



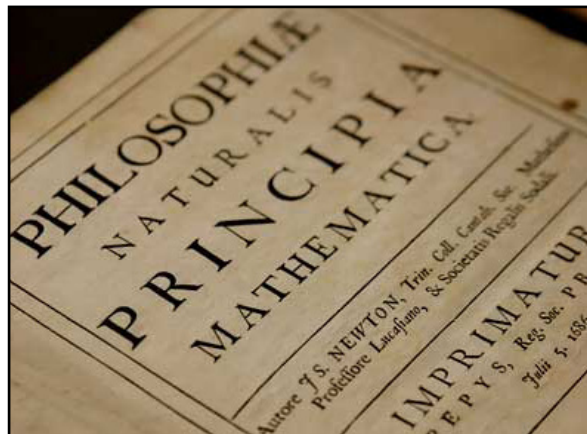
Honors Program

November 2009

THE VIEW FROM HERE

BY DR. MONICA HALKA

Sir Harry Kroto, 1996 Nobel prize winner in chemistry, visited campus early this month to give a couple of talks, one specifically for students in Dr. Paul Houston's Honors Program course (see page 4). At one point he stated that the biggest danger facing humankind is "the wanton destruction of the enlightenment," which startled me because the notion is rather frightening. But I'm afraid he's right. The enlightenment, heralded by the writings of René Descartes and Isaac Newton in the mid- to late 1600s, is a lovely name for the awakening of humankind to the power of the mind and its ability to figure things out by reasoning. Nearly 400 years later, however, judgments made in contemporary society do not, for the most part, seem to be based on reason or free thinking. Intellectual discourse is practically extinct. Outside the classroom, off campus, how often do you hear people discussing (in an enlightened fashion) big ideas, philosophy, meaning? Mostly I hear people telling me how I should think. So-called news analysts tell me what I should believe about what I just heard on the news. Commentators rant. Waiters tell me the prime rib would be an excellent choice (I'm vegetarian). Fortunately, no one tells me how to run my special topic course. There my students and I can reconstruct the enlightenment in tiny increments by reading, questioning, and discussing. It's the best part of my day.



What Would Thoreau Do?

BY VICTOR LESNIEWSKI

So what would Thoreau do by the time November rolled around? Well, he probably would have had his house built by now. But that would be Thoreau at Walden Pond, and this is an Honors Program special topic course at Architecture West. For our "Thoreau's House" course led by Colonel Crawford, we are attempting to timber frame Thoreau's house from his classic Walden. Moreover, we are doing it the way Thoreau would have done it—using 19th-century tools to go from pine trees to squared timbers to joints to a timber frame.

See Thoreau pg. 2

Save the Date!

An Informal Conversation With...

Dan Radakovich

Director of Athletics



Thursday, November 19 from 5:30-6:30pm
Brittain Rec. on East Campus

Thoreau *(Cont'd from Page 1)*

So why are we bothering to use old ways of working wood instead of taking the conventional chainsaw approach to the problem? The trivial response is because we can. But beyond the novelty of using old tools and the engaging dynamic of a retrofitted problem-based learning course, we are searching for a greater understanding of Thoreau's experience at Walden and of knowledge embodied



PHOTO BY HUGH CRAWFORD

in practices and processes. There is a case to be made for gaining a perspective on the world—an additional context for meaning—through material practices. In our class's case, this means going

out and chopping down a tree. It means gaining fluency with an adze when squaring a timber. It means understanding that there is knowledge and intellect that cannot be represented through a graph, a lecture, or a college classroom; it is a tacit knowledge that can only be achieved through an interaction with the materiality of a tree, a tool, the world.

So far this semester, we have mediated our ideas and understandings in a number of ways. We have developed suggested build plans for the house from the meager description Thoreau provides. We have blogged about our first experiences with foreign tools, from a machete to a noodle press. We have read and discussed papers on Heidegger, artificial intelligence, and car mechanics. We have paid for stitches after discovering our lack



PHOTO BY HUGH CRAWFORD

of fluency with an adze and a broadaxe. We have presented our progress in venues ranging from the library's Undergrad Research Kaleidoscope to the Society for Literature, Science and the Arts conference here in Atlanta.

But we still don't have a timber framed house. We are currently squaring timbers outside of Architecture West, and soon we will move on to cutting joints. In the meantime we are conducting interviews with Thoreau scholars, timber framers,



PHOTO BY HUGH CRAWFORD

and architects to continue adding depth to our understanding. So maybe Thoreau would not have conducted a class about his house this way. But then again, our class never intended to simplify, simplify.

If you would like to see our work so far, visit us at www.lcc.gatech.edu/~crawford/Thoreau. If you would like to come out and learn how to work wood, swing by Architecture West, and if you see us, please join. Just make sure to sign a waiver.

