Human history is a never-ending story of change, evolution, adaptation, and at times, revolution. And so frequently in these turbulent times, we hear that last term tossed around freely: The Occupy Wall Street protests are sowing the seeds of a revolution. The late Apple CEO Steve Jobs ushered in a cultural/technological revolution. The uprisings in the Arab world in 2011 are revolutions.

In addition to its common use in defining socio-political-economic changes, the word is also regularly used today for substantive changes in science, health care, social networking, information and computer technology, publishing, business, the arts, media, ecology, and many other fields. But as the word surfaces and resurfaces across multiple terrains, it is critical that we ascertain its meaning and significance in different disciplinary domains. What are the conditions of our use of the term revolution? What are the environmental factors that produce revolutions in the many realms of human behavior and thought?

One of the aims of this issue of the Academic Exchange is to examine the use of this term and the perspectives of several Emory scholars whose work embraces potential revolutionary shifts in their disciplines.

What exactly does one mean when labeling change a "revolution?" In political history, much of the study focuses on dissecting the conditions that produced the most significant revolutionary moments—the French and American Revolutions, the October or Bolshevik Revolution, the Xinhai or Chinese Revolution of 1911, and more recently, the Arab Spring of 2010–2011. The term has also been evoked regularly to define significant discoveries in scientific research, from Copernicus’s 1543 treatise on the movements of planets around the sun, *De revolutionibus orbium*
Where are revolutions occurring today? Are we entering a state of permanent revolution in many fields?

existing government and its ruling coalition. The individual decision to participate in a revolution is motivated by self-interest, and public benefit is only the side effect of a successful revolution.

In her article “France, Russia, China: A Structural Analysis of Social Revolutions,” Harvard sociologist Theda Skocpol states that social revolution is a “combination of thoroughgoing structural transformation and massive class upheavals.” She also states that this definition may not apply to many revolutions if they fail to meet both of the two parts of the definition. Understanding the conditions that allow for social revolutions to occur is of particular importance to governments that wish to keep them from happening. For instance, in observing how the internet and social media fostered the Arab Spring revolts, governments likely noted the changing ingredients for encouraging the modern revolution. Indeed, efforts by the current Chinese government to control the possible conditions for revolutionary uprisings through monitoring and censoring internet communication is a prime example of a government adapting to this change. For all the supposed power of China’s censorship apparatus, even Chinese leaders acknowledge that online propaganda is more effective at diffusing online anger. Wu Hao, deputy director of the Yunnan Propaganda Bureau and a supporter of China's internet propaganda, said last year that “public opinion on the internet must be solved with the means of the internet.” As a result, the government has created a digital army of online monitors—known as the 50-Cent Party—who control activity on the Chinese internet. The goal is to “track and analyze online public opinion, preventing the spread of undesirable information and thereby generating positive guidance of public opinion.” The 50-Cent Party’s activities were described by Chinese President Hu Jintao as “a new pattern of public-opinion guidance.” To borrow a term invoked by Karl Marx and later Leon Trotsky, do certain governments now see themselves needing to engage in a “permanent revolution” as a means of ensuring social stability? Trotsky’s concept of a permanent revolution is important in understanding the history of twentieth-century social movements, starting with the success and the ultimate failure of the Russian Revolution, followed by the anti-colonial movements. His conception of combined and uneven development is still important in explaining major international trends, from the rise of state capitalism to its many struggles, and to the wave of democratizations in India, Indonesia, and the recent Arab Spring. Trotsky summed up the general significance of permanent revolution in the following way: “The permanent revolution is the continuous revolution, the uninterrupted revolution.”

Revolutions of thought and experience

Besides political spheres, the use of the term revolution is ubiquitous in almost every field of intellectual inquiry today, particularly in the sciences—and particularly since modern discoveries and innovations have had such profound effects on human understanding, quality of life, and the manner in which we interact with the world and among each other.

The Darwinian Revolution was probably the most significant revolution that has ever occurred in the sciences, since its effects and influences rippled through every branch of thought, including the social sciences, humanities, and religion. The result of this revolution was an epistemological rethinking of the nature of the world and humanity’s role in it. Many books, articles, conferences, and even feature films have been devoted to exploring the revolutionary Darwin and his theories.

In a letter to Friedrich Engels, Karl Marx wrote of how Darwin had taken industrial England and “read it into biology.” He was referring to the work of English political theorist Robert Malthus and his influence in Darwin’s development of the theory of natural selection. Conversely, the importance of Darwin’s thinking for the development of later Victorian social philosophies (including Social Darwinism) was significant. A more recent conversation on scientific revolution began with the publication of Thomas Kuhn’s The Structure of Scientific Revolutions in 1962. In this work, Kuhn does provide a way to distinguish revolutionary changes from non-revolutionary changes in science. He suggests scientific revolutions are those changes in science that (1) involve taxonomic changes, (2) are precipitated by disappointment with existing practices, and (3) cannot be resolved by appealing to shared standards.

Are these metrics still applicable to modern definitions of scientific revolutions? Or is there a “permanent revolution” underway in the sciences as a result of the accelerated achievements available with advanced technological methods? When individual scientists change theories, has a scientific revolution occurred?

In this issue

Where are revolutions occurring today? Are we entering a state of permanent revolution in many fields? We invite you to consider these questions as you read these articles by Emory scholars and researchers in this issue of the Academic Exchange. Political scientist Carrie Wickham and Peter Lacovara, curator of Egyptian collections at the Carlos Museum, both examine transformations wrought in their fields with the uprisings in Egypt earlier this year. Then law and religion scholar John Witte takes a step back to offer a view of the contributions of early Protestant thought to political rebellion and revolution throughout Western history. And anthropologist Carla Freeman provides a more broadly sweeping take on the concept, showing from her own research that economic and technological transformations around the globe have fostered revolutions in work and culture.

