

PROMOTING SCIENCE THROUGH THE ARTS (OR VICE VERSA)

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I agree with Schopenhauer that one of the most powerful motives that attracts people to science and art is the longing to escape from everyday life.

ALBERT EINSTEIN

Higher Education has a problem with the arts. In a sector that is increasingly serving first-generation students who come from lower income families, the pressure to provide a path towards secure, well-paid jobs is on. That is particularly true in this time and age of political pressure upon public institutions of higher education to emphasize STEM (Science, Technology, Engineering and Mathematics) careers rather than the liberal arts (visual and performing arts, humanities, even social sciences) with the stereotype that if you become something like an artist or a poet you are more likely to end up being underemployed at best or a hippie at worst.

We know better, of course. Numerous studies including the annual surveys carried out by institutions like SNAAP (Strategic National Arts Alumni Project) tell us otherwise. And a multitude of books and articles have been written about the value of a liberal arts education. The problem largely resides with us, higher education administrators, who have for the most part failed to communicate effectively the value of the arts to a larger and more diverse audience. Some have proposed the idea of promoting STEAM (Science, Technology, Arts, Engineering and Mathematics). So, what can we do better to advocate the arts in colleges and universities beyond clever acronyms?

What follows is a summary of my own experiences as a faculty member and higher education administrator with a science background in creatively promoting the arts.

THE SUNSHINE STATE: JURASSIC PARK

One of the problems that faculty members face when they want to teach a particular course in their area of specialization is to attract enough students for administrators to allow the course to be taught. That is particularly true with undergraduate courses that usually require somewhere between 10 to 15 students to make the course financially sensible.

I was a young assistant professor of biology at the Davie campus of Florida State

University in 1996 when I saw that among the courses in the university catalogue was one entitled "Evolutionary Paleontology." Having worked on fossils as an undergraduate in Spain and having written my doctoral dissertation on evolutionary topics, I felt that the course was right up my alley.

Furthermore, three years earlier, Steven Spielberg's extremely successful movie *Jurassic Park*, had boosted interest in dinosaurs and, therefore, in fossils. The challenge I was facing was how to attract students in biology—who were mostly seeking to follow some kind of health sciences career—to take a course that had not been offered in years, that dealt with an issue, evolution, that was very controversial at that time on a campus where there was not even a geology department.

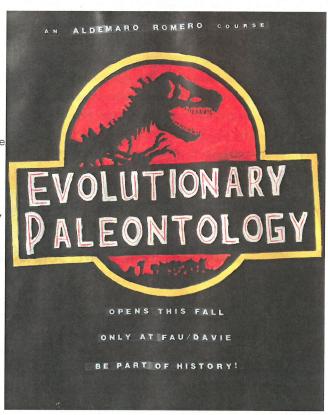
Since we are talking about a time before the explosion of social media that could be used to publicize things among the students, I decided to make a poster announcing the course to be displayed in a hall frequented by the students. However, this was easier said than done. To begin with, I am a terrible drawer. When I was a high schooler in Venezuela, I took a mandatory hands-on, visual arts course and almost failed because of my inability to draw anything decently. Even when I had to draw some simple, black and white depictions of blind cave fishes for my doctoral dissertation, it took me hours to come up with delineations of those creatures and the final results looked like something that had been drawn by a child. The solution? I decided to mimic the original Jurassic Park movie poster but substituting the title of the movie for the title of the course. Other things I did were to twist some of the phraseology typical of these kinds of posters. For example, I put on the poster "Open This Fall," "Only at FAU Davie" (instead of "Only at Your Local Theater"), "Be Part of History" (instead of "65 Million Years in The Making" in the original),

and instead of "A Steven

Spielberg Film," I wrote "An

Aldemaro Romero Course".

The result? a smashing success. Not only did I surpass the minimum number of students that had to register to make the course but also students wrote very enthusiastic reviews at the end of the semester with some evolution doubters now convinced that the evidence for the concept was there. That was a case of art by a very bad artist that helped to convey interest for a particular scientific subject unfamiliar to most students.



THE NATURAL STATE: THE ART OF BIOLOGY

When I became the Chair of the Department of Biological Sciences at Arkansas State University in 2003, I felt that we, in biology, needed to become more open to other fields not only because that was good for more interdisciplinary approaches to the world's problem but also because we could also attract more students who wanted to make biology their life's passion. Traditionally, biology majors are made up of people who were planning to pursue careers in the health sciences. They look at biology either as a natural path to those careers or as a fall back in case things do not go their way. But I wanted to change that by not only making biology more relevant in itself but also as part of the intellectual endeavor to understand the world from the perspective of more than a single discipline, and if you want to achieve that, you need to start by changing the mentality of the faculty of your own science department about the arts.

Thus, the first thing I did after becoming a biology Chair was to transform the conference room where the faculty regularly met into an art exhibit by reproducing on poster-size (or larger) prints or textiles of famous art pieces that in one way or another had to do with biology. Among the pieces I chose to reproduce were the following:

- (1): The Vitruvian Man. A drawing by Leonardo da Vinci done sometime around 1490, that represents the proportions of the human body according to the Roman Architect Vitruvius depicting a man in two superimposed positions with his arms and legs apart and inscribed in a circle and square. Vitruvius described the human figure as being the principal source of proportion among the classical orders of architecture. This sketch, kept in the Gallerie dell'Accademia in Venice, Italy, is not only an exquisite drawing in ink on paper by one of the world's most famous artists but also a great example of how Leonardo represented with absolute precision human anatomy, something biologists can refer to. I even used that drawing as the cover of my syllabi for my own courses on human biology. Not only that but I regularly asked students to do some research about that piece of art because I was going to ask about that topic as a question on the final exam.
- (2) Man at the Crossroads. A fresco by the Mexican muralist Diego Rivera. The original Spanish title of this piece, Hombre en una Encrucijada, has an interesting story behind it. In 1932, Abby Rockefeller convinced her husband, John D. Rockefeller, Jr., to commission Rivera to paint a mural for the lobby of the soon-to-be-completed Rockefeller Center in New York City. Rivera designed a 63-foot-long portrait of workers facing a symbolic crossroads of industry, science, socialism, and capitalism. He believed that his friendship with the Rockefeller family would allow him to insert a representation of Vladimir Lenin. After newspaper articles appeared attacking the mural's anti-capitalist ideology, Rivera was ordered to remove Lenin's image. When Rivera refused, offering to balance the work with a portrait of Abraham Lincoln, Rockefeller Center workers demolished the mural, despite demonstrations by Rivera supporters and negotiations to transfer the work to the Museum of Modern Art (MOMA) in New York City. Rivera recreated the fresco in the Palace of Fine Arts in Mexico City, in 1934, adding a portrait of John D. Rockefeller, Jr., in a nightclub. The mural also contains in the upper left axis surrounding the man at the center depictions of

