

Twenty-four visits to Stockholm: a concise history of the Rockefeller Nobel Prizes. Part I: Alexis Carrel, 1912 Prize in Physiology or Medicine

JOSEPH LUNA

If there were an epicenter for a fascination with the Nobel Prize, The Rockefeller University, with 24 such awards, would be it. For its size, the university has the greatest density of Nobel prizes of any place in the world. The big-picture factors that have led to such a prestigious legacy are ones best left to historians to debate. As a graduate student, I have two much simpler questions: what was each prize for and how were the essential discoveries made?

In this series, we'll peel back the arcane language and suspend a bit of hindsight to explore concisely the ideas and experiments that underlie each of the university's 24 associated Nobel prizes. From the obvious "why didn't I think of that?" to "that can't be true" courageous nonconformity, we'll look into the context of the problems solved and their greater importance. For if genius really is "seeing what everyone else has seen and thinking what no one else has thought," I wonder what truths of the scientific process can be wrought by studying examples of genius close at hand. This isn't to say that getting a call (or telegram) from Stockholm at five in the morning is the ultimate imprimatur of genius, but, as examples of what one university has accomplished over the past century, they'll do just fine.

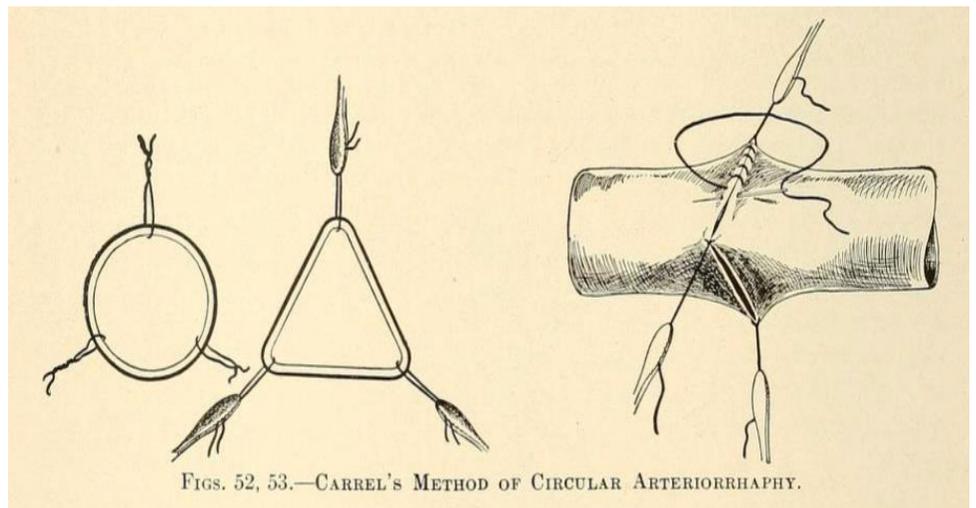
So let's begin. We'll start our journey with something so fundamental, that we rarely give it a passing thought: plumbing.

Any organism with a circulatory system, by definition, is filled with plumbing. The human body is a veritable city of blood pipes: around 60,000 miles of vessels ferry close to 5 liters of blood, all thanks to a large and reliable heart pump. These basic components of human anatomy (of existence even), work tirelessly in the background, ignored only until something goes wrong.

For a surgeon over a century ago, such failures of circulation were frustrating things to encounter. Unlike the plumbing in an actual city, where a team of welders could quickly repair a ruptured water main, there was little a surgeon could do to solve the same problem in a person rapidly losing blood. Where was the surgeon's welding torch?

Alexis Carrel, a French experimental surgeon and the first of the university's Nobel Prize winners, answered this call by inventing many surgical techniques used to repair blood vessels. As anesthesia and aseptic practices became widely adopted in the operating room by the early 20th century, such experimental surgery became possible, and Carrel devised cleverly simple and incredibly powerful methods that unarguably helped lay the foundation for modern organ transplantation. His basic question boiled down to this: how do I join two delicate and floppy tubes end-to-end? Many before Carrel had tackled this problem, using bits of bone or metal

as rigid scaffolds for crudely sewing two blood vessels together, but complications like infection, hemorrhage, and bruising were constant problems. Carrel's solution first required an initial detour. He left the operating room entirely and learned to sew from those who knew best: French embroiderers. Apocryphally, some say Carrel had learned embroidery from his mother in his boyhood, while others write merely that he studied under the finest embroiderers in France. What mattered was that he became so good at embroidery that his stitches across sheets of paper were fine enough to be invisible on both sides. Returning to the operating room, he perfected what is now known as Carrel's triangulation technique for joining blood vessels together. No fancy devices were needed other than silk thread, fine embroidery needles and lots of skill, though the basic premise is ingeniously simple. Three stitches are placed at equal points around the circumference of a vessel to be joined. By pulling at these stiches, the vessel opening no longer resembles a floppy





