

Natural Selections

A NEWSLETTER OF THE ROCKEFELLER UNIVERSITY COMMUNITY



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Word of the Month

DAKOTA BLACKMAN

trust (*n*): a firm belief in the reliability, truth, ability, or strength of someone or something

I have been thinking a lot about the word “trust” recently. Its dictionary definition reads as follows: “a firm belief in the reliability, truth, ability, or strength of someone or something.” The nominal form of the word has roots in Old English, Old Norse, and Proto-German. The words from which it has evolved are all unsurprisingly similar in meaning, beginning in the 13th century with roots in religion, and progressing into an umbrella term for all kinds of faith.

Of course, I think the subject of trust—either directly or indirectly—has been on the mind of many recently. Last month, Christine Blasey Ford, a professor and researcher in psychology at Palo Alto University and at Stanford University School of Medicine, testified during the Senate Judiciary Committee hearing regarding the appointment of Brett Kavanaugh to the Supreme Court. She alleged that

Kavanaugh sexually assaulted her when they were in high school; she described her experience in detail, provided thoughtful and articulate answers to questions asked, and—true to her profession—accessibly and effectively dove into psychological and neuroscientific explanations of trauma, telling Senator Diane Feinstein that traumatic events can occlude “basic memory functions,” resulting in “the trauma-related experience [getting] locked in there whereas other details [can] kind of drift.” Blasey Ford, much like Anita Hill before her, was compliant and forthcoming, claiming simply that she was doing her civic duty and informing the American people of an unfit candidate for the United States Supreme Court.

Brett Kavanaugh, much like Clarence Thomas before him, was confirmed shortly after this testimony.

Trust calls for a belief in the “reliability, truth, ability, or strength” of someone or something. But what does it mean to really trust, and how does it manifest? Objectively speaking, Christine Blasey Ford checks all the boxes here: her testimony was reliable, she told the truth to the best of her ability

(and had enough self-awareness and scientific understanding to account for moments when she was unable to do so), and she showed incredible strength. Brett Kavanaugh, by the dictionary definition, did not live up to Blasey Ford’s example. He was unreliable both in his temperament and his testimony: [he lied under oath](#) and also had what was essentially a [tantrum](#) on the senate floor. His ability has been questioned not only by the American people, but also by organizations such as the National Council of Churches, former friends and colleagues from Yale University (his alma mater), and [several thousand law professors](#). Kavanaugh has not earned the country’s trust, yet he has it. He is not fit to be trusted (much less to serve on the United States Supreme Court), yet he is. It is disappointing, but not altogether surprising, that those in power are willing to put their trust in a man who does not deserve it, and revoke trust from a woman who does.

Throughout the whole confirmation process, our Senators (and our country’s system of justice) did not warrant trust. However, Christine Blasey Ford warranted trust, respect, and—above all—belief. ■

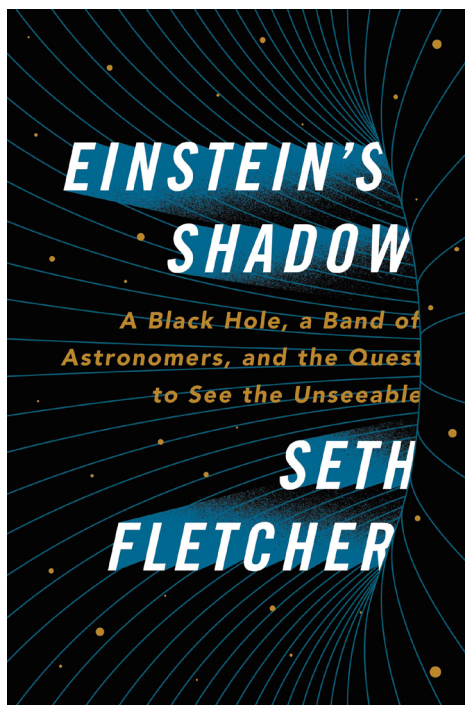
Review | *Einstein's Shadow: A Black Hole, a Band of Astronomers, and the Quest to See the Unseeable*

EMMA GARST

What if the speed of light was 25 miles per hour? What if we lived in “Flatland”, a world of two dimensions? What if you fell into a black hole? There is a whole genre of books dedicated to probing these mind-bending ideas about the nature of space and time—books written to bring complex mathematical concepts to eye level in terms of “what ifs.” However, what is harder to find, is the “how do” book. How do we know planets curve space-time? How do we measure the size of the black hole at the center of our galaxy? In fact, how do we even know there is a black hole at the center of our galaxy? Untangling the intricacies of designing experiments, taking measurements, and seeing a signal in the noise is more complicated and messy than a theoretical model. In *Einstein's Shadow*, Seth Fletcher manages to weave these threads into a compelling narrative.