Advisor Lunches

Beginning Spring 2010, your Honors Program Academic Advisor will host the following departments for informational eat and greets:

- Biomedical Engineering
- Pre-Teaching
- Pre-Health (Including Public Health Masters Degree)
- Study Aboard
- Success Programs
- Work Aboard

If you would like to see another department added to this list, email Nicole Leonard.

Arts & Leisure

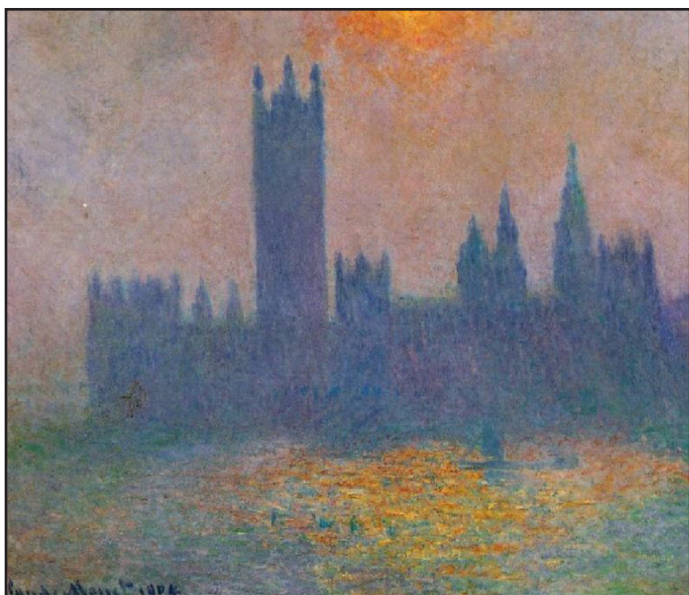
Illusion in Art

BY HELEN SHIN

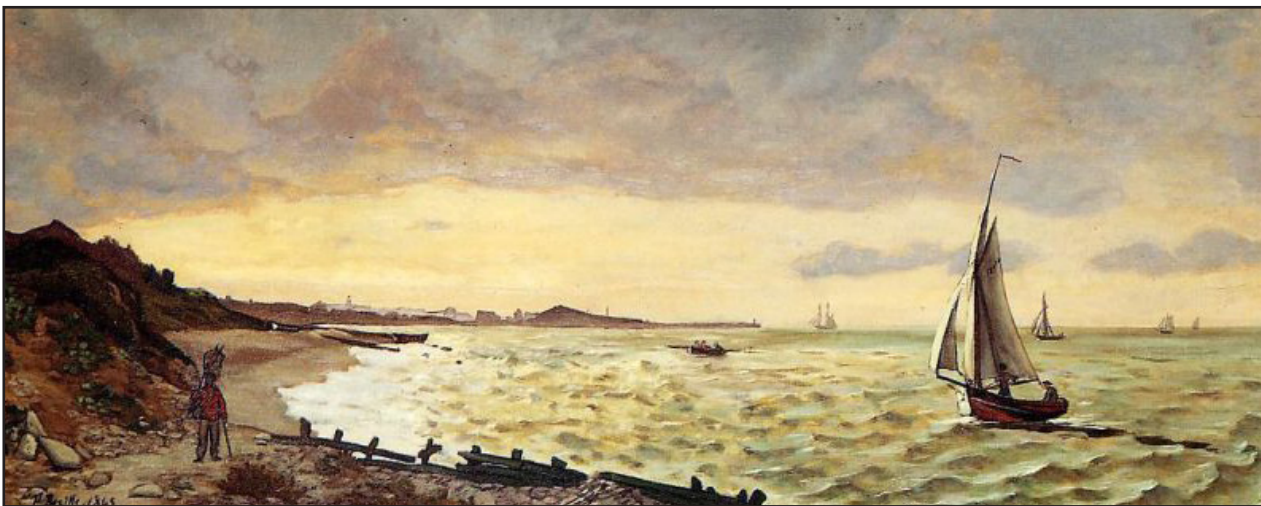
Art in many cases does not depict life exactly, but allows the observer's own mind to imagine and fill in the missing pieces. Claude Monet's *Houses of Parliament in the Fog* is a haze of shades of purple with darker indistinct shapes and a bright orange diffused circle near the top. For the mind to recognize specific objects in this indistinguishable painting would be near impossible without memory. As discussed in Dr. Halka's "Optical Illusions" class, the mind is not able to take in all the information

concerning vision every second. So much of our sight is memory dependent in that the mind fills in information about the peripheral parts. Analyzing *Houses of Parliament in the Fog* demonstrated this aspect of our vision because I was not sure what the dark areas of the picture were until I read the title of the painting. At the moment I read the title, my mind decided the random dark spots were buildings, the picture seemed discernable, and the dark areas could have never appeared to be anything else. Monet uses indistinct shapes and a mix of colors to create an illusion that allows an unknowing observer to imagine whatever picture comes to mind.