Alexis Carrel

circle but a rigid triangle. Holding two such triangulated vessels end-to-end, it becomes easy to sew across the seam for a blood-tight seal (see diagram on the previous page). Since no forceps are used to hold the edges of a blood vessel, only light and delicate silk thread, all sorts of complications were greatly reduced. Varying this basic technique, end-to-end anastomosis, Carrel

performed veritable miracles of medicine. He could repair vessels of virtually any visible size (as small as “matchsticks” as one observer put it) and attach them to other vessels in all manner of ways, from junctions to loops. He devised means to repair blood vessels without exposing them to infectious agents, worked out ways to viably preserve tissues outside the body, and performed some of the first successful organ and limb transplants in animals. But Carrel’s visionary work was a full half-century before its time for wider use in humans, as he lacked antibiotics to control infection and the drugs to suppress the immune system. His lab closed upon his retirement in 1939, but the dream of transplant surgery certainly did not. As his 1912 Nobel can attest, Carrel demonstrated that the surgical part of transplantation and tissue repair was both possible and practical.

Incidentally, Carrel’s lab was located on the 6th floor of Founder’s Hall, where the gym stands today. What a sight to imagine

Natural Selections
Editorial Board
EDITORIAL BOARD

Daniel Briskin
Alessia Deglincerti
Jim Keller
Aileen Marshall
Nicolas Renier
Jason Rothausser
Susan Russo

selections.rockefeller.edu
nseeditors@rockefeller.edu

there: a surgeon hard at work in 1912, saving a dog or a patient, carefully suturing blood vessels, aiming to forestall certain death. I doubt any have sweat more than Carrel did in that space. ◊

For Your Consideration – Ones to Watch, Vol. 1 Edition

JIM KELLER

With the conclusion of last month’s Telluride Film Festival, it’s time to kick off our three-part “Ones to Watch” series. This year, I’m shaking things up a bit by beginning with the Best Actor race—primarily because there are about 44 men vying for five slots, currently more than in any other acting category. Who will have what it takes to take home gold come Oscar night? It’s too early to tell, but we can make some reasonable, educated guesses. But first, let’s look at last year’s names and see how they fared with Oscar.

Three of the leading men discussed in last year’s column went on to earn Best Actor nominations: Chiwetel Ejiofor (*12 Years a Slave*), Bruce Dern (*Nebraska*), and Leonardo DiCaprio (*The Wolf of Wall Street*). Matthew McConaughey won the Best Actor Oscar for *Dallas Buyer’s Club*. Only one actor was snubbed—Robert Redford (*All Is Lost*), who was unseated by Christian Bale (*American Hustle*)—but the race was crowded and this possibility was always on the table. As for George Clooney in *Monuments Men* and Steve Carell in *Foxcatcher*, both films were pushed back by the studios until 2014—the latter is discussed again in this column. Finally, Tom Hanks’s role in *Saving Mr. Banks* was later determined to be supporting, not lead.

THE CHANGELING: Steve Carell – *Foxcatcher* (director: Bennett Miller):

FYC: This drama, based on Mark Schultz’s autobiography, tells the true story behind the 1996 murder of Olympic wrestler David Schultz by paranoid schizophrenic and heir to the du Pont chemical

fortune, John Eleuthère du Pont. Carell (du Pont) won the Golden Globe for Best Actor in a Television Series – Musical or Comedy in 2006 for his role on *The Office*—a role that earned him subsequent consecutive nominations from 2007–2011. Not only does Carell play against type in *Foxcatcher*, but donning a prosthetic nose, he has the heavy make-up card to play (see Nicole Kidman’s and Charlize Theron’s Best Actress wins for *The Hours* and *Monster* in 2003 and 2004). Further, Carell won rave reviews at this year’s Cannes Film Festival, where Miller picked up the Best Director prize and the film competed for the Palme d’Or. There is every reason to believe that Carell will land a nomination, but in which category is the question. While he will campaign as lead actor, both Channing Tatum and Mark Ruffalo (who play Mark and David Schultz), are considered co-leads. But at the end of the day, the Oscar voters alone will decide Carell’s category (see Kate Winslet’s Best Actress win for *The Reader* in 2009 for a huge example of category fraud—Winslet’s role was by all accounts supporting). Given Carell’s star power, expect to see Tatum and Ruffalo go head-to-head in the supporting race.

THE HAS-BEEN: Michael Keaton – *Birdman* (director: Alejandro González Iñárritu):

FYC: In this tale of redemption and self-reinvention, Keaton plays an also-ran who once portrayed an iconic superhero, and battles his ego as he mounts a Broadway play and works to recover his family and career. To be sure, the irony that Keaton played Bat-

man twice is not lost. But after inhabiting more than 71 roles, the 63 year-old has only a single Golden Globe nomination for his lead performance in a mini-series made for television, *Live from Baghdad* in 2003. Why then, am I writing about Keaton? Because it's a plum role that looks fantastic in the trailer and Hollywood loves on and off-screen success stories such as this one. If Keaton is as good as early buzz portends, one could call it imitation of life.

THE DRUGGIE: Joaquin Phoenix – *Inherent Vice* (director: Paul Thomas Anderson):

FYC: This adaptation, based on Thomas Pynchon's novel, follows drug-fueled detective Larry "Doc" Sportello (Phoenix) through 1970s Los Angeles as he investigates the disappearance of a former girlfriend.