venereal diseases (a great source of concern in the pre-penicillin era). These and other biological depictions in the lower right axis may have been taken from contemporary biology textbooks. This is also a depiction of Charles Darwin in the left bottom corner of the fresco representing the enlightenment that science brings us. All these images are very familiar to any biologist.

- (3) The Dream. This oil on canvas by the Frenchman Henri (Le Douanier) Rousseau was painted in 1910, and it is part of collection at the Museum of Modern Art of New York. Rousseau spent most of his life as a customs inspector (or douanier), devoted himself to painting upon his retirement, and became the most distinguished self-taught artist of the modern era. His gifts included an exceptional sense of design and feeling for color, but it was his exotic and sometimes bizarre vision of a purely imaginary tropical world that made his works unique and unforgettable. Rousseau explained that this painting depicts a woman reclining on a couch in Paris, dreaming she is listening to a flute player in the jungle. He claimed such scenes were inspired by his experiences in Mexico, but in fact his sources were illustrated books and visits to the zoo and botanical gardens in Paris. The right half of this painting was used by the magazine Scientific American for its cover of the monographic September 1970 issue titled "The Biosphere" and since then this image has become almost iconic among ecologists.
- (4) Galacidalacidesoxiribunucleidacid or Homage to Crick and Watson. This 1963 oil on canvas by Spanish painter Salvador Dalí has a title that is a linguistic blend of words or portmanteau of the name of Dalí's wife, Gala (depicted in the foreground of the painting, with her back to the viewer) and deoxyribonucleic acid (DNA) as a tribute to Francis Crick and James D. Watson, co-discoverers of the double helical structure of the DNA in 1953. This painting is currently in the collection of The Salvador Dalí Museum in St. Petersburg, Florida. Needless to say, the molecular structure of the DNA is a familiar one even to non-biologists.
- (5) Ecology Now! What I did was to reproduce in cloth a flag by an unknown designer whose original copy is at the National Museum of American History at the Smithsonian Institution. This was conceived sometimes in the early 1970s in the midst of the protests against the Vietnam War and environmental degradation. It was first exhibited as a poster of the flag and other environmental materials collected for the Science in American Life exhibition that took place at the Smithsonian Institution in 1994. The legend read "By calling attention to pollution, destruction of wildlife habitats, and declining natural resources, the environmental movement has challenged conventional American ideas about science, technology, and progress." Obviously, this was an attention catcher for a faculty that was mostly part of the "flower power" generation.

MARKETING A DEPARTMENT

The above experience set the stage for my next move in combining science and art. In order to attract more biology majors and to market the department as something more than a dumping ground for want-to-be health sciences students who realize that such careers were not for them, I thought that one way to do that was by producing a poster for the department. But what kind of

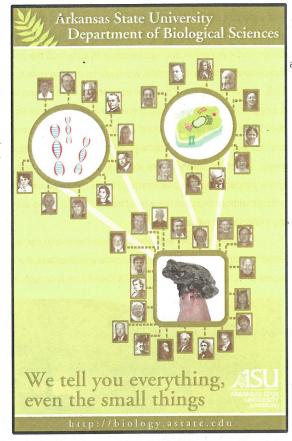
poster? I wanted something that linked our current faculty and their fields with big time names of historical figures in biology. Initially I thought of doing something similar to the cover of the Beatles' most famous album *St. Pepper's Lonely Hearts Club Band* of 1967, where they inserted themselves with reproductions of pictures of other famous people.

In September of 2006, I approached then Chair of the Department of Art and Design at Arkansas State, Curtis Steele, asking if he could find a student able to design a poster for our department along those lines. He proposed the idea of opening a competition among willing

students of his art class to come up with a design, and I embraced the idea wholeheartedly.

After providing guideline of what I was looking for, nine proposals were presented by his students either individually or as small groups. They came up with poster ideas in which our 26 faculty members were to be included. I displayed all of the designs on the table of the conference room and asked each of the 26 faculty members to vote on which one they liked the most, which was also a way for me to say that there was a democratic process is choosing how they wanted to be portrayed.

The winning design was one that intercalated the faculty pictures with those of famous biologists with a very brief mention of their area of expertise. They were grouped into three



major subdisciplines: molecular biology, cell biology, and environmental and evolutionary biology, with each one of those subdisciplines represented by a drawing. The student who came up with the design (whose name I've forgotten) also came up with a tagline for the poster: "We tell you everything, even the small things". I also ordered the printing of the same poster but in Spanish in order to attract a more diverse group of students to the department.

The poster was a success among faculty and students with many asking for copies to be displayed throughout campus buildings. It certainly helped to create a sense of community among us and helped to recruit some Latino students.