Marsha Lewis and Susan Shapiro from the nursing school then explore the ways in which healthcare reform is already revolutionizing both the practice and teaching of nursing. And two interviews examine other revolutions taking place in health practices: Pam Redmon of the Global Health Institute discusses the massive effort to transform the culture of smoking in China, and Linda Cendales, the surgeon who led Emory’s first hand transplant, talks about the coming revolutions in this new field of vascularized composite allograft, or limb transplants.

Finally, three essays look inward to the university as a revolutionary landscape. Florian Pohl of Oxford College explores the transformative new general education curriculum on that campus as a transformative approach to teaching and learning. Chemistry professor David Lynn and his colleagues describe the next frontier of scientific and cultural revolutions as collaborations among widely disparate fields. And finally, Benn Konsynski of the Goizueta Business School calls on us to completely re-imagine the enterprise of education.
Uprising
Were the events in Egypt this year a “revolution”?

The popular uprisings convulsing the Arab world this year offer a useful point of departure for reflection on the concept of “revolution.” In Tunisia, Egypt, and Libya, mass protests have culminated in the ousting of long-entrenched dictators. Joyous citizens in the streets and journalists around the globe have celebrated these events as “revolutions.” Yet we are just beginning to fully grasp the causes and consequences of the Arab uprisings, and the jury remains out on whether and to what extent the revolutionary aspirations of their participants will be fulfilled.

The recent protests took us by surprise. Virtually no one saw them coming, including those like myself who have studied politics in Egypt and the wider Arab world for decades. The failure of Middle East scholars for a long time to come, and more time will be needed for us to take the full measure of the Arab uprisings. But a few points are worth hinging on our assumption that the factors enabling the region’s dictatorships to remain in power in the past would continue to block meaningful change in the future. In Egypt, for example, more than five million people were on the government payroll, or more than half the population employed outside the field of agriculture, making a huge sector of the population directly dependent on the state for their economic survival. The security police, whose job was to spy and report on the activities of their friends, neighbors, and co-workers, pervaded the far corners of Egyptian society. The country’s legal opposition parties, small and fragmented, were more caught up in petty rivalries than in the hard work of building a mass base, while politics in rural areas remained in thrall to local tribal leaders and functionaries of the ruling party.

The only opposition group with a strong base of support, the Muslim Brotherhood, provided social services and called for Islamic reform, but its leaders had been chastened by years of repression. They were intent on avoiding a direct confrontation with the regime because it could jeopardize their survival. Small networks of democracy activists had developed new civil society groups and staged a number of demonstrations calling upon President Mubarak to step down, such as those organized by the “Kefaya” movement in 2004 and 2005. But such demonstrations never managed to mobilize more than a few thousand people. Though successful in placing issues of democracy and human rights onto the public agenda, such small networks of courageous activists failed to engage the broader masses.

Why didn’t the vast majority of Egyptian citizens stand up to the regime? Many Egyptians faced daily hardship and in recent years had become increasingly frustrated and angered by rising food prices, low wages, housing shortages, scarce jobs, overcrowded and decrepit buses, over-strained sewage and electricity systems, and poor quality government hospitals and schools. Yet they were too close to the edge of survival, attempting to feed, clothe, and protect their families, to get involved in politics. Further, they had become deeply cynical about the prospects for change, and above all else, too paralyzed by the pervasive culture of fear to risk subjecting themselves to arrests and beatings—if not worse—by security officers who routinely abused ordinary citizens without any accountability before the law. In light of such widespread fear and intimidation, it is not surprising that those of us who studied Egyptian politics and society did not expect the people to revolt.

And yet they did. So, with the benefit of hindsight, what glimmers—what hints and signs of the potential for radical change—did we miss? This question is likely to intrigue, perplex, and bedevil Middle East scholars for a long time to come, and more time will be needed for us to take the full measure of the Arab uprisings. But a few points are worth mentioning here.

First, it turns out that seemingly marginal activities by small groups of citizens, viewed as hardly worth reporting in the global press, can set the stage for much bigger events. Over the past decade, Egyptian civil and political leaders had been holding meetings and workshops and producing a raft of memos outlining the reforms needed to establish a new democratic order. They met in private homes or in the dusty offices of small civil society organizations, under the radar of Egypt’s authoritarian state. Eventually such networks came to include a new generation of young, technically savvy urban youth who were skilled in the use of Facebook, YouTube, and other types of social media. When these young people witnessed an incident of police brutality on the streets, they immediately captured the image on their cell phones and uploaded it onto the internet. In this way they made it much harder for the government to control information reaching the public. In June 2010 they spread the news of the death in state custody of Khalid Sa’id, a young man from Alexandria who had allegedly posted on his blog a video of security officers divvying up illegal drugs. A member of Khalid’s family entered the morgue and snapped a photo of his mangled face. The image found its way to the internet. Soon a Facebook page dedicated to Khalid’s memory was established and received over 200,000 hits. It provided damning proof that any citizen who dared to challenge the system could be killed with impunity—as it declared, “We are all Khalid Sa’id.” It was to honor Khalid and others like him that young activists chose January 25, a day the government honored the police for their service to the country, to demonstrate against police brutality and corruption.

In addition to marshaling the power of social media, organizers of the uprising learned some important lessons from the demonstrations staged by “Kefaya” and other groups in the past. First, they learned it was possible to confuse and disperse the security police by announcing that multiple demonstrations would be held in different locations at different times, then amass their forces in one time and place. Second, they realized that to produce large crowds they could not rely on highly educated, technically savvy Facebook users alone. So they recruited young people in the low-income neighborhoods of Cairo and other cities and towns, tapping into widespread outrage over the lack of jobs, low wages, dilapidated housing, and mistreatment by police by framing reform as a means for Egyptians to recover their “karuna,” or human dignity. By linking calls for democracy with socioeconomic grievances, the organizers expanded the size of their demonstrations from a few thousand to tens of thousands, and eventually to hundreds of thousands. And once this critical mass was achieved, it encouraged others who had long been held back by fear to join the protests as well. A week into the Egyptian uprising, fathers, mothers, and children from all backgrounds and walks of life were attending the protests together.