Phoenix was first nominated in 2001 for *Gladiator* (supporting) and again in 2005 for *Walk the Line* (lead). He earned his last nomination for Anderson's previous film, *The Master* in 2013—even after declaring that he didn't want any part of the Oscars. This shows the high regard the Academy has for Phoenix. So the only question here is if Anderson's first adaptation will be up to snuff for Academy members.

THE STRAIGHT GAY MAN: Benedict Cumberbatch – *The Imitation Game* (director: Morton Tyldem):

FYC: In this drama Cumberbatch plays Alan Turing—the English mathematician and logician who helped crack the Nazi's Enigma code during World War II and invented the modern computer before being prosecuted for homosexuality by the British government. Cumberbatch has been making a name for himself across television (*Sherlock*, *Parade's End*) and film (*12 Years a Slave*, *August: Osage County*). This could be the vehicle for him to snag the Academy's attention.

THE MONEYMAKER: Brad Pitt – *Fury* (director: David Ayer):

FYC: The film is a WWII drama set in April, 1945, about army sergeant "Wardaddy," (Pitt) who commands the Sherman tank "Fury" and its five-man crew. Outnumbered and out-gunned, the men face overwhelming odds in their attempts to strike at Nazi Germany from behind enemy lines. With three acting nominations under his belt, Pitt has proven to the Academy that he's more than a pretty face. In 1996 he was nominated in a supporting role for *Twelve Monkeys*, and Pitt went on to earn two lead actor nominations for *The Curious Case of Benjamin Button* and *Moneyball*, in 2009 and 2012, respectively. The trailer looks great and this could be the right vehicle (har har!) to get him that elusive Best Actor statuette.

THE SELF-STARTER: Eddie Redmayne – *The Theory of Everything* (director: James Marsh):

FYC: This biopic examines the life of famous physicist Stephen Hawking and his relationship with his now ex-wife. While he has inhabited smaller roles in a few earlier films, Redmayne's first major Hollywood coming out was in 2011's *My Week with Marilyn*. Determined not to be just another flash in the pan, the Britt revealed himself as a vocal powerhouse in Tom Hooper's adaptation of *Les Misérables* the following year, which opened more doors. Now, Redmayne demands to be noticed in his most ambitious role yet, playing Hawking, who suffers from ALS—not an easy undertak-

ing. If he's successful, and the film gets some traction, Redmayne could find himself face-to-face with the Academy.

THE ARTIST: Timothy Spall – *Mr. Turner* (director: Mike Leigh):

FYC: In this biopic that explores the last quarter century of the great, eccentric British painter J.M.W. Turner's life, Spall plays the titular character. Perhaps best known to American audiences for his role as Wormtail in the *Harry Potter* films, this year's Cannes Film Festival Best Actor winner hasn't yet attracted the Academy's eye. Instead, Spall has plotted a quiet course into the Oscar conversation by being a stalwart player in Leigh's films over the years. Beginning with a role in 1990's *Life is Sweet*, followed by *Secrets and Lies*, which earned him a Best Actor BAFTA (British Academy of Film and Television Arts) nomination, and *Topsy-Turvy*, which earned him a second BAFTA nomination for his supporting role, Spall has now appeared in five Leigh films. Given the film's positive reception thus far, it stands to reason that, by year's end, Spall's Best Actor hardware could multiply.

MR. DYNAMITE: Chadwick Boseman – *Get on Up* (director: Tate Taylor):

FYC: This film follows James Brown's rise from poverty to become one of the most influential musicians in history. Boseman resurrects the icon by stepping into his well-worn shoes, becoming one with Brown's soul, and eschewing any notion of an artist caricature. While he earned rave reviews for his portrayal of baseball great Jackie Robinson in last year's *42*, the Academy has yet to come knocking—this performance could certainly change that. Taylor's last film, *The Help*, was released around the same August date as *Get on Up* in 2011 and it successfully mined an untapped period for Academy recognition. It seems Taylor and the studio behind the film, Universal Pictures, had the same hopes here. But it's early in the Oscar season and the heavy hitters are yet to come. So whether or not Boseman can hold on for one of the final five slots is to be determined. Unfortunately, unlike *The Help*, *Get on Up* will likely not have the added muscle of multiple film nominations buzz behind it.

THE NEWCOMER: Jack O'Connell – *Unbroken* (director: Angelina Jolie):

FYC: Jolie's second feature film, based on the best-selling book *Unbroken: A World War II Story of Survival, Resilience, and Redemption* by Laura Hillenbrand, chronicles the life of Olympic runner Louis Zamperini, who was taken prisoner by Japanese forces during the war. While O'Connell earned recognition for playing the lead in *Starred Up* overseas, the film has just received a limited release stateside, so it's likely that his portrayal of Zamperini will be the first that most Americans see of him. Still, many Oscar prognosticators speculate the film will be a juggernaut in this year's race. It has a highly-respected woman at the helm, it's timely (given Zamperini's recent passing), it features the screenwriting talents of Joel and Ethan Coen, and it's being released on Christmas Day—prime Oscar picking time. Not to mention that the Academy loves tales of overcoming great odds, biopics, war films, and athlete stories—check, check, check, check! It is for these reasons I chose to discuss the British O'Connell. So for now, he gets to ride the colossal *Unbroken* wave, and it remains to be seen whether or not both

the film's and the actor's Oscar chances will be realized or dashed to bits on the rocks.

