain had the same relationship to Europe that African Americans had to the United States: wildly significant to the cultural significance of a place, but also a marginal population," Reid-Pharr says. "Our own generation finds it hard to see that, possibly because the history of African American cosmopolitanism is so caught up in leftist political institutions. And we don't live in the same sort of political universe."

Reid-Pharr's forthcoming book, like much of his work, reflects his interest in opening the boundaries of American studies. "I'm very committed to the idea of American Studies that is not limited to the 50 states, and in challenging a sort of monolingualism within American Studies more generally," he says. "And I'm very interested in having an African American Studies that is big-shouldered and in the world, and in expanding the types of archives and languages that we use. We tend to be a little narrow, even in the United States, about what American and African American culture is."

Broadening these fields is also connected to Reid-Pharr's interest in post-humanistic studies. A critical tradition is developing around rethinking the humanities and its role in education; however, this movement hasn't yet extended to questions related to race and ethnicity, he says. "There are a lot of people talking about the need to revivify the humanities, lift it to new levels, and I hope to spend a major part of the second half of my career being a part of that conversation," Reid-Pharr says. "My work will focus on race and post-humanism, and I'm just getting started."

He likes being just a few steps ahead of his students. "I take my sense of the classroom experience directly from the hard sciences," he says. "Students should be developing skills and gaining information, but at the same time participating in a process of experimentation. We're all figuring out what's going on together." In his 13 years at the GC, he has taught his students how to conduct research, and how to live as a creatively—which is why he always pushes boundaries and raises expectations. "I think any teacher's job is to continuously set the bar for every student right beyond what they think they can do," he says. "For the students, it should be an incredible process of growth: they're always being encouraged to do something they couldn't do before."

He sees it as his responsibility to guide his audience—whether composed of readers, students, or fellow academics—just beyond its comfort level, and is willing to risk that not everyone will understand his message, at least at first. "If you have the luxury of communicating with people, you really should give them something beyond what they think they should be getting, or what the environment says they should get," he says. "So I always try to be a little brave about that."

PHOTO: PAULA VLODKOWSKY

Research on the African Diaspora in the Americas & the Caribbean (IRADAC).
Jeremy Kahn, distinguished professor of mathematics, offers elegant solutions to complicated problems.

In 2009, after seven years of work, Jeremy Kahn and his research partner solved a problem that had baffled mathematicians for decades: a puzzle known as the Ehrenpreis conjecture. For this achievement, Kahn and his partner, Vladimir Markovic of Caltech, were awarded a Clay Research Award, which honors major breakthroughs in mathematics.

To understand what that means requires a short introduction to Kahn’s specialty, non-Euclidean geometry—and to the prints of M. C. Escher.

First, the math: for about 1,500 years, mathematics was dominated by Euclidean geometry, best known for its five postulates, or rules. The first four of these postulates—that one can draw a straight line between any two points, for example—are self-evident. The fifth postulate, however, troubled mathematicians for centuries. Essentially, it states that two lines pointing toward each other should eventually meet.

It wasn’t until the 19th century that mathematicians began to develop non-Euclidean geometry, also known as hyperbolic geometry. In non-Euclidean geometry, two straight lines that appear to be parallel will eventually meet, because the lines are traveling in curved space. “Imagine two travelers setting out from the North Pole in different directions,” Kahn explains. “The travelers will diverge until they reach the Equator, and then will approach each other again.” (In non-Euclidean geometry, the curvature of space is actually negative, Kahn notes; lines travel through space that is shaped like a saddle, not like the surface of the earth.)

And now to the prints: suppose a printer wants to make two types of wallpaper, each with a different pattern. The first pattern repeats every two feet horizontally and every one foot vertically. The second pattern repeats every one foot horizontally and vertically. It’s easy to use the same machine to produce both patterns; double the second pattern, and it will repeat as often as the first.