Three other features of the organizers’ strategy gave the demonstrations added force. First, they insisted that people keep slogans or posters indicating any signs of sectarian or political affiliation at home, and allowed only one symbol—the Egyptian flag, which served as a sign of patriotism and national unity. Second, they insisted that the protests be non-violent, shouting “silmiyya, silmiyya” (peaceful, peaceful) even in the face of attacks by the government’s security thugs. Third, and perhaps most consequential of all, they treated the soldiers sent by the regime to restore order as allies rather than as enemies, placing wreaths of flowers on the tanks that had come into the street and lifting their children up onto them for photos with the young men in uniform who had been sent to retain order. Once the military decided to side with the protestors, Mubarak’s fate was sealed. On February 11, just eighteen days after the protests broke out, a state official announced Mubarak’s resignation in a televised statement, triggering shouts and tears of joy among the crowds of Egyptians in Tahrir Square and across the country.

A revolution unfulfilled?
Was the Egyptian uprising a “revolution”? Like the historic revolutions in France, Russia and Iran, the Egyptian uprising brought the masses into politics and expressed a collective desire for radical social and political change. Yet nine months into the transition period, the revolutionary aspirations of the protestors remain unfulfilled. After Mubarak stepped down, the Supreme Council of the Armed Forces, composed of high-ranking military officers formerly allied with the deposed regime, assumed power and arrogated to itself responsibility for managing the transition to a new political order. It was hence the military, and not the

Carrie Wickham
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Revolution in Egyptian Archaeology

Where do we go from here?

The archaeological side effects of the “Arab Spring” must serve as a wake-up call to archaeologists working in Egypt. We can no longer afford to blindly continue operating as we have before. As a profession we have been guilty of ignoring events that have convulsed countries throughout the Middle East for a generation now, and we have failed to see the impact of such situations on the Nile Valley.

While what transpired in Egypt at the beginning of the year—the vandalism and theft of objects in the Egyptian Museum in Cairo and robberies in store rooms at various sites—have been so far less catastrophic than what has happened in Iraq and Afghanistan. Western commentators and archaeologists have been quick to forget that the mitigating factors were almost entirely the work of Zahi Hawass and the former Supreme Council of Antiquities, which he led from 2002 until earlier this year. They have preferred to focus on Hawass’s larger-than-life television persona (which many of them now conveniently forget they helped nurture) and leave out consideration of his record as a tireless advocate of Egypt’s archaeological heritage and brilliant administrative successes. Thanks to his broad efforts at sensitizing Egyptians to the importance of their archaeological heritage and a campaign to promote site management and improve storage facilities and inventory procedures throughout the country, an epic disaster on the scale of what occurred in Iraq was in large part averted.

Unfortunately, there is a limit to what the Egyptians can do at this moment to protect their heritage in the face of political instability. Many are still hard at work, putting in long hours for minimal pay, guarding the sites and museums from the opportunistic crime we have seen in Iraq and more recently, in Libya. Advice and equipment should be provided to the new government to enable them to have the latest technology and methodologies to police the archaeological sites and continue all the reforms and new projects begun in the last few years by the Supreme Council of Antiquities. Now the question is, what should foreign Egyptologists do in the future to better aid our colleagues in Egypt? First and foremost, allowing objects from excavations, particularly valuable and important ones, to pile up, to better aid our colleagues in Egypt? First and foremost, allowing objects from excavations, particularly valuable and important ones, to pile up, unpublished, in store rooms can no longer be allowed. This poses a danger not only to the objects themselves but also to the local officials who are bound to protect them. Archaeologists should expediently process this material as part of their field season and not postpone it some distant “study season.” Also, to aid in tracking and inventory, this material needs to be published as quickly and as accessibly as possible. Given modern technology, this is now far easier than was possible before.

Of objects of value need to be removed from regional storerooms and put in museums as promptly as possible. Zahi Hawass was a visionary advocate for creating a network of regional and site museums, and it is to be hoped that this plan will remain a priority for his successors. As much of this material as possible should be put on display—both for study and for monitoring—rather than be relegated to museum basements. In addition, foreign museums might be allowed to have material, which would otherwise be in storage, on long-term loan from Egypt. This not only allows for additional security for some of the vast amounts of material recovered from excavations, but it also makes them available for foreign missions and scholars to study it on their own turf. An Egyptian Museum has already been set up in Italy, and there have been cultural exchanges with Mexico. Additionally, international partnerships between Egyptian and foreign museums could provide useful support and training for the staffs of both participating institutions.

Restoring monuments for tourism is another important means of insuring that they are valued, visited, and protected. Working with the Egyptian government to undertake the necessary steps to facilitate the long-term survival and touristic potential of these places should also be part and parcel of any excavation. Likewise, the training and participation of Egyptian students and scholars should also be part of the expedition’s work.

The future of archaeology is, and must be, conservation. Even before considering what to do with their discoveries, foreign missions need to take seriously their responsibility to preserve, restore and protect the monuments they do uncover. Archaeological sites are a “non-renewable” resource, each one unique and precious. It is to these areas that our future efforts must be directed. It is no longer acceptable to excavate simply for curiosity and expose more sites to neglect and destruction.

Excavation spotlights sites as potential targets for looting. As such, before any work is begun, particularly in remote sites, it must be considered as to whether these sites should be visited at all, if a long-term strategy of site protection cannot be formulated. Ultimately a great commitment on the part of all nations to training, education, and cooperation with our Egyptian colleagues is what is needed moving forward, to preserve and secure Egypt’s heritage for all.