As I indicated at the top, this is merely a smattering of the leading performances to bow this year. Bradley Cooper just had his name thrown in the ring for Clint Eastwood's *American Sniper*, Christian Bale joins the hunt as Moses in Ridley Scott's epic *Ex-*

odus: Gods and Kings, and Michael Fassbender could turn some heads in the title role of Justin Kurzel's *Macbeth*. Each of these men is a past nominee and each of them should be expected to bring it. Who will be left standing at the end of a long line of blows to compete in the title match? Stay tuned as the race has just begun. Next time we'll review some of the leading ladies' roles of the season. So until then, I bid you adieu. ◉

A One Day Jaunt: Whirlwind D.C. Trip on the Cheap

SUSAN RUSSO

A one-day trip to Washington D.C.? Are you crazy? No, I am just ultra-cheap. You won't get to everything on your must-see list, but you can manage a lot with some planning. Maps of D.C.'s most popular tourist spots in what is called the "Federal District" are easily available on the Web. Most of these places are FREE. Starting on the National Mall, you can visit the Smithsonian museums—the American Art Museum, the National Air & Space Museum, the Freer and Sackler art galleries, the National Museum of American History, the National Museum of the American Indian, the Hirschhorn Museum and Sculpture Garden, the National Museum of Natural History, the National Gallery of Art, and the National Portrait Gallery (sorry, Stephen Colbert's portrait has been taken down.) Also free are the outdoor memorials—the Jefferson, the Lincoln, all the war memorials, and the Washington Monument (you can even go up to the top with a free pass on the day you arrive, or with a \$1.50 advance ticket). Within walking distance are the White House, the Library of Congress, and the U.S. Capitol Building. The Library (Monday through Friday) and the Capitol (Monday through Saturday) offer free tours of their amazingly beautiful interiors (advance reservations are recommended for the Capitol). Easily reached on the Metrorail system ("the Metro") is the wonderful National Zoo (also free) with grounds opening at 6:00 a.m., buildings at 10:00 a.m. and closing at 8:00 p.m., with free strollers and wheelchairs available. Also on the Metro, you can go to Georgetown, with its elegant

townhouses, cafés, restaurants, and the C&O Canal Walk, and to Dupont Circle, with bookstores, restaurants, ice cream parlors, and, nearby, the impressive, varied mansions housing most of the embassies.

Walking and the Metro are my favorite ways of touring, but there are also Old Town Trolley Tours and the DC Ducks (amphibious vehicles). These can be boarded at Union Station, Washington, D.C., where trains and some buses arrive. Trolley Tours (the hop-on, hop-off variety - \$35/adults; \$26/child; free for children under 4 years) will take you to all the places mentioned above, as well as to Arlington Cemetery and the Tidal Basin (where you can hire paddle boats). DC Ducks (\$35/adult; \$26/child) is a 90-minute talking tour past most of the sites above, but also onto the Potomac River. "Segway Tours" (helmets and training provided) are guided and must be booked in advance for different time periods: the Experience tour (\$65/2 hours), the National Mall tour (\$75/3 hours), the Food Truck tour (\$65/3 hours), and the Monuments and Memorials tour (\$75/3 hours).

My thrifty one-day (and longer) trips are by bus, all of which make rest stops at highway centers with food concessions and clean restrooms (more about that later). The fares I have obtained were for travel roundtrip on Saturday, September 6. Greyhound Bus Lines (starting from the Port Authority at 42nd Street and Eighth Avenue, and arriving at Union Station in D.C.) offers Web fare of \$45 roundtrip, if you book very early departures and late

returns (e.g., the 3:45 a.m. bus stops in Maryland and arrives at 11:05 a.m.; the returning 8:00 p.m. bus arrives at 12:30 a.m.). The BoltBus (starting near Macy's 34th Street and arriving at Union Station) charges fares from \$1 to \$25 each way, depending on when you buy your ticket and on the time of day (e.g., for \$23 the 6:30 a.m. bus arrives at Union Station at 10:45 a.m.; for \$15 the return bus at 6:30 p.m. arrives in New York at 11:00 p.m.). GoToBus, also called Eastern, starting near Macy's and arriving at Washington's Chinatown, charges \$25 each way (e.g., the 7:30 a.m. bus arrives at 12:01 p.m. and the returning 8:00 p.m. bus arrives at 1:00 a.m.). I have taken the GoToBus for 30 years, starting when the fares were \$10 each way, and they were called the Chinatown buses, leaving from and returning to Chinatowns in both cities.