But what if someone designs a pattern that measures one foot horizontally and the square root of two feet vertically? The printer can’t copy this second pattern and make it repeat in the same way as in the first example. However, mathematicians have proven that by very slightly distorting one or both of the patterns, and by multiplying the patterns by a large enough number, it is possible to print both patterns on the same machine—at least within the world of Euclidean geometry.

The Ehrenpreis conjecture stated that this should also be true within non-Euclidean geometry. In this world, patterns wouldn’t look like typical wallpaper; they would resemble what you see in M. C. Escher prints, such as his Circle Limit series. The third work in this series depicts what Escher described as “strings of fish” rising and falling infinitely. Though Escher had no formal mathematics training, this pattern and others in the series illustrate ideas from non-Euclidean geometry, such as straight lines that appear to be curved and do not meet.

Kahn and his partner began working on the Ehrenpreis conjecture when they crossed paths at previous teaching jobs. “There were a number of people in the field who had worked on it and tried to come up with ideas,” he says. Kahn and Markovic tried working on a version of the conjecture in which patterns were stretched to the boundaries of an Escher-like circle. “We worked on that for a very long time, and came very close to solving it,” he says. “And then we hit a wall.”

For five years, Kahn traveled to England over his summer and winter breaks to work on the problem with Markovic, who had moved to the University of Warwick. “We went in another direction and proved a version in three dimensions,” Kahn says. “It turned out to be easier in three dimensions, which was surprising.” The one thing left to prove was the Ehrenpreis conjecture itself, which they managed to accomplish the following summer. “We kept quiet about it for a few months, because the proof was so complex,” he says. “We wanted to have it written up properly before announcing it.”

As for the applications? Interestingly, the problem Kahn and his partner proved along the way—the three-dimensional version known as the surface subgroup theorem—has turned out to have important applications to the study of three-manifolds (in very simplified terms: a space that locally appears to be a slightly distorted version of Euclidean space, but which may curve in upon itself in unexpected ways). But as with Fermat’s Last Theorem, which famously took mathematicians more than 350 years to solve, the marvel of solving the Ehrenpreis conjecture is an end in itself. Kahn is currently building on this work and hopes to prove a wider class of theorems, some of which would relate number theory to geometry. That may change, says Kahn, who is always looking for new avenues of research. “The work that you do as a mathematician,” Kahn says, “should never be limited to the work you were planning to do.”
Reimagining Education for the New Information Age

Under Cathy Davidson, the Futures Initiative will develop new ways of teaching and learning at the Graduate Center

On the first day of class, Cathy Davidson, a leading interdisciplinary and technology scholar, likes to give a low-tech educational tool—the index card—to each of her students. They are instructed to write down the answer to a question: who invented the printing press? Not surprisingly, the most popular response is Johannes Gutenberg. But Davidson gives her students a chance to reconsider: they can either stick with the name they wrote down on their card, or they can take 90 seconds to come up with a better answer using any mobile device at their disposal.

Almost without exception, the students turn to their laptops and phones. And these students quickly discover that the printing press was first developed in 11th century China, about 400 years before Gutenberg would improve upon existing technology to build his own press.

Davidson, a passionate believer in innovation who frequently challenges assumptions about technological change, sees this informal experiment as revealing the division between the world of higher education and our everyday lives. “Students know there is a much more complex and global answer than the first name that comes to their heads,” she says. “We have the skills to come up with the complex answers, but we’re not using them very often in education.”

This fall, Davidson, who serves on the National Humanities Council and is the cofounding director of Hastac, a 14,000-member digital learning network, is launching the Futures Initiative at the Graduate Center—an ambitious project that will draw on CUNY’s resources to develop new methods of teaching and research. The focus will be on interdisciplinary and collaborative learning, with a goal of inspiring public investment in higher education.