Einstein's Shadow follows Shep Doleman in his intrepid journey to build an earth-sized telescope to image the black hole at the center of the galaxy. The reader quickly finds out that this does not, in fact, involve building a Death Star-like outer-space contraption. Instead, this massive telescope requires the synchronization of radiotelescopes all over the world to get a view of that black hole from many points at once, creating a virtual telescope with a dish diameter equal to the distance between the observatories.

The undertaking of such a project is not as simple as asking for money and collecting data. Telescopes around the globe must be upgraded with state-of-the-art equipment and never before tested methods of data collection must be written. Time on the telescopes must be coordinated and the weather must cooperate in three to four different locations thousands of miles apart. Massive international consortiums of scientists must be organized and managed—by scientists with no formalized training in organizational management. Fletcher is attuned to the small absurdities that arise in this situation. “The minutes from their discussions convey the good-natured cluelessness of kids trying to start a rock band,” he writes of an early organizational meeting. “Perhaps we should keep a list of action items and take



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288 pages
Hardback, \$27.00

turns with writing minutes,” concludes the first installment.”

Fletcher’s narrative ability shines as he describes the installation of an atomic clock in one of the many telescopes needed for this project. On its face, the process of moving a hulking piece of equipment from the first to the second floor of a telescope base seems so trivial as to not be worth a mention. However, Fletcher heightens the scene to an emotionally charged peak, laying out the nail biting process and the dire consequences of one misstep. From the slow-moving caravan up the side of the mountain to the lifting of the atomic clock by a slew of workers using rappelling harnesses and roping ladders together “as if to cross chasms in the Khumbu icefall” and swinging the atomic clock “Tarzan-style... cable to cable, across the open stairwell,” the reader is thrown in with the scientists, looking on with a bit of terror and a silent prayer. This is one of a thousand steps that must go right to create the earth-sized telescope, and in these moments the reader feels how precarious the scientific endeavor is.

The wonders of the day-to-day, mechanical work of getting a project of

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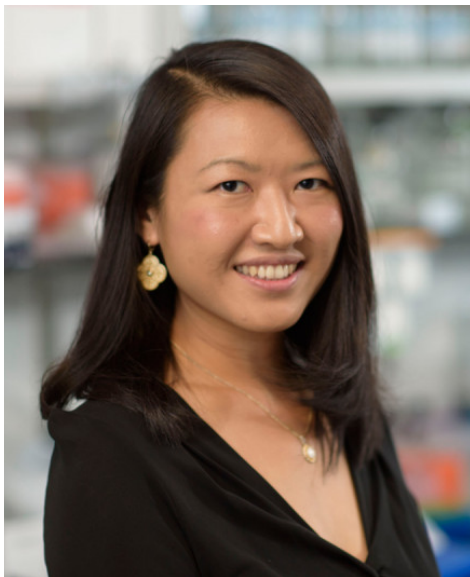
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this scale off the ground were sometimes overshadowed by the people and politics involved. Fletcher’s focus on Shep casts the astronomer as the necessary hero of the story, the man shepherding a wily and complex idea towards execution—which wouldn’t be a problem if I didn’t find the man so unlikeable. Throughout the book, Shep seems in turn difficult, smug, and paranoid. These character failings are not totally lost on Fletcher, who describes Shep as “tightly coiled and intense”; but the broader view casts Shep as a difficult genius, whose larger than life personality is a necessary quirk of his innate intellect. As a scientist I’ve met enough smart, capable, communicative, and cooperative people that I have little infatuation with this pernicious trope.