MORE ARTISTIC MARKETING OF THE SCIENCES

By the Fall of 2007, I began to have ideas about how to expand the promotion of the department by collaborating with other departments with similar interests. Since Biological Sciences shared a building with the Department Chemistry and Physics at Arkansas State University, I approached my colleague and good friend Dr. John Pratte, then Chair and Professor of Chemistry and Physics, about using the entrance hall as a museum exhibit of our departments' faculty in order to showcase their research and to attract more students interested in the sciences. The exhibit we created was a mixture of animal, plant, and mineral museum specimens, along with live exhibits of plants, animals, and active displays from environmental monitoring stations. One unique exhibit was the skeleton of a porpoise that had become stranded off the coast of Massachusetts and was dissected and mounted by the students in my class on marine mammals. This was paired with the cast of the skull of a minke whale at the front entrance to the building to help draw visitors into the space. On the opposite side of the lobby, there was a vivarium containing some live specimens of basiliscus (the "Jesus Christ lizard" named for its ability to walk over the water) and blind cave fishes (my own subject of research). This was coupled to a marine aquarium with some 50 species of fish, corals, and other invertebrates aimed at promoting the new marine science program that was under preparation. The placement of these two exhibits allowed visitors to spend time watching the animals without being in the way of traffic flow. All these live animals were bred in captivity to avoid any collecting in nature.1

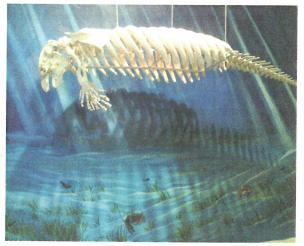
Other themes exhibited included research carried out by our faculty on the ivorybilled woodpecker, flying squirrels, mine salamanders, the effects of nicotine on the brain, and the recent documentary filmed by BBC's David Attenborough in Arkansas on that subject. A complete



specimen of the American alligator "Big Arkie" was also exhibited. Some sections of the exhibit were made available online, such as the data output from a local seismograph and meteorological station on campus. The output from these was displayed on monitors in the lobby as well. This data was also used by researchers who are studying the New Madrid Fault Zone and by students in climatology classes. A major part of the exhibit was a rotating set of rocks and minerals from all over the world that had recently been donated by an alum.

The opening of this exhibit was made to coincide with the celebration of "The Week of Science" that included the showing of science-related films, the 200th anniversary of the birthdays of Abraham Lincoln and Charles Darwin, and the release of a high-altitude atmospheric probe. At the cost of nearly \$50,000, this science expo was fully funded by private donations and funds generated by the university's research activities.²

These initial exhibits fit in the cavernous front lobby, but later expansions would draw admirers further into the buildings hallways and stairwells. For example, the skeleton of a manatee was mounted at the base of the main stairwell in front of a wall painted as a diorama. The manatee in question was a female, 132 inches in length that weighed more than 1300 pounds at death. Manatees are very large animals that normally reach about 135 inches, so the one exhibited was a full adult. This manatee was found dead and severely decomposed on a beach next to a canal in Sarasota Bay, Manatee County, Florida, in July 2004. Biologists of the Florida Fish and Wildlife Conservation Commission determined that the cause of death had been collision with a watercraft whose propeller made severe scars all over its body. Since historically this species had been exploited and because of environmental changes in its coastal habitats, its population has been reduced significantly and is now considered "Vulnerable" by the International Union for the Conservation of Nature (IUCN) and at that time "Endangered" by the U.S. Fish and Wildlife Service (USFWS). Since this species is protected under the U.S. Marine Mammal Protection Act, we had to request a special permit from the federal government in order to obtain the specimen and keep it on our premises.



The skeleton was received unarticulated, and it was the job of then ASU biology graduate student Tracy Klotz to mount it. This was the first time that a manatee skeleton had been mounted in the Midsouth. Klotz had to use pictures and drawings from a variety of resources to figure out how the nearly 200 bones of this animal articulate. We also used the skeleton for teaching, research,

and outreach purposes. The mural that served as the ecological background for the manatee was done by ASU Art student Amber Heard, who used pictures from the natural environment of the Florida manatee to recreate its habitat. The exhibit included an electronic screen that revealed, in the form of a slide show, information on this animal.

The entire exhibit became a place for showing off the university, especially when groups of students and their relatives came to explore the university as a place of study, thus becoming a way to increase enrollment in the sciences. More importantly, the exhibit sparked a research interest in our students that blossomed into several extramural endeavors. Students viewing the porpoise and manatee became interested in other animals that might be flensed and mounted. Soon, an emu was prepared for an exhibit in the hallway leading from the lobby. This was followed by the curation of an alligator skeleton to mirror the "Big Arkie" exhibit so that viewers can see what the skeleton inside of the animal would look like.

Along the way, students became interested in other types of plants and animals that could be curated. With help from an NSF S-STEM grant, several students became involved in the curation of the herbarium collection that was stored at Arkansas State. This led to the creation of the Natural Histories Collections Curation Club (NHC³), which became a registered student group on campus. This group also began curating the massive fish and reptile collection that biologists at the institution had been gathering over the years. From this came three additional NSF grant awards. One was to fund the NHC³ to hold workshops at other universities and colleges on how to start such a student club and get it involved in research. The other two awards were for the formation of a multi-institutional consortium to digitize collections for researchers to be able to use online. These projects are still ongoing and have changed many lives.

HOLLYWOOD!

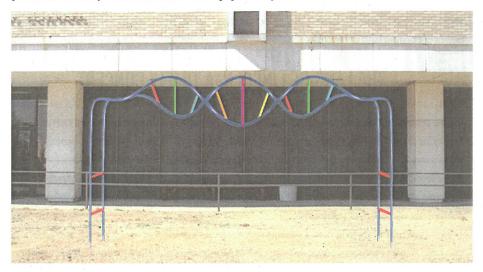
Science-based movies have always been a commercially important theme for Hollywood. From the Silent Film Era to Steven Spielberg movies, science and scientists have been represented in many shapes and forms. Since movies are a big attraction for younger audiences, why not to use them to promote science?

I first came up with the idea for a "Science Flicks" series in 2007. The idea was to show a science-based movie in the Lab Science Building at Arkansas State University in Jonesboro each month, followed by a panel discussion with experts from the scientific field related to the movie. I again asked my colleague Dr. John Pratte, a physicist who has been a longtime advocate for the use of narrative in the teaching of science and has presented papers on the subject at academic conferences, to participate. Initially, this film series stood on its own; however, within a semester, we had developed a course titled "Science in the Cinema" that incorporated the film series, i.e. movies were still presented to the general public, but students in the class dug deeper into the issues presented. Besides the films in the series, students watched complementary movies at the library, read both a textbook and papers, and actively participated in the discussions about these movies.