The *Beach at Sainte-Adresse* by Frederic Bazzille uses distinct shapes and shadowing to create an illusion of depth. Bazzille painted the waves of the ocean so the crests are dramatically pointing upward and then used darker shades to create a shadow on each wave. The illusion is that the sun appears to shine down on the waves creating shadows and the waves consequently look like they are three-dimensional. Artists are able to confuse the mind in different ways such as creating depth when there is none and making observers see something where there is nothing.



"Houses of Parliament in the Fog" by Claude Monet

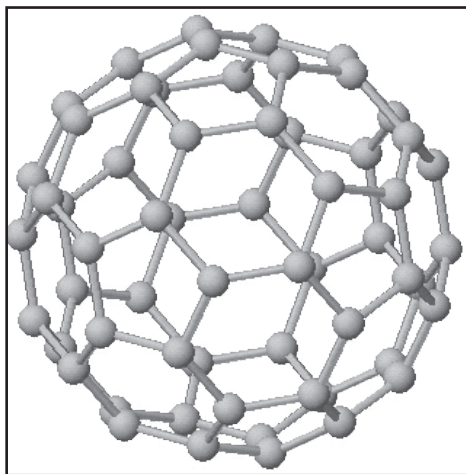


"The Beach at Sainte-Adresse" by Frederic Bazzille

Sir Harry Kroto on How to Talk Science

BY MICHAEL CHEN

Students in “The Art of Talking Science”—an HP special topic course taught by the Dean of the College of Sciences, Dr. Paul Houston—got a special treat on Thursday, November 5th: the opportunity to talk with the co-discoverer of the buckyball, Sir Harry Kroto. The class interviews scientists all over



Harry Kroto, Richard Smalley, and Robert Curl were awarded the 1996 Nobel Prize in Chemistry for their discovery of buckminsterfullerene (C₆₀), which launched the field of carbon nanotubes.

Georgia Tech's campus, such as the director of the Center for Advanced Brain Imaging, Doctor Chris Rorden. With light boxes and professional video cameras rolling, the interview with Kroto seemed to be an intimidating

departure from the casual discussions the class has previously held with Georgia Tech scientists. Expecting a lecture on the discovery of C₆₀, the carbon soccer ball that launched Kroto into the limelight, everyone was taken aback by Kroto's beginning discussion: how to make a good PowerPoint presentation.

The day before, Kroto talked at the Ferst Center about how to use the technologies of today to further education for generations to come in a lecture titled “Science, Society and Sustainability.” Holding to his mission of “furthering international education outreach,” Kroto wished to impart to Honors Program students an ability to communicate well using the various tools available to us today. Among the varying questions HP students asked, came varying responses from Kroto that allowed the audience to paint a picture of the Nobel Laureate.

Even though Kroto still maintains a research laboratory at Florida State University, he also travels the world to accomplish his mission of bringing internet and higher quality education to all classrooms. Despite the goals Kroto wishes to accomplish in the decades to come, when asked by HP sophomore, Nathan Edwards, what Kroto wanted to do with the rest of his life, Kroto simply responded by saying, “go to my studio.” Always an aspiring graphic artist, the Nobel Laureate hopes to eventually spend his days filling up blank canvases.

For interesting interviews of Nobel scientists and tips about making great presentations of your own, visit vega.org.uk. To learn more about Sir Harry Kroto's life as well as his current pursuits, visit www.geoset.info and www.kroto.info.

Congratulations!

We would like to congratulate the following Honors Program students for their hard work and dedication:

Jonathan Walker

Awarded a prestigious \$10,000 scholarship from the Astronaut Scholarship Foundation.

Audrey Plummer

Participating member of the National Organization of Minority Architecture Students team that won the top prize and was named Chapter of the Year at a recent nationwide NOMA conference.

Amy Varallo

One of only 100 students across the nation invited to present their research in the Department of Energy's 2009 Science and Energy Research Challenge.

We want to hear from you!

Attention all graduating members of the Georgia Tech Honors Program:



If you are graduating either Fall 2009, Spring 2010 or Summer 2010, please email Nicole Leonard at nicole.leonard@carnegie.gatech.edu as soon as possible with your full name, your major, and the semester you are graduating.

A Night with Dan Gordon

BY EMILY WEIGEL

As a Young Ambassador to the German Academic Exchange Service (DAAD), I volunteer my time to connect American students with Germany. As I was brainstorming my strategy last July for the upcoming school year, I thought of things that would come to students' minds when thinking about Germany. I personally thought of research prestige, distinguished scientists and musicians, castles, but my friends thought first of one single, simple thing: beer.