Why is there such a pressing need for change? The forms and structures of higher education were designed for the Industrial Age, Davidson explains. “Between 1865 and 1925, the medieval university was remade for the era of the time-pound card,” she says. “So many current ideas in higher education—the rigidity of academic disciplines; the emphasis on product rather than process; and the stress on individual achievement—were nailed down during a very specific time in American history. Our world has changed, but our educational model has changed very little.”

Davidson’s mission is to reconstruct higher education for the world we live in now—in which change comes fast, but basic information is readily available. “Many students have adapted to new methods in their informal learning,” she says. “They wind up with almost a double consciousness: they know when they’re operating in the world of the Internet, as opposed to operating in the world of formal education.”

Through the Futures Initiative, Davidson plans to teach skills that are often ignored in the classroom, such as digital literacy, working collaboratively, and teaching how—rather than what—to learn. “We’re very good at teaching subjects, but not at teaching the process by which to learn a new skill,” Davidson says. Another goal is developing alternatives to standardized testing: the first multiple-choice test was designed in 1914, just a few years after the production of the first Model T. Davidson points out: “We don’t live in that world anymore,” she says. “Standardized tests are simply an inefficient means of assessment.”

Davidson has been fascinated with innovation and change since the earliest days of her career. As a student, she majored in philosophy and literature, but her interests included robotics and artificial intelligence. Her first book, Revolution and the Word: The Rise of the Novel in America, explored how mass printing made books, particularly novels, widely available to women and to the working class. “I like to say that I couldn’t be a historian of the Internet if I weren’t a historian of the novel,” Davidson says. “The detailed, textured history of the novel made me very suspicious when people said the Internet would dumb us down. Thomas Jefferson said the same thing about novels.”

This spring, Davidson will be teaching a seminar with William P. Kelly, the GC’s former president and current interim chancellor, that will propose ways of restructuring the current educational model. The experimental class, Mapping the Futures of Higher Education, will include 15 students with different interests and skills, all of whom will teach at various CUNY colleges. Each student will research the best ways of teaching in their field and share these methods with the class. Their findings will be published online through Hastac, which will have a new administrative home at the GC. “Our model is working together, learning by doing, and interacting in society to make a public contribution to knowledge,” says Davidson. It is also her way of making an impact on the new information age, one that is moving faster than any one could have imagined.
Art as an Engine

David Joselit, author and contemporary art critic, examines the effects of globalization and digitization

"Art seems to be something that leaves the world, practiced outside of or beyond everyday experience," says David Joselit, distinguished professor of art. "But the art world itself is a kind of economic engine, and has enormous real-world effects."

Joselit, whose recent work has focused on the history and theory of image circulation in the 21st and 20th centuries, elaborated on his views of the contemporary art world in his 2012 book, After Art. The book presented a powerful argument not just on the meaning of contemporary art, but also on the ways in which the art world creates circles of power throughout the globe. Its title refers both to repetition in art and to the trajectory of art after it leaves the studio. Joselit explains. "A work of art starts to mean something when it circulates," he says.

Contemporary art, Joselit argues, is under dual pressures: globalization and digitization, both of which are making it possible for works of art to circulate differently than they have in the past. "Globalization has led the infrastructure of art—and of contemporary art, in particular—to expand dramatically," he says. "Saudi Arabia is undertaking an enormous museum-building project. There's a vast increase in the number of museums in China as well. So the introduction of a certain originally Western art infrastructure has become a mark of modernization internationally." At the same time, digitization is changing the nature of images, in ways that are both literal and metaphorical. "A digital world makes it possible for people to be aware of exhibitions that they wouldn't even normally know about," he says. "But the status of images has also shifted, because images can change formats easily, and can be sent from place to place. So this has had an effect even on people who are making very solid, traditional art like paintings and sculpture."

These pressures have helped fuel a movement in which artists act, to various degrees, as content aggregators. Joselit points to work by Slavs and Tatars, an anonymous art collective that focuses on a vast geographical expanse within Eurasia, as demonstrating "the aggregator's impulse to furnish a platform where unlike things may occupy a common space."