In later semesters, we brought in Dr. Bethany Stillion, a psychologist, playwright, and actor, as a co-instructor to broaden the discussions in the course. Among the topics discussed were the public perception of science, how to watch for science content in movies, the portrayal of space aliens, the representation of objects colliding with the Earth, environmental catastrophes, nuclear wars, uncontrolled germs, computers gone wild, the stereotypical portrayals of scientists, predictions about the future, and scientific accuracy in movies in general. By the end of the semester, students were able to better understand how and why movies portray science as a public endeavor. They also understood how movies used basic stereotypes as a shorthand to further the plot in a short time frame, and how the use of these stereotypes colored the public perception of scientists and the science they did. Films were categorized based on whether they were apocalyptic or futuristic or about space aliens, "mad scientists," monsters, robots, telekinetic, or a combination of two or more of those themes. The course was offered at both undergraduate and graduate levels.

The whole experience was a great success in attracting not only students, but also the attention of the general public which, by the way, had to walk through the "Hall of Science" described above to go to the auditorium where the movies were projected and discussed. It was also a great cultural experience for the students when they saw how society of the 50s and 60s was being portrayed, for example, how common it was to see people smoking even if they were physicians or how women were portrayed in those movies by always screaming or fainting every time the saw an alien or a monster. Still, it was necessary to explain that the emphasis on aliens in the 50s was a product of the fear of communism in the McCarthy era.

To publicize all of the successes we were having, I used the university radio station, KASU-FM, a local National Public Radio (NPR) affiliate for which I produced and directed a radio show titled "Science in the Natural State," a show that was picked up by other NPR stations. I also published a weekly column in the local newspaper, The Jonesboro Sun, to the same end.



SCULPTURING FAILURE

However, not everything I tried was a success and sometimes it was for reasons beyond anyone's control. Given the well-received initiatives described above, I thought: why not take science-related art exhibits to the open spaces of the campus? I started to mull over some ideas with Curtis Steele, the Chair of the Art and Design Department, and one of the ideas was to design a DNA sculpture that could be not only aesthetically attractive but also functional, something that people, especially the young, could play with. I cannot remember who exactly, but one of us came up with a simple DNA design similar to the ones we find at playgrounds. We even identified an alumna who was willing to make it as long as we would cover the cost of the materials (about \$1,000 at that time), which would be provided through private donations. But when we thought we had everything lined-up and after informing the higher administration of our plans, university officials discovered that the institution did not have policies regarding display of art in public spaces. Apparently, a big issue.

Thus, the administration came up with a draft of a policy that involved a number of review committees and approval levels, so that even when the project was totally financed from outside sources, it would take months, if not years, for anything to be approved. To make things worse, the art faculty saw the whole policy proposal as a way to censure art, especially that involving nudes or politically controversial issues. The whole story became the source of articles in *The Jonesboro Sun*, the local newspaper, as well an editorial in the student newspaper, *The Herald*.⁷

In the end, I decided to withdraw the proposal. I felt that I was between a rock and a hard place. As a faculty member, I entirely sympathized with the art faculty, which was very sensitive towards the possibility of art being censored by the university administration. As department Chair who operated at the pleasure of the university administration, I could not defy university policies and procedures. In other words, it was just too much of a controversy to get something simple done. This was a case that should teach a lesson to administrators: although it is important to have policies in order to keep an institution of higher education working smoothly and fairly for everyone, they should never become an obstacle to creativity and innovation, which are two of the most important pillars of colleges and universities.

THE LAND OF LINCOLN: A TIMELY CONCERT

When I interviewed for the position of Dean for the College or Arts and Sciences (CAS) at Southern Illinois University Edwardsville (SIUE) in 2009, I could sense some uneasiness from a part of the faculty because I was a scientist, and they may have thought that I would be only interested in supporting the sciences to the detriment of other disciplines, particularly the arts. Somehow, they felt relieved when I told them that my father, who had passed away recently, was a composer, arranger, and orchestra conductor. But once I got the job I knew that I had to do something to confirm my commitment to the arts.

What I did was to plan a concert with my father's music that would include two pieces that I could use to bridge science and art. One of those pieces was "Five Paleontological Mysteries,"

a five-movement score for strings and bandoneon that my father wrote based on a number of fossils from Spain that I had been describing over the years.

It all got started for no particular reason. I sent my father a scientific article I published about those fossils, and to my surprise he converted that information into a musical composition. This might have been the first time that an obscure scientific paper inspired music. I decided to accompany the performance of this piece with a video based on pictures of these fossils. Given the variety of meters and tempos, it was a challenge to produce and edit the video in synchrony with the music, but it worked.⁸

The other piece I used was "Fuga con Pajarillo" (Fugue with Little Bird), arguably the most performed of my father's academic music. I decided to use it as the musical score for a video beautifully shot and edited by one of our faculty members in the Mass Communications Department: Cory Byers. I gave Cory the music and told him that this could be used to illustrate what every academic unit in the CAS does that is unique to that unit. He took care of the rest. Again, this musical piece was performed in synchrony with the video. It was not necessarily a relaxed performance because Venezuelan music is not easy to play for people unaccustomed to the syncopation of that kind of music. Thus, I decided to conduct the two pieces myself because I am very familiar with both my father's music and the videos, and you needed both familiarities when conducting without reading a musical score and trying to make the music to play in perfect synchrony with a video. To perform the music, I contacted Peter Soave, one of the world's greatest accordionists and the performer my father had in mind when he wrote the "Five Paleontological Mysteries." He suggested a superb chamber music group, the Carpe Diem String Quartet, who executed these technically challenging scores with superb precision and musical sensitivity. The logistics for the concert were magnificently put together by the Director of the Arts & Issues series at SIUE, Grant Adree. A complete success in terms of public attendance and critical reviews, the concert raised some money for the College and, more importantly, established me as a true friend of the arts, despite my being a scientist.

ART-A-THONS AND FLASHMOBS

One issue we are facing in academia is lack of engagement. With more pressure on faculty to get tenure and promotion and with more students who have pressing financial needs, what we are seeing is people spending less and less time with each other on campus, which leads to fewer community activities on colleges and universities, and that means fewer artistic events, which are part of the soul of campuses.