Part of the draw of this work is its importance; these scientists are trying to get a look at the structure of our galaxy, and in the process see the inner mechanics of our universe. If that’s not grand, I don’t know what is. By focusing on the nitty gritty work of engineering and organization for this ambitious astronomical project, Fletcher brings a massive undertaking down to earth, in more ways than one. ■

Editorial Note

This month, the *Natural Selections* Editorial Board bids farewell to **Chew-Li Soh** and **Stephanie Marcus**. We would like to thank both for their dedication and for helping *Natural Selections* to become what it is today.



Chew-Li Soh



Stephanie Marcus

Chew-Li joined *Natural Selections* in May 2016 as a Copy Editor and served as Associate Editor beginning in December 2016 where she has left a permanent mark on the Editorial Board. She leaves us this month to begin a job at BlueRock Therapeutics as a Senior Scientist studying stem cell therapies for regenerative medicine.

Stephanie joined *Natural Selections* in October of last year as a Copy Editor and served as Associate Editor from March to October 2018. She leaves us to focus her attentions on Women in Science at Rockefeller (WISer) where she serves as the group's president. She is looking forward to future collaborations between WISer and *Natural Selections*.

We wish Chew-Li and Stephanie all the best. They will be greatly missed!

For Your Consideration – *Ones to Watch, Vol. 2 Edition*

JIM KELLER

As the sun finally sets on summer heretofore possibly known as “the rainy season”, it’s time for the second of a three-part series, which examines the roles that are likely to feature in the Best Actor race. In recent years, the eventual Best Picture winner had its big reveal at the Telluride Film Festival. The films of that festival (August 31 – September 3, 2018), along with the Venice International Film Festival (August 29 – September 8, 2018), the Toronto International Film Festival (TIFF, September 6 – 16, 2018) and, to a lesser degree, the New York Film Festival (September 28 – October 14, 2018), provide the majority of awards season fodder, and so begins the Oscar race. In fact, by this time last year, four out of five eventual Best Actor nominees were on the table following film festival premieres: Gary Oldman had become the frontrunner for *Darkest Hour* thanks to Telluride, the Sundance Film Festival gave us Timothée Chalamet (*Call Me by Your Name*) and Daniel Kaluuya (*Get Out*), and TIFF gave us Denzel Washington (*Roman J. Israel, Esq.*). Daniel Day-Lewis (*Phantom Thread*) would follow in December after his film’s premiere in New York.

Before we peel back the layers of this year, let’s revisit the last one. Of the seven roles that were discussed here, four landed Best Actor nominations: Oldman, Chalam-



Bradley Cooper in “A Star is Born.”

et, Washington, and Day-Lewis. From the outset, there was no stopping Oldman who after a 36-year career in the industry had not yet won an Oscar. The only person who gave him any chase was Chalamet who was never going to win because of his age and newbie status. And so, the veteran handily defeated the newbie.

As for the other performances discussed here, Christian Bale (*Hostiles*) was the only one left out in the cold, with Kaluuya taking the fifth slot. But Bale re-

turns this year (see below). As for the others, the ship sailed on Hugh Jackman’s chances for a nomination when *The Greatest Showman* failed to deliver and Jake Gyllenhaal’s *Stronger* did not have enough support to make it a contender.

This year, we have someone I would refer to as a frontrunner but its early and I am not willing to cash that check just yet.

Photo Courtesy of Fox Searchlight Pictures

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THE ROCKSTAR: Bradley Cooper – *A Star Is Born* (director: Bradley Cooper)