Rights and Resistance

Early Protestant contributions to Western democratic revolutions

Over the past three decades, a small cottage industry of important new scholarship has emerged dedicated to the history of rights talk in the Western tradition prior to the Enlightenment. We now know a great deal more about classical Roman understandings of rights, liberties, capacities, and powers, and their elaboration by medieval and early modern civilians. We can now pore over an intricate latticework of arguments about individual and group rights and liberties developed by medieval Catholic canonists and moralists and the ample expansion of this medieval handiwork in early modern Spain and Portugal. We now know a good deal more about classical republicans’ theories of liberty and their transformative influence on early modern common lawyers and political revolutionaries on both sides of the Atlantic. We now know, in brief, that the West knew “liberty long before liberalism,” and had many fundamental rights in place before there were modern democratic revolutions fought in their name.

Early modern Protestants, too, made monumental contributions to the development of Western rights, as they worked out their logic of revolution against tyranny. Most Protestants did not start off as political revolutionaries. The Bible taught believers to “be subject to the authorities” and to “render” them all due honor, respect, and obedience. Martin Luther, John Calvin, William Tyndale, and others before 1550 thus counseled their followers to practice only passive and non-violent resistance against tyrants and to bear political persecution with patience, patience, and prayer. After the 1550s, however, French, Spanish, German, and English authorities began repressing Protestants with a vengeance, killing them by the tens of thousands, even with the primitive weaponry of the day.

In response to this escalating genocide, Protestant jurists and theologians in the later sixteenth century developed a robust theory of political revolution. Their theory was, in essence, a Christian government contract theory, modeled in part on ancient Isrealite prototypes. Every political government, they argued, is formed by a tacit or explicit covenant

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When I began my research about globalization in the 1980s, it was shocking to see advances in communication technologies beginning to transform the knowledge-based economy as footloose as the garment and electronics plants, which were moving to Mexico and Asia. As we faced the loss of assembly line production in North America, we were also beginning to see the migration of more skilled, “white collar” work, from the drafting of legal briefs to industrial systems design—and with these, a growing unease about threats to American middle class privilege.

The technological and economic revolutions we have witnessed over the three decades since then have fostered unprecedented transformations of labor and capital. “Revolution” conjures images of upheaval and public protest, hints of violence, the seizure of power, the promise of regime change. But revolution also takes other guises: Scientific revolutions have allowed us to understand the some of the building blocks of life. The Green Revolution promised a transformative vision for agriculture and world hunger. New modes of contraception spurred the Sexual Revolution, challenging traditional norms of sexual experience and identity. And the Digital Revolution has put in the grasp of much (though certainly not all) of the globe an increasingly interconnected world of media, information, financial markets, consumer tastes, and more.

With those technological shifts in particular, a wide array of jobs has migrated from the U.S., Europe, and now Asia, in search of ever cheaper—and increasingly skilled—labor in other countries. These circulations have become increasingly familiar and exceedingly complex, moving not just from “first” world to “third” but in multiple directions all at once. The paths and profiles of such circulations and workers are in constant flux.

Whether in sweatshops in New York, maquiladoras on the Mexican border, North Carolina berry fields, brothels in Thailand, or private homes in Taiwan or Rome, laboring bodies are shaped and disciplined in both dramatic and subtle ways by neoliberal capitalism—the primacy of the free markets, the shrinking role of the state, the retrenchment of public welfare systems, and the emphasis on the individual as an engine of economic activity and growth. Indian IT professionals who sought H1B visas and the American dream only a decade ago are, in growing numbers, returning home to better economic opportunities, quality of life, and the embrace of their extended families. Meanwhile, growing numbers of American and European professionals (including academics) are finding attractive options in Asia, while immigration legislation simultaneously becomes more restrictive for those attempting to find work in the U.S.

Vast new modes of consumption and a swirl of new consumer desires also reflect the global revolution. These transformations range from changing habits of diet and expanding cuisines to eating disorders and nutritional diseases. We are witnessing dramatic transformations in leisure, travel, sport, entertainment, and self-fashioning. Growing numbers seek medical and therapeutic interventions as part of a transnational circuit of healthcare and other body practices, whether as heart patients, candidates for reproductive technologies, or plastic surgery. As ayurvedic and other remedies, treatments, and philosophies of the body are increasingly commodified and imported, they are becoming part and parcel of “local” models of health, healing, and personhood all over the world.

Globalization is changing practices of adornment and expectations of service: Western consumers (and increasingly those in Asia, as well) have come to expect inexpensive clothing and athletic wear produced by Chinese or Sri Lankan workers, and the delivery of polite and patient technical computer and banking help offered remotely by Indian or Irish customer service representatives. As a recent body of ethnographic work makes clear, the importance of mass consumption and global media for contemporary globalization, so too are the stresses and strains being traced through new diagnoses such as anorexia, depression, anxiety, and post-traumatic stress disorder. The global internet revolution and the growth of new social networking platforms not only connect people more freely across transnational time and space, but simultaneously change the meanings of sociability and “selfhood” across the world. On one hand, we might craft our cyber identities, and on the other hand we are denied the capacity for forgetting, as the difficulty of editing and erasing these identities makes clear. Like many aspects of global production and consumption, cyberspace simultaneously generates opportunities for creative self-representations and new niches of labor, such as the growing field of so-called “reputation defenders.”

The world has been re-mapped along the lines of “producers” and “consumers,” manual and intellectual workers, senders and receivers of knowledge, goods, values, and resources. Those changes do, indeed, constitute a revolution. Equally radical, however, are the changing ways in which even the most private and personal aspects of life and selfhood are being newly conceived.