To deal with this problem, I decided to organize annual "art-a-thons," that is, day-long programs of events encompassing many types of artistic activities in which the public could participate not only by attending concerts, plays, video showings, or exhibitions, but also by doing hands-on activities like how to make pottery, or play a percussion instrument, drawing exercises, marathon readings, presentations of student videos, etc. The total number of events was usually around 20. To project an image of the university as a vibrant place within the community, the

general public was invited. The date chosen for the Art-A-Thon was made to coincide with the Arts Advocacy Day, ¹⁰ Shakespeare's birthday (sometime in April because nobody knows the exact day he was born), and the like. Usually all these dates are sometime in the Spring, which is good because many of the activities can take place outdoors.

A major event attracting a lot of attention was a flashmob in which a number of students started to show up at a highly transited public space on campus at noon (usually the time of the highest traffic). One of those flashmobs was the performance of an abbreviated version of the fourth movement of Beethoven's 9th symphony (the "Ode of Joy"), in which I closely collaborated with the Department of Music, chaired at that time by my friend Audrey Tallant.

The whole performance was choreographed so that a few students started to come out from different rooms of the Student Union, and as the piece progressed, more and more performers joined the recital at the center of the hall in that facility. We hired an arranger to rewrite the score for the kind of musicians available and in an abbreviated form. Since the main theme of this movement is widely known, it was easy to imagine people sensing that the piece was familiar to them. That was especially the case once the choir started to sing. I also asked one of the dance instructors to choreograph something after the choir started singing, so it was going to be a very comprehensive artistic event. I personally had a lot of fun conducting it because the experience allowed me to get to know students with whom I rarely have the opportunity to interact. Usually flashmobs take place by surprise before an unsuspecting audience. The problem is that when you have more than 100 people involved in something, especially when many of them are college kids who seem to spend all their time in social media—well, good luck with that. Several video cameras were placed at strategic points so that the whole event could be broadcast via Facebook Live. At the end, we had more than 100 performers, between musicians, singers, and dancers, participating. It was a great success with the campus community, and the video went viral among campus participants.

COMMUNICATING SUCCESS

All these initiatives worked out well, but I felt that we needed to communicate them well also. That is why I launched three major initiatives. The first was a weekly radio show series titled "Segue." This radio show was broadcast by the university's radio station (88.7 WSIE FM) and also posted on the website of the College of Arts and Sciences. 200 episodes of those shows lasting 30 minutes and sometimes even a full hour each were produced, and they consisted, for the most part, of interviews with faculty members about their scholarship and teaching. 12

As an offshoot of these radio shows, a roughly 1,000-word article that summarized the most interesting points of each show was published in the local newspaper, *The Edwardsville Intelligencer*, and also posted on several websites. ¹³ Access to these two venues was facilitated by the then Chair of the Department of Communications, Dr. Gary Hicks, a superb professional with whom I continue to collaborate to this day.

Finally, I coedited two books coauthored by either then current faculty or retired ones about their work at the College. 14,15 These books were a great success, not only publicizing the

achievements of the College but also acting as a fundraising tool. One of the retiring professors who contributed to the book with a chapter gave us an unsolicited check for \$150,000 to have a teaching lab named after him. A key individual with whom I worked in these two books was my colleague and friend Dr. Larry LaFond, who kept the prose of the books straight and always provided good advice when it came to selecting the authors of the chapters.

A FAILED DREAM

But not everything was a success at SIUE. When I became Dean of the College of Arts and Sciences it was clear to me that the college had very strong arts programs, yet it lacked good venues, especially for performing arts. SIUE was historically known as the central location for the Mississippi River Festival (MRF), a festival of the performing arts that originated in 1969 as a joint effort between the University and the St. Louis Symphony Society. The MRF quickly evolved into a varied performing arts festival that presented the best in classical music, contemporary music, drama, dance, and film, drawing large audiences for over twenty years from both sides of the Mississippi River and from far beyond the metropolitan St. Louis area.

Another historical initiative at SIUE's was the *Arts & Issues* series. It had a long tradition of providing affordable, high-quality cultural and educational programs directed at a wide cross-section of the community. Through its world-class productions and programs, SIUE's *Arts & Issues* provided a wide variety of points of view, theatrical, musical, and dance performances to area residents and students. This series had featured legendary artists and thinkers such as Dizzy Gillespie, Dave Brubeck, Maya Angelou, Norman Mailer, Joyce Carol Oates, John Kenneth Galbraith, and William F. Buckley. The Arts & Issues series was complimented by robust programming through the Department of Theater and Dance, the Department of Art and Design, the Department of Music, and a University Museum encompassing over 60,000 artifacts from Pre-Columbian, Native American, African, Oceanic, Oriental, Greek, Roman, and Egyptian cultures as well as major collections of works by contemporary artists. The Museum's outstanding collection of architectural ornament focused on Louis Henri Sullivan, founder of the "Chicago School" of architecture.

Arts & Issues alone attracted audiences of more than 3,500 annually; the performances offered through the Music Department brought approximately 4,000 people to campus annually; the Department of Art and Design's exhibits attracted over 7,000 guests annually; and most remarkably, Theater and Dance events attracted over 10,000 visitors annually over the academic and summer semesters. Using the "Arts and Economic Prosperity Calculator" tool provided by Americans for the Arts, the then total economic impact was estimated to be more than \$1.6 million.

Despite all this, the arts facilities were less than adequate. For example, what was used as a "concert hall" was not only small in terms of space but also horrible in terms of acoustics: it was built as a TV studio like the ones that were designed in the 1950s for live TV shows. Not only that, but the dance studio was so inappropriate that a consultant told us that such a facility would not pass the standards required for accreditation by NASD (National Association of Schools of

Dance), the reason why that academic program was the only one in the entire university that was not accredited.

All this was strong evidence of significant, untapped potential. I thought that if we could attract these numbers with existing, inadequate facilities, imagine what we could do with a world-class *Visual and Performing Arts Center* (VPAC). Its geographical location within 20 minutes of downtown St. Louis and close to the rural populations of Southern Illinois seemed ideal.