FYC: You have no doubt heard about the latest rendition of this timeless tale of love and stardom in which a musician (Cooper) helps a young songstress (Lady Gaga) rise to the top as his own career descends into darkness through his addiction. With a current Metacritic Score of 88, it seems the fourth time is the charm for this version of the film. For a full summary of the other films' brushes with Oscar, see [last month's column](#). Suffice to say that only the original (1937) had a Best Picture nomination, and the last time the film earned nominations for its stars was in 1954 (Judy Garland and James Mason). Cooper is mesmerizing as Jackson Maine—a man who spent most of his life on the road running away from his demons. The last time Cooper featured in the column was in November 2012 when the actor was first nominated for Best Actor for *Silver Linings Playbook*—the same film that would nab Jennifer Lawrence her best actress trophy. Back then, Cooper was mostly known for his work in *The Hangover* film series, and that film marked the point where Hollywood began to take him seriously as an actor. The following year Cooper was nominated as Best Supporting Actor for *American Hustle* and the year after that he earned his second Best Actor nomination for *American Sniper*, which also netted him an Oscar as producer. As for his Oscar chances this year, Cooper has the trifecta: he is overdue for a win, the film is playing like gangbusters, and he's great in the film. The only thing going against him is that a Best Actor nominee has only won twice for a film that he directed himself: in 1949 when Laurence Olivier won for *Hamlet* and most recently in 1999 when Roberto Benigni won for *Life is Beautiful*. In fact, it is far more common in such a case for the nominee to win for directing the film: five out of 10 times. The remaining three instances, the nominee didn't win either award.

THE VEEP: Christian Bale – *Vice* (director: Adam McKay):

FYC: This biographical film stars Bale as Dick Cheney who rose from a bureaucratic Washington insider to the most powerful Vice President in America's history, forever reshaping the country and the globe under president to George W. Bush. Bale won the first time he was nominated for his supporting role in *The Fighter* in 2011. He has since been nominated for Best Actor in 2014 for



Christian Bale in "Vice."

American Hustle and Best Supporting Actor for *The Big Short* in 2016. Based on the trailer, Bale appears to give a transformative performance something he did for *The Fighter*, where he lost 60 lbs. In *Vice*, he has packed on more than 40 lbs. But in a time when many are in dismay over the political climate, is anyone interested in revisiting another dark time in this country's history?

THE SPACEMAN: Ryan Gosling – *First Man* (director: Damien Chazelle):

FYC: Chazelle's much anticipated follow-up to *La La Land* is a biographical drama based on James R. Hansen's book *First Man: The Life of Neil A. Armstrong* and centers on the legendary Apollo 11 mission that led Armstrong (Gosling) to become the first man to walk on the Moon in 1969. Gosling was nominated for Best Actor in 2007 for *Half Nelson* and again just last year for *La La Land*—the same role netted him the Golden Globe award for Best Performance by an Actor in a Motion Picture - Musical or Comedy from the Hollywood Foreign Press Association (HFPA). This win followed four other Golden Globe nominations, including two in the same category: *Lars and the Real Girl* (2008) and *Crazy, Stupid, Love* (2012), and two in Best Performance by an Actor in a Motion Picture - Drama: *Blue Valentine* (2011) and *The Ides of March* (also in 2012). Although Gosling will likely be nominated for his performance as the famous astronaut, the role is not showy. What's more, if Leonardo DiCaprio's long history of being overlooked by the Academy for a win is any indication, Gosling likely faces the same difficulty due to his own pretty boy status.

THE PHILANDERER: Hugh Jackman – *The Frontrunner* (director: Jason Reitman):

FYC: This biographical drama based on Matt Bai's book *All the Truth Is Out: The Week Politics Went Tabloid* chronicles the rise and fall

of American Senator Gary Hart's 1988 presidential campaign when he is caught in a love affair. Although Jackman was nominated for Best Actor in 2013 for *Les Misérables*, most of his awards recognition has come from the HFPA who first nominated him for Best Performance by an Actor in a Motion Picture - Comedy or Musical in 2002 for *Kate & Leopold*. He won that Golden Globe award for *Les Misérables* and earned a third nomination in the category this year for *The Greatest Showman*. The film faces the same uphill climb as *Vice* but additionally, Jackman's role here is a departure from the others he has been recognized for because it is neither comedic nor musical in nature.

THE CONVERT: Lucas Hedges – *Boy Erased* (director: Joel Edgerton):

FYC: The coming-of-age drama based on Garrard Conley's 2016 memoir of the same name follows the son of Baptist parents (Hedges) who is forced to participate in a gay conversion therapy program. At 21, Hedges star has only begun to rise but he already has a Best Supporting Actor nomination under his belt for 2016's *Manchester by the Sea*. In 2016, the same performance earned him recognition across several precursor awards as he earned nominations from the Broadcast Film Critics Association (BFCA) and Screen Actors Guild (SAG), and won the Breakthrough Performance - Male from the National Board of Review (NBR). He was also nominated for the British Academy of Film and Television Arts EE Rising Star Award. Landing a spot in the top five may prove difficult for Hedges though because he has a second performance in contention for *Ben is Back*, which could work against him.