I began a study of contemporary neoliberalism more than ten years ago with the hopes of unearthing some of the tensions, promises, and cultural particularities of a growing mandate for people all over the world to become self-employed engines of economic growth and development. The trademark neoliberal mantra for entrepreneurialism has advanced business as a path of financial solvency for regions like the Caribbean that face increasing pressures of debt, industrial retrenchments, and state cutbacks of social welfare. I discovered that the entrepreneurial imperative has also permeated realms of life one might imagine to be far outside the reaches of the global economy. I find myself drawn to these less obvious transformations—the “behind-the-scenes” revolutions in culture and everyday life—whose actors, forms of expression, and meanings are seldom captured in political-economic analysis, or in the news media.

In my fieldwork among young and middle-aged entrepreneurs in Barbados, interviews and discussions veered away from questions of financing and debt, local and overseas markets and supply-chains. Instead, many people wanted most to talk about their desires for not only economic but personal autonomy and creative expression. They expressed dreams of a new kind of “partnership” marriage, new understandings of child- hood and parenting, and visions of a new kind of self. Sociologists from Anthony Giddens to Eva Illouz have described some of these processes (“modern love” and a heightened individualism of “emotional capitalism,” for example) as signposts of modernity itself. This modernizing process marks a profound transformation in the structure of Caribbean society.

My research subjects in Barbados and their current embrace of entrepreneurialism—not just self-employment, but the view of the self as a project to be examined and cultivated—represent dramatic historical ruptures. This cultural transformation echoes across this island nation, in the sudden growth of new-age charismatic churches, “living room cells” of spiritual Christian communities, and a growing array of holistic health spas, yoga, and treatment centers for everything from depression and nutritional management to marriage counseling and psychotherapy. They signal a decisive break with long-held traditions centered on civil service careers and pursuit of higher education as the path to middle-class respectability, the matrifocal extended kin-group as the fundamental social institution that defines personhood, and the expectation that one “grin and bear” life’s troubles with little acknowledgement or support but the rum bottle or the rituals of the mainline church.

The small island of Barbados is known both proudly and mockingly as “Little England” for its 300-year history as an orderly and conservative sugar producing colony, and perhaps is best known today for its upscale golf resorts and its native daughter, Rihanna. The radical nature of its contemporary embrace of such highly individualized and affect-laden practices is hard to overstate. If anthropologists have learned anything about globalization in the past twenty-five years, it is that as much as places and people in the world appear to look increasingly alike, the meanings ascribed to similar appearances and practices cannot be assumed.

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Revolutions and Evolutions in Nursing and Healthcare
How the Affordable Health Care Act is transforming teaching

Whether or not you agree with the provisions of the Affordable Care Act, this groundbreaking legislation will fundamentally change—and in some cases already has changed—the way health care is financed and delivered over the next several generations. Signed into law in March 2010, the law completely realigns the economic incentives that have driven health care decision making over the past 70 years. Within the previous reimbursement structure, both hospitals and independent physician providers were reimbursed based on the volume of care they provided; the more patients admitted to the hospital and the more procedures performed, the more hospitals and physicians were paid. The Affordable Care Act, while maintaining our insurance-based structure for paying for care, has changed the basis of reimbursing hospitals and providers from the amount and complexity of the services provided to the quality of care they are delivering.

Called Value-Based Purchasing (VBP), this aspect of the revised reimbursement structure incorporates principles of evidence-based practice and healthcare quality improvement into the way hospitals and providers are compensated, rewarding those who meet benchmarks and penalizing those who don’t. The goal of VBP is to reduce overall costs by a) consistently implementing the most cost effective, evidence-based care processes and b) reducing avoidable complications of care.

Since the late 1990s, numerous reports have highlighted the need to improve both quality and safety within our healthcare system. Among those cited most often are the highly regarded and evidence-based reports of the Institute of Medicine (IOM): To Err Is Human (1999); Crossing the Quality Chasm (2001); and Health Professions Education: A Bridge to Quality (2003). The first of these reports estimated that between 44,000 and 98,000 patients die in U.S. hospitals every year due to preventable adverse events, and that was a major driver for both the national push for improved quality and safety in healthcare and for the inclusion of VBP in the Affordable Care Act. Emory Healthcare had already responded to these initiatives with a renewed focus on quality and safety throughout all facilities, systems, and practice settings. At the Nell Hodgson Woodruff School of Nursing, faculty have worked to include quality and safety as integral to the basic nursing curriculum, based on the 2007 publication of the Quality and Safety Education for Nurses (QSEN). In 2007, we were fortunate to join with fifteen other nursing schools funded by the Robert Wood Johnson Foundation to pilot integration of these competencies school-wide in partnership with the Emory Healthcare Nursing Education department. The grant allowed us to undertake a deliberative, evolutionary process to implement the QSEN competencies into our undergraduate program.

We developed a comprehensive model and moved each component, step by step, into both the classroom and clinical settings. Faculty development was a big part of that grant, and we have trained our core faculty in the principles underlying the QSEN competencies, so much so that the competencies have been included prominently in the overall curriculum redesign currently underway in the nursing school. We are most excited, however, about two transformative partnerships that have evolved from this initial project: the first has led to the formation of Dedicated Education Units (DEUs) at Emory Healthcare, and the second has expanded a hands-on learning experience for students in the School of Medicine and Nell Hodgson Woodruff School of Nursing.

To appreciate the revolutionary nature of these partnerships, it helps to know that for a variety of political, economic, and social reasons, schools of nursing do not have the same intimate relationship with teaching hospitals that medical schools enjoy—in which, for example, faculty practice as educators in medical schools and also provide care to hospitalized patients. The worlds of nursing education and practice are entirely separate, and at Emory, both the nursing school and Emory Healthcare are committed to bridging that separation in order to better prepare new nurses for a recast health system based on continuous quality improvement.