Thus, I came up with the idea of designing and fundraising for the VPAC. In fact, the idea was not that far-fetched given the musical history of the institution. My vision was to build a highly unique performing and visual arts facility combing existing and cutting-edge technologies to create an interactive, flexible, democratic, and open performance and exhibition environment, giving access to the performing and visual arts in numerous ways to a variety of audiences.

I proposed a new world-class facility that would: (1) allow new forms of expression, (2) create an innovative and flexible space open in new ways to the public through technology, (3) serve populations currently without access to visual and performing arts, and (4) enhance SIUE's academic reputation in the arts. To that end, I developed the concept of an architectural design that does things rather than simply represents them. The SIUE Visual and Performing Arts Center I imagined had components that together would have allowed for much broader and more affordable access to the arts, and would have integrated the arts into the community fabric in innovative and unprecedented ways. The facility would have had five major elements: (1) an exterior that blends with the beauty of the campus and can be used as a platform for projecting art, similar to the Hamburg Kunsthalle; (2) a Concert Hall designed to have high-quality sound projection using cutting-edge designs and materials while incorporating electronic visual elements (including holography) that can be used to accompany the audio; (3) a "Theater-Machine" designed to have numerous movable parts using hydraulics so that it can be adapted for different types of performances and/or uses, similar to the Teatros del Canal in Madrid, Spain; (4) a Visual Exhibit Area that would also be flexible in its internal design allowing for different types of exhibits, while incorporating capabilities for the use of 3-D and holographic projections; and (5) an Atrium that, in addition to concessions, would provide actual "windows into works in progress" to display what goes on behind the scenes in the workshops for music, theater, and visual arts. 16

My idea was that the proposed facility would not only transcend convention, but also would be a place where the artist could define what it means to suspend belief, break tradition, and dismantle established frames of illusion and creativity. The new facility would generate operational revenue through rental and advertising income. Most importantly, the new center would have attracted audiences from east and west of the Mississippi river. The new Center would have put Southern Illinois and SIUE on the metropolitan St. Louis area map, helping to break down the psychological barrier of the river and bring together East and West St. Louis, while serving a severely underserved population rich in artistic and creative history, home of Katherine Dunham, Maya Angelou, and Miles Davis, among many others. It would have given SIUE and the metropolitan St. Louis area a new international profile, increasing recruitment and retention of both students and faculty while elevating academic standards at SIUE and beyond. I consulted with

internal and external constituencies to be ready to raise the funds privately. In consultation with Morris Architectural Planners and Figueras International, I estimated that the maximum cost of the feasibility study would have been \$100,000. Following this initial fundraising effort, I would have proceeded to open a bid process (following state regulations) to choose the consulting firm(s) that would execute the feasibility study. That study would have provided a detailed timeline and benchmarks regarding the development of the project, evaluation, and fundraising plans.

Based on the advice received from Morris Architectural Planners and Figueras International, this building would have cost a maximum of about \$50 million (including unexpected expenditures). I identified about 70 US private foundations that would have provided support for this type of project. However, I would have focused initially on individuals through the network of supporters that have given financial aid in the past to the University as well as new donors that were to be identified. Given that this building would have been unique in its conception, I intended to market it among potential donors as such. My draft fundraising plan suggested seeking roughly 2,000 gifts ranging from \$5M to \$15,000 in order to reach the projected cost. ¹⁷ I even produced a video with the theme "We will build it" with music by one of our music professors, Rick Hayden, who composed a modernist music, and then many of our international faculty saying in their native language "we will build it." Thus, enthusiasm among the university community was widespread.

Despite all this I received no support from the upper administration. I could not understand how a project that was to be funded exclusively by private sources and that would have generated income to a university starved for money, could be ignored or just rejected. One of the arguments I heard was that the university could not afford to clean the facility, despite the fact that the money generated by it would have taken care of that. If I were to summarize what happened, I would put it in very simple terms: sometimes higher education managers see themselves more as bureaucrats than visionary leaders. So that was the end of it.

THE BIG APPLE

In 2016, I became the Dean of the Weissman Arts and Sciences (WSAS) at Baruch College, part of the City University of New York (CUNY) system. In the cultural capital of the world, the possibilities to promote the arts were limitless. Yet I had to confront a number of challenges. First was the fact that Baruch was an urban campus, meaning that there was little sense of communal activity. Second, Baruch was considered a "business school," meaning that the arts and sciences school that I was leading had been viewed as an accessory providing general education courses, despite the fact that we had nationally and internationally recognized scholars with faculty holding numerous grants from the National Science Foundation and Guggenheim fellowships.

Therefore, I felt I needed to elevate the profile of the school along the lines of making it a "destination school" (as specified by the college's strategic plan). In other words, a place where people—students and faculty—wanted to go not because it was an afterthought but because of its intrinsic values. I repeated some of the same experiences that I have described in the previous section of this chapter such as the radio shows (which were now being podcast), weekly

newspaper-formatted articles that now were being widely distributed through social media such as Twitter, Facebook, Gmail+, Pinterest, LinkedIn, and the like, as well as being posted in more academic-oriented sites such as Academia.edu and ResearchGate.edu. I now added video blogs, 3-5 minute weekly video segments about what was going on in WSAS, which not only were widely distributed through social media but also emailed to the college community.¹⁹

As for the art-a-thons and flashmobs, I followed the same scheme that I used at SIUE. To my surprise, these events had a very high level of faculty and student participation with rooms full of people and great publicity and reviews in the internal media of the College, 20 while faculty were elated to participate. Not bad for a campus that had very little tradition of communal events.