THE DRIVER: Viggo Mortensen – *Green Book* (director: Peter Farrelly):

FYC: In this film, a New York bouncer named Tony Lip (Mortensen) drives a Jamaican-American classical pianist (Mahershala Ali) on a tour through the 1960s American South. Mortensen has earned two Best Actor nominations, the first in 2008 for *Eastern Promises* and the second just last year for *Captain Fantastic*. He also has Golden Globe, BFCA, and SAG nominations for those films. Mortensen has a Supporting Actor Golden Globe nomination for 2011's *A Dangerous Method* and a third BFCA Best Actor nomination for 2009's *The Road*. Green Book's status as the People's Choice Award winner at TIFF makes the film a serious Best Picture contender, which only helps Mortensen's bid for Best Actor. The last six films to win the award went on to be nominated for Best Picture.

THE SINGER: Rami Malek – *Bohemian Rhapsody* (director: Bryan Singer):

FYC: This biographical film is focused on front man Freddie Mercury (Malek) and chronicles the years leading up to Queen's legendary appearance at the Live Aid concert in 1985. Malek is best known for his work on television's *Mr. Robot* for which he has two Golden Globe nominations for Best Performance by an Actor in a Television Series – Drama and two SAG nominations for Outstanding Performance by a Male Actor in a Drama Series, both in 2016 and 2017, respectively. *Bohemian Rhapsody* marks Malek's first leading role in a major film, and regardless of its mixed critics reviews, notably for historical inaccuracies, there has been unanimous praise for his performance. It is important to note that unlike Gosling in *La La Land*, Malek lip-synchs throughout the film, which could impact his chances for a nomination as the awards season progresses.

THE POLICE OFFICER: John David Washington – *BlackKkKlansman* (director: Spike Lee):

FYC: This biographical dramedy, based on Ron Stallworth's memoir *Black Klansman*, follows Stallworth (Washington), an African American police officer from Colorado Springs who sets out to infiltrate and expose the local Ku Klux Klan branch. Washington is the son of Oscar winner Denzel Washington and he only has eight acting credits to his name. Still, he is brilliant in this film as he deftly walks a tightrope between comedy and drama—all under the umbrella of a top-



Rami Malek in "*Bohemian Rhapsody*."

Photo Courtesy of 20th Century Fox



John David Washington in "*BlackKkKlansman*."

Photo Courtesy of Focus Features

ic that carries as much relevance in America today as ever before: racism. This is to say nothing of how Lee has used past events to amplify those in recent history, thereby delivering one hell of a powerful impact, which will likely be recognized in awards season and pull newcomer Washington along for the ride. But regardless of what happens in the awards race, Washington's career is just beginning, and this film will forever mark a dark time in this nation's history.

As always, there are more actors in the hunt for Oscar this year than I have the space to discuss. There's Willem Dafoe's turn as Vincent Van Gogh in *At Eternity's Gate*—he has more than enough goodwill leftover following his Best Supporting Actor

nomination for *The Florida Project* this year. Given that the film has the most Gotham Award nominations, including Best Feature and Best Actor, could Ethan Hawke breakthrough for *First Reformed*, which saw its release back in May? Or could the Academy swing the other way and recognize Robert Redford for his final performance in *The Old Man & the Gun* or Clint Eastwood for his late-breaking performance in his own film *The Mule*? Other performances from leading men to consider include Stephan James for *If Beale Street Could Talk*, John C. Reilly for *Stan & Ollie*, and Steve Carell for *Welcome to Marwen*. With the fall film festivals in the rearview, it's time for the critic groups to weigh in and for a consensus to build. Until soon, Oscar watchers! ■

Come for Pie, Leave with Joy

MELISSA JARMEL

If you can't wait for Thanksgiving to have a slice of pie, you can go down to the diner at the Brooks Atkinson theatre to get yourself a piece of pie in a jar. *Waitress* has been dishing up jars of pie and slices of musical joy since the spring of 2016. Before every show, pie is baked fresh in the lobby so that you are greeted by the intoxicating smell upon entering to prepare you for the baked goodness ahead.