The first step in developing the Dedicated Education Units was to form a leadership team. Marsha Lewis, Associate Professor Gerri Lamb, and Assistant Professor Bethany Robertson from the nursing school joined Sharlene Toney, executive director of professional nursing practice at Emory Healthcare, and Kelly Shelby, a nursing instructor who was hired into a newly created joint position, 50 percent in the nursing school and 50 percent in the Emory Healthcare Nursing Education department. This relatively new model for clinical nursing education capitalizes on the wisdom of seasoned staff nurses willing and qualified to act as clinical instructors for undergraduate/predicensure students while being guided by a seasoned faculty member.

With this principle in mind, the team identified suitable units at both Emory University Hospital on the main campus and Emory University Hospital Midtown in midtown Atlanta. Although the bulk of students’ time and attention while on the DEUs is focused on acquiring clinical skills and judgment, quality improvement is an integral component of the learning process. As was quoted in “Becoming a Real Nurse,” (Emory Health, Summer 2011), “Quality is foremost in the DEU, where students are taught that the daily quality-improvement plan is as important as the care plan.”

As part of their clinical experience on the DEUs, students engage with staff to participate in ongoing quality improvement, including reducing patient falls, eliminating pressure ulcers, reducing the incidence of hospital-acquired infections, and other more focused efforts. The students have helped design and implement tests of change and have done the difficult work of collecting data related to both process improvements and outcomes. This represents a win for students, who are learning how quality and safety are practiced in “the real world”; a win for staff, who use students’ energy and creativity to help improve care; and a win for patients, who experience smoother, more effective care and better clinical outcomes.

A clear and persistent message in all of the Institute of Medicine reports on quality and safety revolves around the importance of communication among healthcare providers in order to ensure patient well-being. The Joint Commission has reported that failure in communication is one of the main causes of patient mishaps. Addressing this major quality and safety issue required that the School of Nursing explore a second transformational partnership—this one with the School of Medicine. Taking the lead on this initiative—called the Interprofessional Team Training Day—were Bethany Robertson and Associate Professor of Emergency Medicine Doug Ander. Together they adapted the widely used, evidence based, TeamSTEPPS curriculum, endorsed by both the...
New Ways of Seeing and Organizing the World

“Revolutionary” qualities of Oxford’s curricular reform

This fall, Oxford College officially launched the first component of its distinctive new General Education Program (GEP): the Ways of Inquiry courses. This move towards learning through inquiry represents a fundamental shift in the way we as faculty teach—and it promises to have a far-reaching impact on how our students learn.

By the time this year’s freshmen finish their general education requirements at Oxford and continue to Emory College or the professional programs on the Atlanta campus, they will have taken a minimum of three of these Ways of Inquiry (INQ) courses. These courses are designed to introduce students to the specific ways knowledge is pursued in each discipline through active engagement in the discipline’s methods of analysis. With a focus on discipline-specific ways of knowing, seeing, valuing, and feeling, students not only experience each discipline’s distinctiveness but also move beyond those boundaries to understand connections across disciplines and fields.

Oxford’s new curriculum asks faculty to think of ways the study of their particular discipline can contribute to the goals of the GEP.

The next step in implementing Oxford’s new curriculum will involve two additional components designed to extend our students’ disciplin ary and trans-disciplinary explorations. A number of Themed Cluster courses will explore the same topic with different approaches, and a General Education Honors Program will serve as a capstone to our students’ general education experience.

To call the new GEP “revolutionary” can obscure important continuities, such as its alignment with Emory College’s general education requirements and their organization into five academic areas. But it may also reveal a good bit about the nature of the changes taking place. As a scholar of religion trained in the social sciences, where revolutions are characterized as mass social movements outside of electoral politics and involving the use of—or at least the threat of—violence, I hesitate to apply the revolution analogy to the change in Oxford’s GEP. After all, our deliberations that brought forth and shaped the new GEP were marked by collegiality among faculty and by support from College administrators. At the same time, the historian of religion in me can appreciate how a comparative perspective, if properly contextualized and limited, can bring about new ways of seeing and organizing the world. So what may be revealed when we view the changes in Oxford’s GEP through the lens of revolution?

A central characteristic of revolutions is that they lead to significant reform. It is not an overstatement to assert that the new structure of Oxford’s GEP reflects far-reaching changes on the level of individual courses as well as on the program level. When viewed as a program, the Ways of Inquiry approach, with its focus on disciplinary modes of inquiry and trans-disciplinary explorations, provides a coherent intellectual framework for a general education that serves students foundationally for their entire undergraduate liberal education. This means that our GEP’s goals and objectives for student learning are intimately connected to the College’s liberal arts-intensive focus. Chief among the learning outcomes are students’ intellectual growth and maturity by growing from dependent learners, with a belief in the certainty of knowledge and unquestionable authority of experts, to engaged learners, who recognize uncertainty and the contingency of knowledge claims.

In the context of U.S. higher education, as Ernest Boyer and Arthur Levine pointed out in A Quest for Common Learning (1981), it is common to ask how general education courses can prepare students for the study of particular disciplines. Oxford’s new curriculum is revolutionary insofar as it conceptualizes general education as an integrated program that asks faculty to think of ways the study of their particular discipline can contribute to the goals of the GEP.

The pedagogical implications and consequences for the classroom are no less sweeping. If the goal of a Ways of Inquiry course is to introduce students to disciplinary modes of knowing and thinking, then it does not suffice to simply make additional space in our existing courses for it. Instead, inquiry must become the central organizing principle in our courses, and a significant portion dedicated to discipline-specific learning techniques. Through these strategies, questions provide the context for study, such as problem-based learning, case-based learning, project-based learning, or inquiry-based learning. All of the courses share an inductive approach to teaching and learning that starts with the specific and moves to the abstract. They are student-centered and often collaborative, and they place increasing responsibility on students for their own learning.

While everyone on our faculty is experienced with active learning strategies, using them intentionally to engage students in the ways our disciplines seek knowledge has challenged many of us to rethink our assumptions about and approaches to teaching.