A MUSIC VIDEO

But to me that was not enough. I wanted to convey a sense of place and to take advantage of the fact that Baruch has one of the most diverse student bodies in the U.S.²¹ But how to convey that through the venues students use the most, i.e., social media? I decided to produce a music video in which the protagonists would be students themselves singing and dancing in the campus premises (basically a building). The first challenge was how to come up with an original composition whose score and lyrics convey the ideas of fun, diversity, and excitement about the school of arts and sciences. I contacted one of our faculty who happened to be a musician with recording experience (even though a member of the Department of Journalism and Writing Professions), Eugene ("Gene") Marlow. Gene wrote the music with a rap beat, and he contacted a much younger person, Janet Lawson, to write the lyrics. The theme that was chosen was "wonder"—to convey that you come to college to wonder about things, to explore what you want to do in the future—and that was also the title chosen for the piece. Very much aligned with the nature of a liberal arts education.

Gene contacted a number of musicians and vocalists to record the theme at Dubway Studios, with the editing and mixing taking place at Valhalla Studios, and the master at Onomatopoeia, all in New York City. Most of the voices were from our a capella group "The Blue Notes" led by Laina Tzanides. I had a cameo appearance singing as a tenor/bass. Thus, I asked some of the members of The Blue Notes who had participated in the recording to be the ones appearing singing, acting, and dancing in the video. I chose the locations on campus, came up with some choreography, and asked one of our former students, Stevie Borrello—with whom I had been working on video projects since I came to Baruch—to do the videography and the editing.

The video became viral²² and has been passed around among the students since then. In fact, since a lot of people asked me about how the video was made, I asked Stevie to write the script for another video entitled "The Making of the Weissman School Music Video," which was also successful in portraying what our school was all about.²³ These pieces were a good example of how collaboration between faculty, students, and external individuals could generate a community sense of who you are.

THE FUTURE IS NOW

My next idea was to produce a poster with a tagline that could convey why we at WSAS were unique. There are more than 4,500 institutions of higher education in the U.S. All of them promise—in one way or another—that students are going to have fun, learn ... and get a job after graduation. The problem is that all of them try to copy each other in the way they advertise themselves. Almost all of them talk use the term "excellence." In fact, in many cases, if you just exchange institutional names, you would have a hard time trying to tell each one's website from the others.

So I tried to figure out how could I envision a poster that was different from anything else. How to be distinct in the jungle of institutions of higher education in this country? I came out with two common ideas among students. One has to do with the "future" because all of them know that college is a vehicle for what you want to achieve in life. The other is that if you observe students, they seem to spend most of their time "connected" to their mobile devices. Given that we at the

school were in the process of creating a virtual reality (VR) lab, for which you need to use goggles, and after looking at dozens of movie posters, I designed a sketch of a poster with a student wearing the goggles and looking upwards towards the sky with a star reflected on the lenses, an image of planet earth as seen from space as a background, and the following tagline at the top: "The Education of Tomorrow, Today," with the name of the school at the bottom. The student I chose for the poster was a student of color to send the subliminal message that we prize diversity. Faculty were really enthusiastic about the design (finalized by one of our students) to the point that many of them asked for a copy of the poster to be displayed on the walls of their departments.



AN ART EXHIBIT WITH A TWIST

One of the units that were part of the Weisman School of Arts and Sciences when I became dean was The Sidney Mishkin Gallery. Created with a donated collection more than 25 years ago, the gallery had a small but high-quality collection of art. During that time, it was able to maintain a regular number of exhibits getting good reviews in *The New York Times* and The *Washington Post* among others. However, it had been belittled by previous administrations with some of the art pieces being sold just for the sake of money (a big "no, no" in the world of art galleries, particularly at institutions of higher education) and some of the endowment money being transferred to other accounts under financial stress (actually a violation of Internal Revenue Service rules).

Although all that happened well before my time, I could see that the gallery had great potential because of its location and dedicated staff. It also had its challenges. One of them was its location in the main floor of the administration building, meaning that no students and very few faculty pass by the gallery on a regular basis.

Since I thought it provided a great opportunity to promote the arts within the campus community, I came up with the following idea: since I was a graduate student in the 1980s, my wife and I had been collecting art pieces (oil paint on canvas, lithographs, papier-mâché, bark, wood, sculptures, and cloths) from Latin America, mostly by buying them directly from the artists themselves. These were self-taught artists who lacked professional education and training. Among the major characteristics of this art are simplicity, repetition, a geometrically erroneous sense of perspective, and the use of brilliant, saturated colors. For example, in a jungle scene in one the pieces by the Haitian artist E. Marime, he painted every leaf individually, repeating its shape rather than creating clusters of foliage. The intensely colored jungle animals and plants appear stacked in space, without a traditional use of perspective.

Although it is sometimes confused with folk art, self-taught art usually lacks a clear cultural context, and it is often hard to identify by its geographic origin. Some self-taught artists are well-known, including the French painter Henri Rousseau (1944-1910), who was discovered by Pablo Picasso. Lately many of these unknown artists have become part of the art historical canon, as self-taught art has become very popular with colleges and museums devoted to teaching.

Thus, I took pictures of every single piece of the collection (about 100) and showed them to the then gallery director Sandra Kraskin and proposed the idea of exhibiting a selection of them for fundraising purposes for the gallery and also to create more interest within the college community about the gallery itself. I figured that a lot of people would come to see it just out of curiosity to find out what kind of art was being privately collected by one of its deans.

Kraskin selected 40 of those pieces originally from Brazil, Costa Rica, Cuba, Guatemala, Haiti, Mexico, Panama, and Venezuela, and arranged them geographically instead of chronologically. Then I approached Hedy Feit, a long-time donor of the college from Chile and a great supporter of Latin American culture, to create a fund not only to support this particular exhibit but also four other Latin American exhibits in subsequent years, so she created the "Schlinder-

Lizana Fund for Latin American Arts & Cultures at Baruch College" for \$125,000, so each exhibit would receive \$25,000 for its curation.

The Self-Taught Art from Latin America and the Caribbean exhibit ran from April 21 to Friday May 19, 2017, and its opening was a fabulous success. There were so many people at the gallery that for a while I was afraid that the fire marshal would show up and shut down the whole event. I went to Stevie Borrello again to write the script and edit a short video about the exhibition. Because all the artists represented at the exhibit were self-taught and convey the authenticity of their craft without a formal training in the arts, I asked Jennifer Tavarez, a secretary of the Modern Languages department at the College, whose heritage is from the Dominican Republic, to do the narration. Although she has a good voice, she had had no training in broadcasting, so I sat with her in the audio studio, and she contributed an English voice with a Latin American accent that sounded really authentic. Thus, I achieved my objectives of increasing the visibility of the gallery, fundraising for it, and establishing the basis for more interesting exhibits for the future.