For the more affluent, trips to D.C. can also be made on Delta and USAir shuttles, the current costs for roundtrip being \$290. There is now, however, a Metro stop at Reagan National Airport, so there's no expensive taxi ride to and from D.C. And then there is Amtrak, which is \$79 each way (or higher if the less expensive seats are sold out or if you take the Acela), but my last trip on Amtrak to and from Williamsburg, VA, was marred by the deplorable conditions of the restrooms, which I wrote about to the Directors of Amtrak, daring them to take a trip of over three hours on one of their trains. I did, however, add that the courtesy of the conductors and café staff were excellent. And the seats are really more comfortable than on the bus! ◉



This Month Natural Selections interviews Danielle Little from the Brivanlou Laboratory.

New York State of Mind

1. How long have you been living in the New York area?

47 years (all my life) I've been in New York.

2. Where do you currently live? I live in the Bronx.

3. Which is your favorite neighborhood? 167 St./Anderson Ave. When I was living around there I met a lot of people who looked out for me and made sure I stayed in school, I had a lot of fun on that old block. Had some good times and bad times but we stuck together and watched each others family.

4. What do you think is the most overrated thing in the city? The trains! because It is a shame that we have to pay so much money to get to work, school or anywhere.

5. What would you say is most underrated? The horse and carriage ride through the park. It can be romantic!

6. What do you miss most when you are out of town? I really don't miss anything when I'm away. When I go out of town I just relax and let my mind be free. I worry about missing things when I get back...lol.

7. If you could change one thing about NYC, what would that be? I would change the cost of living for the people who cannot afford high rent and raise the taxes on the rich. lol.

8. What is your favorite weekend activity in NYC? Finding a nice restaurant and taking a nice long walk through Central Park. Sometimes as long as half the day.

9. What is the most memorable experience you have had in NYC? ("have" got left out somewhere along the line...) Going to the top of the Statue of Liberty. One time I was with a group of friends and we dared each other to go to the top. Just the walk up was scary enough. I even looked over the edge and was so scared



but it was fun!

10. If you could live anywhere else, where [would] might that be? A long time of ago I would have loved to move to Atlanta. The cost of living is way cheaper. You can buy a house for the price of a studio apartment in NYC. Not to mention I have a lot of family out there.

11. Do you think of yourself as a New Yorker? Yes I do..... Born and raised. New York is where it's at! ☺

Natural Selections is seeking writers of all levels with something to say—whether non-fiction or fiction, the choice is yours! You don't have to be science-minded to contribute something meaningful to our community.

We welcome submissions from all RU students, staff, and faculty, on ANY topic, and in any form—travel experiences, satire, original photographs and artwork, reviews, your opinions, diatribes—in short, any ideas you may have.

We encourage collaboration among the Rockefeller community and our editors, who are eager to assist in polishing your writing while preserving your views.

Still unsure about submitting? Take the opportunity to step out of the lab and walk on the creative side. You might find that you have more ways to shine than you expected.

Culture Corner: Summer Film Roundup

BERNIE LANGS

By way of introducing the highlights of my experiences with selected movies I watched in the summer of 2014, I am oddly reminded of the Roman Emperor Nero and the infamous popular image of him as the ruler who “fiddled while Rome burned.” The notion of Nero playing the lyre at a time of crisis can be traced back to the ancient biography of him by the historian Suetonius in his book *The Twelve Caesars*. It took only a couple of thousand years for the story to be diluted down to the image we now have and for it to become a metaphor for someone who dallies foolishly during a time of immediate crisis. The point is that the summer of 2014 was one of constant emergencies and tragedies on the international and domestic stages, some of which I wonder if the world will ever recover from. And yet, while our politicians avoided or, in most cases, just could not figure out viable solutions, the public, so very emboldened (and deluded) by the idea that the ballot box gives them power, also sat back and could not truly and in a meaningful way, engage. My own personal fiddling was scored by the following flicks.

This summer, the big studios poured out yet more comic book epic films and other banal entertainment with big bright explosions. This allowed my stretch of not actually going to a movie theater to reach a life-long record length of time. Yet, I was able to find some recent film nuggets to watch On Demand on stunningly detailed HD television or downloaded on my hand-held Kindle Fire device. Films that present the story of an isolated individual facing a near impossible situation and either persevering or perishing in a gallant tale of courage have always appealed to me. Two movies I watched this summer examine this bravery and both did it extremely well. Robert