This movie-turned-musical follows the empowering story of Jenna, a waitress in a small town pie diner who sees baking as a way to escape from her unhappy marriage. I love that a theme of this musical is the excitement and hope of new beginnings, and even more so, that this show has a history of giving actors a chance to make their Broadway debut. This was the first musical that Sara Bareilles wrote the music for and later starred in as Jenna. Katharine McPhee from *Smash* and *American Idol* also made her Broadway debut in this role, as well as Nicolette Robinson from *The Affair*. Katie Lowes from *Scandal* made her Broadway debut in this show as Jenna's friend and coworker, Dawn, as did Kimiko Glenn from *Orange is the New Black*. In addition to giving many women their Broadway debut, *Waitress* also made history by having the first all-female creative team for a Broadway show. Some guys have also had their first chance to be on the Great White Way in *Waitress*: Jason



Photo Courtesy of Playbill

Mraz had his Broadway debut as the doctor in this musical, and the latest celebrity addition is Al Roker in the role of Joe, an older man who owns the pie diner.

Celebrities aside, the talent runs deep in this cast and the music will bring you joy for days to come with Bareilles' earworms. But Robinson and Roker announced that they will be extending their run at *Waitress* until November 18, so you still have time to see them in action and enjoy some pie in a jar before the holidays (you won't regret getting the salted caramel chocolate).

You also won't regret going to see *Waitress* this month because you will have the opportunity to help *Waitress* win a competition against the other shows. It's not for a Tony, but it's extremely valuable; twice a year an organization called Broadway Cares/Equity Fights AIDS hosts a friendly competition between the shows to see who can inspire their audi-

ences to donate the most, often with a brief auction for signed memorabilia held directly after the show. In the organization's own words from their website, they help "men, women and children across the country and across the street receive lifesaving medications, health care, nutritious meals, counseling and emergency financial assistance." They are one of my favorite places to donate money to because I have full confidence that it will be used well to support individuals in the arts community when they need it most. So enjoy some pie, help some artists, and have a great start to the holiday season!

Discount tickets available:

- \$40 Day-Of Rush at the Box Office
- Day-Of TKTS booth in Times Square
- Ahead of date with code:

<http://www.playbill.com/discount/playbill-discount-for-waitress> ■

Natural Expressions

Sports

Chris Marhula of the MacKinnon Laboratory and Alicia Sicangco, Clinical Research Nurse at the Rockefeller University Hospital, will both be running in this year's New York City Marathon on Sunday, November 4! Spectators can gather along the route to cheer on participants as they run 26.2 miles through all five boroughs, beginning in the morning in Staten Island and finishing in Central Park. Miles 16 to 17 run along First Avenue near the University, making this a convenient spot to watch the race. For further information, check out <https://www.tcsnycmarathon.org>.

Music

Collette Ryder announces a concert from the New York Choral Society and NY Choral Chamber Ensemble, "My Shadow and My Light" on Monday, November 12 at 8:30 p.m. at Carnegie Hall. In honor of the 100th anniversary of the end of the First World War and the 80th anniversary of Kristallnacht, this concert features the works of three early 20th century composers, two British and one American, who composed pieces

expressing their deeply personal reactions to the social and political environment of their day. Tickets are \$30-80 (<https://www.nychoral.org/events/nychoral-presents-my-shadow-and-my-light/>).

Santa Maria Pecoraro Di Vittorio brings us another concert at Carnegie Hall—the season opener for the Chamber Orchestra of New York. On Friday, November 16 at 7:30 p.m., conductor Salvatore Di Vittorio will open with Bach's Brandenburg Concerto No. 5, followed by Di Vittorio's own Baroque-inspired Sarabanda Antica. The evening will continue with the world premiere of the June Naxos recordings, followed by Vivaldi's Bassoon Concerto RV477, and Marcello's Oboe Concerto. The program will conclude with Mozart's ever popular Serenade in G Major *Eine Kleine Nachtmusik*. Tickets are \$40-50 (general admission online discount code: CNY29834 / students at the door: \$30). Further information can be found online at <https://www.carnegie-hall.org/calendar/2018/11/16/chamber-orchestra-of-new-york-0730pm>.