Knowing that beer is apparently an essential catalyst to the Germany+student reaction, I set out to find a reasonable connection that would show the benefits of studying abroad, yet still have the ever-favored element of beer. After talking to some friends of mine studying brewing engineering, I was given the name of Dan Gordon, and from there, the event took off.

I invited Dan Gordon, co-founder of Gordon Biersch, an international brewery-restaurant with a location near Georgia Tech, to give a talk on the benefits of an international career. Dan, as he likes to be called, attended the Technical University of Munich (TUM), Georgia Tech's biggest partner in Germany, to study brewing engineering. At the talk, Dan highlighted the advantages of the TUM as they related to his career and also received many questions from students looking to pursue brewing and study in Germany. Dan, in addition to being a very generous, funny guy, showed a tender side when he encouraged all of us to study abroad at some point. I echo his sentiments and say, "Cheers" to those who can.



PHOTO BY EMILY WEIGEL

Advising Corner: Know to Ask for Help

BY NICOLE LEONARD

Only one thing stands between you and winter break...finals week. Whether you are a first semester Techie or seasoned four-year champion, there is no escaping the week of December 7th. As the semester winds down I want to offer the following advice: If you need help, ask for it. This does not just apply to those tutoring or review sessions, this also applies to life beyond academics.

Let's start with the basics though: tutoring. In preparation for finals, the Student Success Program offers a plethora of options for locating the assistance that you need. Utilizing any review sessions offered by professors and TAs is highly recommended. Unless noted, you are not limited to attend review sessions given by your section of a particular course. If you can attend multiple meetings, do so. Also, I encourage you to actively begin dorm study groups. Assign each member a section to review so that they can re-teach it to the rest of the group. These gatherings are great for reinforcing knowledge and correcting any errors in understanding. If you prefer self-study, begin to compose a study schedule incorporating assignments that you need to complete with what needs to be reviewed.

While dealing with the academic rigors of Tech, it is easy to neglect your mental and physical wellbeing. Peer/parental conflicts, mental/physical fatigue, and stress does not care that you have a test on Monday or a project due on Wednesday. The Counseling Center offers "...individual and group counseling, workshops on such topics as stress management and study skills, career counseling, and psychological testing." For those who don't feel comfortable talking, stress can be relieved through physical activity—the Campus Recreation Center is open most weekdays from 5:30a to midnight. Additionally, make it a point to eat well and regularly, [try to] sleep at least 5 hours a day (a nap counts), and keep up with your personal hygiene.

Just a few more assignments until you have a month to rest so make these last few weeks of November count. And remember, my door is always open.

Message from the Director

BY DR. GREG NOBLES



"Those things for which the most money is demanded are never the things which the student most wants. Tuition, for instance, is an important item on the term bill, while for the far more valuable education which he

gets by associating with the most cultivated of his contemporaries no charge is made." -Henry David Thoreau, *Walden* (1854)

Like Hugh Crawford's students, I've been reading *Walden* lately—or re-reading it, actually, for about the fifth time since high school. It's one of those books that you keep coming back to, almost always finding something you hadn't really noticed before, like the above passage, which is tucked inside a long, two-page paragraph in the chapter on "Economy." This time around, I didn't focus so much on the price of tuition, which maybe I did as a student, but on the importance of the "cultivated contemporaries" who have educated me since my student days.

Two of them are in a category all their own, long-enduring friends from decades back. Sean and I met in seventh grade, went through high school together, played soccer and baseball, wrote for the school newspaper, did poorly in math, and generally spent an enormous amount of time trying to make sense of growing up in Dallas, Texas. We both left Dallas for college, he to Brown and I to Princeton, and that's where I met Phil, my other buddy-for-life.

I'm grateful to him for getting me into backpacking, but probably even more just for all the time we spent talking about books, being involved in Vietnam-era politics, and, throughout senior year, going to the Annex Bar after a night of thesis-writing.

After college, Sean became a prize-winning journalist, writing mostly on music and the arts, and Phil became a college professor, a smart and insightful environmental historian. I've read most of their published works, and I freely confess to being the third-best writer of the three. But writing is what's kept me in contact with each of them over the years, first with semi-regular long letters in the pre-email days, and now with almost weekly electronic exchanges, ranging from inappropriate jokes to musings about married life to hot-stove hopes about baseball to complaints about some political outrage. I don't get to see either one as much as I'd like (Sean's in California, Phil's in Michigan), but I still consider them the essential go-to guys for most of what I need to know.

Just as a good book like *Walden* can come to seem like an old friend, always there for the re-reading, old friends can be like good books, familiar and reliable sources of information and pleasure over the years. And in that sense, Thoreau got it right about the real benefits of a college education. The courses, the dorm, the food, the library—we charge you money for all that. But we throw the friends in for free, and they're yours to keep forever. So look to your left, look to your right: you'll find quite a few "cultivated contemporaries" of your own.

GeT HyPed

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