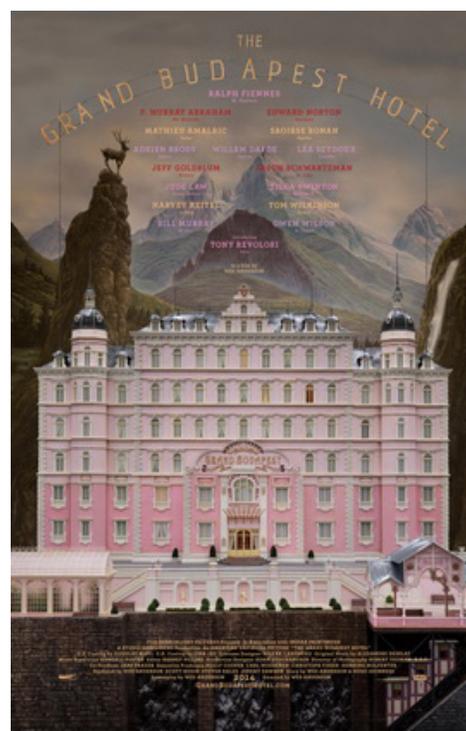
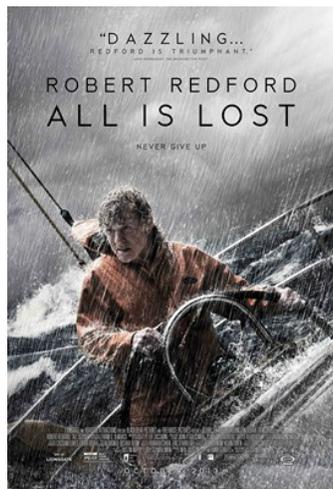
Redford is the sole actor in *All is Lost* and how he was not nominated this year for an Academy Award as Best Actor for this performance will remain a mystery in perpetuity [Editor’s note: though Jim Keller’s “For Your Consideration” column may shed some light on that]. Redford was in the 1972 film, *Jeremiah Johnson*, about a 19th century American who takes to the snowy mountains to leave civilization behind and ends up facing everything from attacks by Native Americans to bears. The title character’s solitude as portrayed by Redford is best summed up at its end, where Johnson is reunited with a like-minded elder mountain man and he sorrowfully says, “I wonder what month it is.” *All is Lost* takes place in the present and there is almost no dialogue in the whole film aside from the tearful, regret-filled prologue speech. It’s the story of Redford’s unnamed character on a boat, in the middle of the ocean, and his struggle to stay alive and afloat after he is awakened to find a hole in his ship made from striking a large, metal container used to export goods. It’s a fantastic nuanced fight that he displays and the movie builds to an excellent and thrilling finish.

Gravity was surprisingly engaging as well, with Sandra Bullock portraying an astronaut in crisis out in space with nothing but her wits and the advice of a Buzz Lightyear-type, George Clooney to pull her through. The final two minutes had me thinking that this was a new generation’s *2001: A Space Odyssey*. That film, masterminded and directed by Stanley Kubrick from the book by Arthur C. Clarke, was more subtle, and left its audiences wondering what in hell it all meant. *Gravity* finishes with an oddly Kubrick-like flair, yet it is an ending meant for a 21st century audience that likely won’t think about its implications for hours or years to come, the way I did after I saw *2001* at a film revival house theater in Cambridge, Massachusetts in 1980.

Tim’s Vermeer was another fine film I watched this summer. The entertaining and sometimes frightening comedy duo Penn and Teller created this documentary about how software maven, Tim Jenison persists over years of preparation and months of actual painting to produce a replica of a detailed Johannes Vermeer painting. Jenison, who is not an artist and had never painted before, creates an optical device using only materials that were available centuries ago in Vermeer’s time. He seems to prove his theory about how Vermeer was able to paint in such minute detail,

which is beyond the scope of what the human eye can actually see. Vermeer could only have done so with the aid of a mechanical device like the one Jenison builds. But he doesn’t stop there. Jenison physically recreates the room depicted in the painting, from the tapestries to the furniture to scale. He even makes his own paints, using only materials available in Vermeer’s time. The film entertains because Jenison, though brilliant, is human, and his gargantuan task often leads to bursts of frustration, many of which are funny and amusing. But his patience and persistence gives the film its passion and leaves one with a lesson of the satisfactions of succeeding with personal tests of endurance.

I had high expectations for Wes Anderson’s *The Grand Budapest Hotel*—especially since I recently discussed his movie, *The Darjeeling Limited* with high praise. I wasn’t disappointed. In this surreal fable-like movie, Ralph Fiennes plays the concierge of a fictional hotel in a fictional country with incredible humor, refinement, and with a keen sense of adventure. Similar to Woody Allen, it appears that actors are anxious to work with Anderson, and the cast includes some of today’s better film personalities. One expects Bill Murray, Owen Wilson, and Jason Schwartzman to make their usual appearances, but there are many surprise stars, including an almost unrecognizable, yet characteristically tough, Harvey Keitel. The tale, told in flashback, takes



place mostly in the early 1930's and Fiennes's character, Gustave H., is the consummate Old European hotel concierge, who is teaching a young bellhop protégé the ropes of pleasing the most demanding of Old World wealthy guests. The movie reaches hysterical and improbable levels of convoluted plot twists and diversions, all of which are a pleasure to watch unfold and resolve. Ralph Fiennes's previous roles include the mob boss in 2008's *In Bruges*—his entrance towards the end of that movie is a wonder of hilarity mixed with a dangerous persona. He reaches new heights of subtle comedic touch in *Budapest*. I loved listening to his vocal inflections throughout this performance.