Examining the origins of the GEP initiative, as well as its ongoing support, once again invites the analogy of revolutionary change. In From Mobilization to Revolution (1978), Charles Tilly theorizes that all collective action that results in successful revolutionary transformation shares four components or stages: organization, mobilization, common interest, and opportunity. Without stretching the analogy too far, we might identify the initial 2008 Ways of Inquiry proposal by two of our colleagues, David Gowler and Michael Rogers, and the subsequent support and resources they won among the faculty and administration, with Tilly’s organization and mobilization stages. Common interests that moved the Ways of Inquiry project forward include a widely shared desire to express more intentionally the College’s liberal arts-intensive focus throughout the curriculum.

Finally, opportunity for “revolutionary action” arose in 2009 in the context of Emory College’s change to new GER tags. The decision to adopt the GER tags and distribution requirements, however, also precipitated further reflections on how to restructure general education at Oxford so that it would remain congruent with Emory College yet also reflect the distinctive character of Oxford as a liberal arts-intensive institution.

The analogy between revolution as collective action and the transformation of Oxford’s GEP begins to wear thin if we follow Tilly’s view that revolutionary movements develop under conditions of political disenfranchisement and repression and at one point or another must lead to open conflict with those holding power. Without painting too rosy a picture, confrontation and conflict have been markedly absent from faculty deliberations over the GEP.

Moreover, a model such as Tilly’s strikes me as too linear, too clean to encapsulate the rather messy and multi-vocal process that has characterized the transformation of our GEP to this point. From the beginning, multiple initiatives and practices have informed our thoughts and considerations on educational coherence for the GEP. With currently more than half of our faculty actively involved in teaching INQ courses, our institutional understanding of the Ways of Inquiry at Oxford continues to evolve in a collaborative and formative process that is marked as much by shared intentions for student learning within the Liberal Arts as it is by a hesitation to be too narrowly prescriptive about their realization. Despite our collective commitment, many of us may have different answers to...
Last year, close to 8 percent of China’s gross profits came from taxes and sales of tobacco products. The government will have to make a choice between the revenue from tobacco consumption and the public health of their nation.”

Pam Redmon
Executive Director, China Tobacco Control Partnership, Global Health Institute

The China Tobacco Control Partnership was established in 2008 within Emory's Global Health Institute to reduce the health, social, environmental and economic burdens of tobacco use in China. The CTCP, funded by the Bill & Melinda Gates Foundation, has established smoking reduction programs in seventeen Chinese cities.

The Academic Exchange: How serious a problem is cigarette smoking in China?

Pam Redmon: China today is comparable to the United States some forty years ago, when approximately 40 percent of adults smoked. There are more smokers in China today than there are people living in the U.S. An interesting difference is that 53 percent of men, but slightly more than 2 percent of women, smoke. Fewer than 20 percent of Americans smoke today. We would like to see an even more accelerated decline among Chinese smokers in the years to come.

The Chinese culture is very accepting of tobacco use. Gifting cigarettes is a huge tradition. You give expensive brands of cigarettes to your doctor, government officials, and important people in your life. On Chinese New Year, at weddings and other holidays and events, cigarettes are a favored gift. The packaging on expensive cigarettes is beautiful, and a carton can cost $100 or more. One way to change social acceptability of cigarettes as gifts is to require ugly graphics and warnings on packages in accordance with World Health Organization recommendations.

AE: How does the CTCP operate?

PR: Our program is unique in China. Rather than providing grantees with a standard program plan, we let each city consider its own situation and its own stage of readiness, then determine for itself where it can have

Linda Cendales
Assistant Professor Of Surgery

In Spring 2011, a team of Emory surgeons led by Cendales successfully performed a rare hand transplant on a twenty-one-year-old patient. Only seventeen patients have undergone this procedure since 1999.

The Academic Exchange: In what ways might limb transplant be a kind of revolution?

Linda Cendales: We are introducing the option of a quality-of-life transplant for the reconstruction of defects that we are unable to reconstruct from [a patient’s] own tissues. A limb transplant extends beyond the technical and immunological. In addition to the functional aspect of performing daily tasks, the hand can be the means to communicate emotions, language—how we project to others.

AE: Why is limb transplant more complicated than solid organ transplant?

LC: Hand transplantation is vascularized composite allograft (VCA). In contrast to other solid organs, such as the kidney, liver, heart, etc., VCA includes the transplantation of multiple tissues—skin, muscle, nerve, tendon, bone—as a functional unit. Each tissue has different components that may add to the way the body reacts to a transplant and to the outcome of the transplant.

Additional differences include the visibility of this type of transplant, the return of sensation, and the social, emotional, psychological, and occupational implications that the transplant has to the recipients and the people around them. In addition, I believe the hand is the reflection of the brain, and as such, limb transplantation impacts cortical changes.

AE: The patient said several days after the surgery, “I’ve already accepted this hand as mine.” What does that acceptance mean to you?

LC: I think when someone accepts an organ from someone else, there is a moment when the recipient takes ownership of that organ. The visibility and functionality of a hand brings that ownership to a different dimension. After a hand transplant, the patient needs to be committed to making that organ work, which extends beyond the compliance of taking the immunosuppressive medications. It includes monitoring the skin for changes, long hours of hand therapy, protecting it from temperature changes until nerve regeneration takes place. In addition, [there is] the adaptation of the body image and the projection of that image onto others.

Thanks to advances in micro-surgery and transplantation, it is technically and immunologically possible to transplant basically every organ.”
the greatest impact in changing social norms around tobacco use. We have seventeen cities and seventeen different plans of action. Each city will be evaluated independently based on its unique situation.