Digital Events

Bernie Langs shares the release of his re-

cently recorded medley of "Just My Style" (by Al Capps, Thomas Leslie "Snuff" Garrett, Gary Lewis, and Leon Russell) / "Do You Love Me" (by Berry Gordy) with music and singing performed by Bernie Langs and Matthew Murphy providing additional vocals. Check out this release on SoundCloud at <https://soundcloud.com/bernie-langs/just-my-style-do-you-love-me-b-langs-feat-matt-murphy>.

Gretchen M. Michelfeld, from Rockefeller's Office of General Counsel, announces the online release of the feature film, *As Good As You*, on which she worked as screenwriter and executive producer. This film is "...a serious comedy about trying to grieve the right way..." and was the winner of the Hollywood Reel Independent Film Festival's 2016 "Best LGBT Feature". *As Good As You* is now available to stream/buy/rent at <http://firstrunfeatures.com/asgoodasyouhv.html>.

Email Megan E. Kelley at mkelley@rockefeller.edu to submit your art/music/performance/sporting/other event for next month's "Natural Expressions" and follow @NatSelections on Twitter for more events. ■

Culture Corner

Concert Review: Paul Simon at the Prudential Center (Newark, NJ), September 15, 2018

BERNIE LANGS

Singer-songwriter Paul Simon completed his farewell tour with an outdoor concert in Queens, New York on September 22, 2018, close to where he and his former musical partner Art Garfunkel grew up together in the 1950s. The duo joined forces in the 1960s creating hit records as Simon & Garfunkel and acrimoniously splitting in 1970 at the height of the band's fame. Garfunkel has a fabulous voice, hitting and sustaining high harmony and lead vocal notes that few can attain in the pop/rock genre, but Simon wrote most of the band's hits and played a mean and creative acoustic guitar on songs such as "Mrs. Robinson" and "The Boxer." Simon's voice is wonderfully rich and unique and he's a masterful composer and arranger, but in the same way that Eric Clapton had many great records after he left his Cream bandmates in the late 1960s, both he and Simon could never maintain the unique fantastic sound they had as a member of a group during that turbulent decade in musical history.

I saw Simon perform at Newark's Prudential Center one week prior to his final bow in Queens. The artist informed the crowd that although it is well-known that he grew up in New York, he was actually born and spent the very early days of his life in Newark. Simon has always had an amiable persona and has hosted *Saturday Night Live* many times over the years, often appearing in self-deprecating skits and showing off his natural wit and humor (see his infamous opening bit where he is dressed as a turkey for Thanksgiving while crooning his song, "Still Crazy After All These Years"). I jumped at the opportunity to see Simon in concert after viewing video of his brief reunion tour with Garfunkel—they have yet to speak again according to many sources.

Simon played many of his solo hits as well as those from his days in Simon & Garfunkel and each song was a delight for different reasons. He had a back-up band of about fifteen musicians, featuring virtuoso guitarists Mark Stewart, who played with Simon on the prior tour with Garfunkel, newcomer Biodun Kutí, as well as Bakithi Kumalo, who is a smooth bass guitar master running complex lines that are easy on the ears, yet technical wonders. The band's lineup included drummers and percussionists, string, woodwind, and horn players, and a bevy of back-up singers. The group performed as a mirac-



Paul Simon sings "The Boxer" at the Prudential Center—YouTube view by audience member.

ulously tight unit amid the complex arrangements. Simon's solo career is an homage to world music, showcasing African and Latin textures throughout his compositions. In the international mode, the band tore through crowd-pleasing renditions of "Diamonds on the Soles of Her Shoes," "Me and Julio Down by the Schoolyard," and the grooving, reggae-inspired "Mother and Child Reunion."