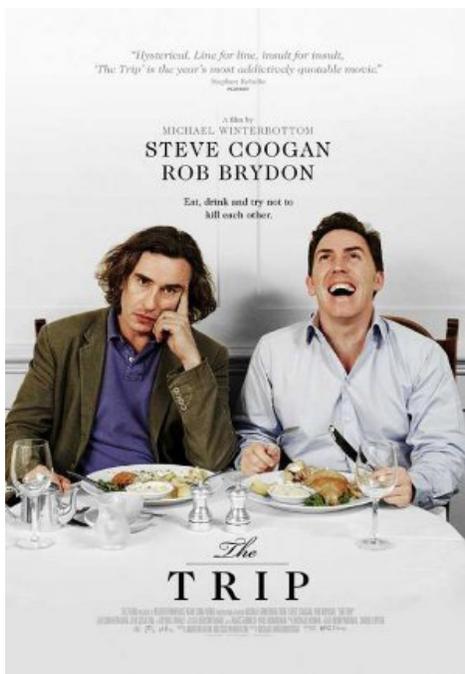
Like the description of Jesus's miracle of turning water into wine at the wedding at Cana (as noted in John's Gospel) I have saved the best for last. I have quite the soft spot for British humor since the days of stumbling on the U.S. premier on public television of *Monty Python's Flying Circus* in the mid-1970s, where one would have least expected to find such irreverence. The 19th century art critic John Ruskin said something along the lines of "in the face of the most gorgeous sight of countryside an Englishman will not pause to make a wise-crack." The other day I heard a musician note that the British are unique in their deep-set humor to the point that they would allow appropriate and accepted jokes at "a funeral of triplets."

My wife alerted me to *The Wall Street Jour-*

nal review of the new movie *The Trip to Italy*. Discovering that it was a sequel, we tracked down the first film, *The Trip*, made for the BBC in several episodes in 2010 and released later that year as a feature film. *The Trip* follows Steve Coogan and Rob Brydon playing versions of themselves through a tour of north England restaurants Coogan is to review for a British publication. The absolutely stunning countryside is depicted matter-of-factly, as are so many great cinematic views of small English towns and their varying historic remains. Coogan and Brydon were about 40 years when

filming, and while watching I had the thought that the British version of the immaturity of the modern male adult is more mature than his American counterparts. Then, Ben Stiller, Hollywood poster boy for childish antics appeared in a dream sequence. Coogan and Brydon riff throughout their car rides, meals, and hotel stays with incredible wit, erudition, and silliness. They make one laugh by reciting classic English poets or by attempting to out-imitate each other with impressions of veteran Brit talent, Michael Caine. Brydon notes and demonstrates, quite hysterically, in his impressions of Caine, the subtle difference in inflections of the early Caine and the old Caine. The biggest problem with *The Trip* is that I laughed so hard during some of their fast-paced attempts to one-up each other, that I missed a lot of dialogue. My wife told me that her friend watched the movie a second time with subtitles, so as not to miss any lines.

I began this column with the gloomy image of the matricidal madman Nero fiddling as his world burned and likened it to our own inability to fix the complex problems we face today while spending time watching movies. Yet, I will not leave you adrift like Robert Redford and Sandra Bullock. Let us remember, though to be honest I can't come close to recalling the actual phrasing, the lesson taught in ancient China: Fix (rectify) your family, and then you can fix your village; fix your village and then you can fix your nation; fix your nation and then you can fix the world. ◊



Ten Years of Natural Selections

DANIEL BRISKIN

Continuing on with our salute to the tenth anniversary of Natural Selections, here is a comic republished from 2004. ◊



Professor Flipman and farmer Dave present their discovery of the gene that causes crop circles

By Sean Taverna

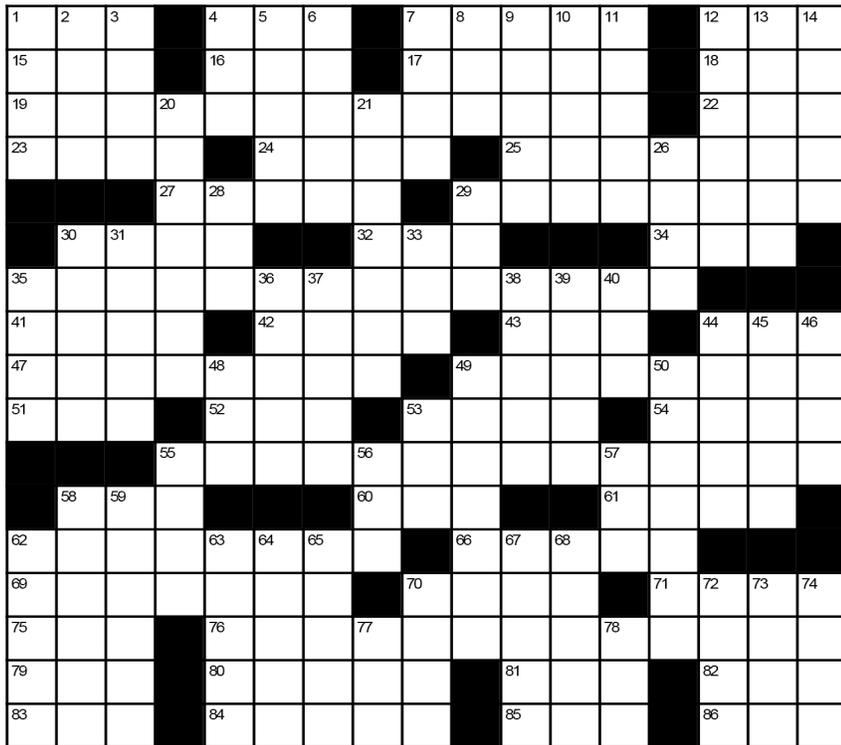
This month, the *Natural Selections* Editorial Board bids farewell to Daniel Briskin. We would like to thank him for his dedication and for helping Natural Selections to become what it is today.