In an exhibit two years ago at the Museum of Modern Art, the collective created a reading room that contained disparate texts exploring the potential of language, it focused in part on three letters from Hebrew, Cyrillic, and Arabic that represent the same sound. "In our current moment, it is the aggregator that makes accumulation eloquent," Joselit says. "Aggregators filter a world saturated with commodified information, making the unnowness of globalization plastic and visible." He is expanding on these ideas in the book he is working on now, particularly the theme of globalization. The challenge of a global art world has made it impossible for anyone interested in contemporary art to remain exclusively focused on the Euro-American modernist tradition, which has in turn caused artists, historians, and critics to rethink their work in important ways. "There's a certain levelling due to the merging of markets and the 'McDonaldization' that we're all aware of," he says.

Perhaps in response to this, many contemporary artists strive to assert a local specificity. "Artists from various parts of the world will often reference traditions, quite ancient in some cases, that derive from the place where they live or work," he says. "But they do it in language derived from contemporary practices like conceptual art. So it's a way of establishing locality."

As with globalization, the art world's expanding reach doesn't always result in positive or intended consequences, he notes. "Art leads to things like gentrification," he says. "It is part of what makes certain cities unaffordable, and that's seldom acknowledged. On one hand, it provides a kind of cultural burg for those that have access to it. But on the other, it's a mode of creating even more value in private property." And though many artists are seeking to understand conflict and inequalities on a global scale, the contemporary art world is tied to a machinery that sells luxury products to the elite and to institutions, he says. "There is a contradiction between the legacy of a progressive socio-political position that has its historical roots in the avant-gardes of the early 20th century, and the highly elitist social and financial world that has arisen around it," Joselit says. "And all contemporary artists must confront this in one way or another."

For all of these pressures and risks, Joselit does see some benefits in the current tendency to describe art as a "global currency." "Art is sometimes seen as a financial instrument, a hedge against markets of other sorts. And that's a cynical view," he says. "But we can also think of art as a kind of communicational currency. Particularly in the current moment, it is important to recognize that art translates one cultural place to another. It builds audiences, it makes connections—between people, and between philosophies."
About the Graduate Center

The Graduate Center is the principal doctorate-granting institution of the City University of New York. Offering more than 30 doctoral degrees from Anthropology to Urban Education, and fostering globally significant research in a wide variety of centers and institutes, the Graduate Center provides rigorous academic training in the humanities, sciences, and social sciences.

Through its extensive public programs—lectures, conferences, performances, exhibitions, and conversations—the Graduate Center contributes to the intellectual and cultural life of New York City and affirms its commitment to the premise that knowledge is a public good.

The Graduate Center is home to a core faculty of approximately 140 teachers and mentors, virtually all senior scholars, many leaders in their disciplines, and more than a third holding the rank of Distinguished Professor—the University’s very highest academic honor. Further, as the only consortium of its kind in the nation, the Graduate Center draws upon more than 1,700 faculty from across the CUNY colleges, as well as from cultural, academic, and scientific institutions throughout New York City and beyond.

By virtue of its competitively funded doctoral programs, its emphasis on research, and its wide-ranging professional training, the Graduate Center benefits from a highly ambitious and diverse student body. About 90 percent of its 4,200 students are enrolled in doctoral programs, and a growing number of master’s students pursue degrees in disciplinary and interdisciplinary subjects. Throughout their courses of study, Graduate Center students acquire tools and skills that increase and diversify their prospects for careers both inside and outside the academy.

Research and the creation of theoretical and applied knowledge stand at the heart of the Graduate Center. In addition to more than 30 centers that foster research and programming in the humanities, social sciences, and sciences, the Advanced Research Collaborative (ARC) extends the Graduate Center’s global reach and prominence as an international hub of advanced study by promoting interdisciplinary research, facilitating collaboration, and supporting students, postdoctoral appointments, and visiting scholars.