For me, the hits from the 1960s that Simon performed throughout the evening were the highpoints. The performer's voice was unexpectedly strong for a 77-year-old man and he did not shy away from challenging vocal phrases and high notes, which he hit each time. He retains a knack for making his guitar playing stand out as both accompaniment and lead. Simon took time during the show to tell anecdotes, reminisce, and discuss the emotions surrounding his retirement from touring. He never mentioned Garfunkel by name, who flew by in only a handful of photos in the highlight film reel of his career. When Simon performed their music, the oft-times melancholy tunes took on greater significance, not just for the star himself as a farewell, but as a moment of finality for the music of the 1960s. Simon opened the show with "America," a hit from 1968 that could have served as the thinking man's hippie anthem. "The Boxer" was released in 1969 and it was played in Newark as a dark, yet celebratory poem on the subject of the unexpected and unending turbulence of life and love. As the emotional tone and tide rose during the lamenting chant sung by the backup singers at the end of the song, Simon's acoustic flairs finally relieved the crowd from its grip and

we were brought back to calmer waters by his instrument's marvelous ringing, bright tone.

Near the halfway point, Simon told the audience that the next song was one he'd known immediately on composition as a more exceptional creation. He explained how he'd given it away to another artist to record and would now play his own rendition. The joke, we realized as the tune began, was that the song was "Bridge Over Troubled Water," a huge hit for Simon & Garfunkel, sung solo on the record by an emotionally expressive Garfunkel until Simon enters later with dazzling background harmonies. At the Prudential Center, the composer reclaimed his song, and the new arrangement with Simon on lead vocals was not only the best moment of the evening, but among the top performances I've ever heard live. I was absolutely stunned by how "Bridge" built and towards the end I became completely overwhelmed by the music. Perhaps the Sixties and its promised utopian nonsense, which I'd bought into, were now long gone and deservedly recognized as idealistic, unrealistic dreaming? Perhaps my musical heroes were now too often appearing in the obituary section than in the arts section? Perhaps Simon, Mick Jagger and Paul McCartney were old men—not the youthful powerhouses who had had wowed us decades ago as they swept millions of people into the clouds with promises and sounds of sweet song? But as "Bridge" finished up, and later as the artist played the final song of the evening, "The Sound of Silence," alone with his acoustic guitar, I knew that Simon's music was as strong and powerful as ever and he had absolutely proven that the soul survives. ■

Rockefeller Mutant Takeover

ALICE GADAU

“What about ‘Spooktacular?’”, “I like spooky scientists!”, “What about something with CRISPR?”, “Oh! I got it ‘CRISPR Gone Wrong!’”—and that is how, in the back of yellow cab, Donovan Phua came up with the theme for this year’s Halloween party. Each year, the first year graduate student class organizes the Rockefeller University Halloween party. A group of highly qualified party planners (wink!) were chosen from the first year class to organize, plan, order, and set up for the party. Just as every other year, the party took place in the famous Faculty Club with a chill bar set on the patio outside. The party planners created fun activities for kids and adults alike, including pumpkin DNA extractions during the kids’ hour, and a costume contest for adults. Beautiful, original pumpkin carvings designed by the first years were on display during the Halloween party, which took place on October 26. Hopefully you didn’t miss it! In the words of one party planner, Mari Soula, “It [was] lit!” ■

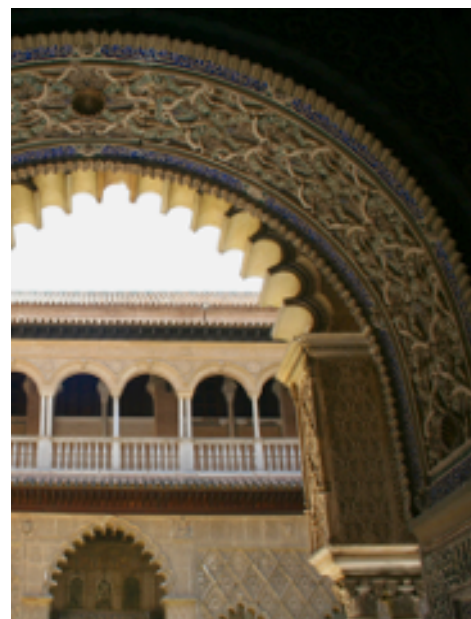


Life on a Roll Alcázar of Seville

ELODIE PAUWELS

<https://elodiepphoto.wordpress.com/>

In the middle of the capital of Andalusia is a royal palace, well protected by tall, thick walls: the Alcázar of Seville. Across centuries, more elements were added to the exterior. Getting lost in this charming maze of lovely patios will make you travel further than Spain! ■



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