Danny has been a contributor and editor for Natural Selections for nearly two years. He worked as a Research Assistant in the Laboratory of RNA Molecular Biology and began a graduate program at MIT, beginning this fall. While preparing for graduate school, Danny contributed this year by dusting off a collection of comic strips that originally ran in 2004 issues of Natural Selections. This dovetailed nicely with the publication's 10th anniversary. We wish him all the best! ◊

Princip of the Thing

GEORGE BARANY AND BRENT HARTZELL

GB is a Rockefeller alum (1977) and BH holds a master's degree (1994) in public policy from the University of Minnesota. For more about this specific puzzle, including a link to the answer, visit <http://tinyurl.com/princippuz>. More Barany and Friends crosswords are at <http://tinyurl.com/gbpuzzle>.



- 3. It turns litmus blue
- 4. NFL six-pointers
- 5. Stop by
- 6. Enliven, with "up"
- 7. FBI operative
- 8. "Am ___ risk?"
- 9. Prickly shrub
- 10. What almost always goes for a buck?
- 11. Align auditorially
- 12. Getty or Guggenheim
- 13. Is really bad
- 14. Trying experience?
- 20. "To the tooth," literally
- 21. Turbinate site
- 26. Fingered
- 28. Tool that is a homonym of 33-Down
- 29. Torch lighter at the 1996 Summer Olympics
- 30. Venue for van Gogh
- 31. Twosomes
- 33. Corporate lures
- 35. Something to save?
- 36. Fees for public transportation
- 37. Praise
- 38. Bridge position
- 39. Bordeaux bye-bye
- 40. Aussie outlaw Kelly
- 44. It may be crowned
- 45. Biting in tone
- 46. Approve
- 48. Heat meas.
- 49. City on the Clyde (see also 35-Across)
- 50. Tied up
- 53. Lilt
- 55. Berlin's "He's ___ Picker"
- 56. Pi ___ (arsonists' fraternity?)
- 57. Org. for Anthony and James
- 58. Leatherneck
- 59. Dawned
- 62. Old Testament city
- 63. Old Testament city
- 64. Pianist Gilels and actor Jannings
- 65. Computer woe
- 67. Plant life
- 68. Star of "Two Women"
- 70. 66 and others: Abbr.
- 72. Not at home
- 73. Wise one
- 74. Gait for a Hambletonian competitor
- 77. Jeanne d'Arc, e.g.
- 78. Call at Wimbledon 45.

Across

- 1. Arachnid creation
- 4. Tubes
- 7. Obama's first press secretary
- 12. Phoenix summer clock setting: Abbr.
- 15. Tide competitor
- 16. Fiesta bowl?
- 17. Wed
- 18. Actress Hagen
- 19. Cause of death for Benazir Bhutto or Rajiv Gandhi, e.g.
- 22. Auntie, to Mom
- 23. Boat's bottom
- 24. Desktop gateway
- 25. Like dinosaurs
- 27. Palm fruit
- 29. Beethoven's Piano Trio in B-flat major, familiarly
- 30. Parodied
- 32. Latvian chess champ in the 1960's
- 34. ___ Dispatch (1870 message to Otto von Bismarck)
- 35. "Take Me Out" indie band based in 49-Down
- 41. Landed
- 42. X, Y or Z
- 43. Bobbie Gentry wrote one to Billy Joe
- 44. Nixon's host in February 1972
- 47. Prone to intellectual reflection
- 49. Stalemate
- 51. Serpentine shape
- 52. Abbr. to the left of a number

- 53. Der ____, epithet for Konrad Adenauer
- 54. Guts
- 55. Dual monarchy with capitals in Vienna and Budapest
- 58. Stain
- 60. Hank Aaron never hit more than 47 of these in a season
- 61. Ranch wire component
- 62. Site of 1984 Winter Olympics
- 66. Key of Chopin's "Black Key Étude"
- 69. Paper work?
- 70. Candy from Mars
- 71. Bridge position
- 75. Major put down, in slang
- 76. Hostilities triggered by 55-Across's outrage to the 19-Across of 29-Across 35-Across of 55-Across in 62-Across, on June 28, 1914
- 79. The loneliest number
- 80. Instrument for James Galway
- 81. Blogger Drummond
- 82. In the past
- 83. Bishops and queens, e.g.
- 84. Ninnies
- 85. It may be fare to an aardvark
- 86. Even so

Down

- 1. Watered down
- 2. Gaelic tongue