CONCERT

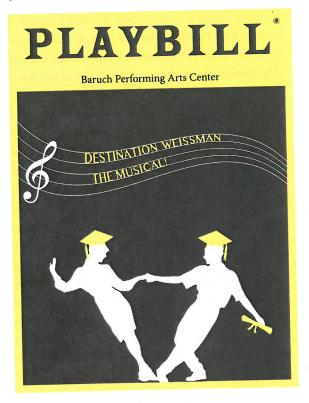
Sometimes ideas that come to you out of pure chance and serendipity can be more fortuitous than winning the lottery. One of the team-building experiences that I had developed at SIUE, which I described above, was to edit a book co-authored by faculty members in which we could convey first-hand what it meant to be at our institution. When I became Dean at Baruch College I decided to do the same thing. This time I asked the associate dean Gary Hentzi to help me to co-edited it. He was the perfect choice. Not only he was a professor of English, which is key to make sure that the prose of the chapters was consistently good, but also he had been in the institution for nearly 30 years. His institutional memory was exactly what was needed to select the authors for the different disciplines.

From my own experience editing this kind of book, I knew that illustrations in the form of pictures from the past were a good way to refresh memories and convey how things have changed through time. Therefore, Gary and I went to Baruch College's archives in the library to see what was there that we could use to illustrate this book. The archivist, Sandra Roff, showed us a variety of pictures, and one of them was of a building located in the exact place where the main campus building, the "vertical campus," is located today. When Sandra mentioned that the previous building was the RCA Victor studios, I got goosebumps. Not only was that the place where luminaries such as Elvis Presley, Harry Belafonte, Antonio Carlos Jobim, Count Basie, Plácido Domingo, Robert Flack, Duke Ellington, Ella Fitzgerald, The Everly Brothers, The Monkees, and Aaron Copland had recorded, but it was also where my father had recorded his first album back in 1954 when we were living in New York City. Imagine what it was for me to realize that I was working at the exact GPS location where my father began his recording career more than 60 years earlier. I shared this story with Ted Altschuler, the Director of the Baruch's Performing Arts Center (BPAC), and he suggested that we present a concert of my father's music to celebrate that tremendous geographic and historical coincidence. ²⁶

Since some of my late father's music is complicated, I contacted his widow in Caracas, Elizabeth Rossi, to find out which Venezuelan musicians I could find in New York to interpret my father's music. She immediately recommended Selene Quiroga, a young and excellent pianist and vocalist who was putting together a CD of my father's music in her own arrangements. She was very enthusiastic about the idea and recruited other Venezuelan musicians living in the U.S. who knew my father's music very well, such as the Grammy-nominated cuatro player Jorge Glem (known as "the Jimmy Hendrix of the cuatro"), thd bass player Gonzalo Teppa, the drummer Fabio Rojas, and the pianist Gonzalo Grau. To find Venezuelan musicians of that caliber living in this country was possible because of the diaspora of Venezuelans who have come here to escape the terrible economic and political situation in their home country.

I also incorporated the resident Alexander String Quartet so that some of my father's classical compositions could be performed. The college's a capella group, The Blue Notes, was brought in for one of the pieces; a student, Iosu Bascaran, did the choreography for the choral group walking in and out of the concert hall; I played the melodica, hosted, and conducted the concert. Two of the pieces were world premieres of my father compositions; some of the pieces were accompanied by videos; and at the end of the concert during an encore, I brought in my not-quite 2-year-old grandson Jordi O'Neill, who sat on my lap at the piano to play a few notes.²⁷ Between artists and staff, about 50 people were involved in the production of the show. The concert,

which took place on November 17, 2017, was very successful. Critics gave it rave reviews. 28 Not only did we have a full house, but it also helped us to raise some money for BPAC, and a DVD with both the full concert and the documentary about its making was made in order to be used for fundraising purposes. My final objective is to make of the BPAC a name opportunity for a major donor, and time will tell whether or not it will be successful.



BROADWAY!

Sometimes people can take you too seriously. After the radio shows, the art exhibit, the music video, and the concert in less than two years, some people were asking me: "what's next?" I responded in a sarcastic way "wait and see," although I really had nothing in mind. Then it occurred to me to come up with a practical joke. How about insinuating something so outlandish that people would laugh at it? Thus, I said to myself, why not a fake Broadway production? I asked (in secret) one of our students working for our marketing department in the school, Samantha Azizo, to produce a poster representing the cover of "Playbill," the monthly magazine for U.S. theatergoers, announcing "Weissman, The Musical"

At the holiday party in December of 2017, we had a great gathering as usual. When it came time for me to say a few holiday-related words I "announced" that our next big event would be a Broadway musical about the school, and that in order to make it as authentic as possible, the performers would be members of our faculty, who would be provided with acting, dancing, and singing lessons and, more importantly, release from teaching some courses. I was laughing while making the announcement while showing the poster of the fake cover to the gathering.

I truly believed that everybody had understood the joke. It was not until the next day, when some people started to ask me questions, that I realized everybody thought I was serious. It never occurred to me that faculty at the gathering would really think I was planning to spend the millions of dollars and months, if not years, to produce a Broadway musical about the school. That would have taken a lot of creativity...

POSTSCRIPT

I began this chapter with a quote from Albert Einstein, who remarked that what attracts people to science and art is the longing to escape from everyday life. And that is an appropriate quote for this chapter. We university administrators are constantly inundated with demands for our time for mundane and sometimes not so enjoyable tasks, such as budgeting, managing, fundraising, scheduling, communicating, and the like. When we got into academia, that was not what we were looking for; however, for a variety of reasons we entered the world of academic administration. But that does not mean that we have to limit ourselves to those routine tasks all the time. We should have fun as well, and developing creative ideas in our day-to-day tasks is one thing that can make our job more enjoyable.

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