**AE:** Does what you want to achieve equate to a revolution of sorts?

**PR:** Yes. The goal of the program is to dramatically change social and cultural norms. People have to understand that smoking is harmful to them and others around them and that it can cause serious illness and death. Then they have to change their attitudes and their behaviors. Any progress toward reducing the attractiveness and acceptability of tobacco use will have a tremendous impact.

**AE:** Describe some of the strategies you’ve used.

**PR:** The strategies fall into three categories: policies, programs, and health communications/media. Smoke-free policies and increases in the price of cigarettes through taxation have been proven to reduce tobacco use. When properly enforced, smoke-free policies can go a long way to protect non-smokers from secondhand smoke and to encourage smokers to quit. When smoking is cost prohibitive, consumption decreases. Along with these policy changes, there is a need to educate the population about the harms of tobacco use and secondhand smoke through media messaging and educational programs. In China, only about 23 percent of the adult population understands that smoking is a deadly habit.

**AE:** Other than funding, what types of assistance do you provide?

**LC:** We have a phase II clinical trial evaluating how a hand transplant compares to the standard of care after amputations, which is a prosthetic device. Our screening evaluation at Emory is thorough. The assessment includes laboratory workup, radiologic and neurologic studies, rehabilitation, psychosocial and social work assessments, and reconstructive and transplant surgery evaluations. We have a multidisciplinary meeting where each candidate is individually considered [regarding whether or not to move forward to the next step in the process. The evaluation is a good opportunity for us to learn about the candidate and for the candidate to learn about us.

The field of VCA is in its initial stages. The current experience shows that the procedure is safe and that patients have improved their quality of life after a hand transplant. Recipients are able to do activities that they were unable to do with their prior prosthetic device. Examples include opening doors, tying shoes, turning newspaper pages, acquiring sensation, and feeling "whole again."

At this point, it is possible to do the procedure safely. What we as a field have not been able to figure out yet is in whom to do it and when to do it. The fact that we can do it does not necessarily translate that we should do it.

The natural history of medical discovery starts with pessimism and rises to enthusiasm before it achieves a stable pace. Today, in VCA, we have not reach the peak of enthusiasm. I look forward to looking back in five, ten, fifteen years to how the evolution took place and to celebrating our Emory contributions to the improvement of people’s quality of lives, the advancement of science, and the training of new generations through the development of this innovative therapy.

**AE:** Why go to the trouble and perhaps delay of waiting for a limb that matches the patient in terms of gender and skin tone?

**PR:** We delivered a lot of training on the front end and talked about the types of activities that promote changes in social acceptability of tobacco use. We also discussed how to address the needs in different population sectors, such as in schools, medical centers and public places. We trained them to conduct a situational analysis within their cities to determine available resources and identify areas of greatest need. Some found they already have smoke-free regulations, but these policies are not being enforced. The cities selected their areas of focus, and we continually work with them to determine ways to better educate the populace and partner with city government and organization leaders to create, strengthen, or enforce policies. We’ve seen that if the city leadership gets behind the effort, great things can happen.

**AE:** Has there been resistance to anti-smoking initiatives from China’s tobacco industry?

**PR:** Yes. China is the largest producer of tobacco products in the world. Last year, close to 8 percent of China’s gross profits came from taxes and sales of tobacco products. The government will have to make a choice between the revenue from tobacco consumption and the public health of their nation.

**AE:** Describe some of the challenges of working in China.

**PR:** You learn very quickly that city government support is an important key to success. In fact, city mayor support of the Tobacco Free Cities program was a grantee requirement. Even if the central government passes a smoke-free policy, it’s up to the cities to implement the policy, and they often need help making some of that happen. That’s where we come in. By initiating movement at the local level, we believe social norm change will occur and ultimately spread throughout the nation of China.

**LC:** Our current protocol matches for blood type, skin pigmentation, size, and gender. At this stage, there are many more “unknowns” than “knowns,” and we lean towards the cautious side until we collect sufficient systematic data to move forward incrementally. I think as we move onward, skin pigmentation and gender will be the recipient’s choice.
Igniting Revolutions with Ideas
Science/Art Collaborations and the future of Emory

More than at any time since Charles Darwin’s revolutionary idea emerged, the last decade may have changed our understanding of biological evolution and the tree of life. From defining the human genetic bar code to the transplantation of entirely synthetic genomes into organisms, new technologies have enabled a description of life at the atomic level, and that understanding has forever changed our view of our place on Earth. Indeed, scientific and technological discoveries are extending ideas about our world at an ever-increasing rate. In high school chemistry, students are taught that the product of pressure and volume of a gas remain constant; yet in the domain of ideas, this relationship is rarely maintained. Revolutionary insights create social pressure, and, as in the Arab Spring, the ideas and thoughts explode. Or, as in Darwin’s revolution, the volume of ideas may be unchanged as they remain sealed within the academy. What might be before us in this era of rapid scientific transformation? Can Emory provide a vantage point for the future? Ideas begin in universities. Our faculty, students, and staff create new knowledge; our buildings store rich repositories of information. As the pressure of new ideas shapes our ever-changing world, it can at times ignite revolutions. But ideas require a conduit to the community—a leaky pipe that can nourish people in unexpected places beyond our campus. One of the greatest thinkers of all time, Galileo Galilei, recognized the need to share scientific advances with the public. His success as a scientist was politically charged largely because of the way he taught, which was to include everyone in a dialogue about the radically expanding universe. He shared the story of the conflict between the theories of a geocentric and heliocentric universe as a dramatic dialogue in the vernacular language, Italian, in order to reach beyond the walls of the Church. Following in the footsteps of Galileo, we, too, must find ways to share our dramatic dialogues in a common vernacular.

We must find, that is, a way to stretch our ideas into the public domain and create a shared and accessible discourse. The collaborative, cross-disciplinary spirit that characterizes Emory offers great possibilities. Our Methodist heritage survives through a commitment to education as a moral force in society. We stay on the pulse of issues facing the academy and society, and we often respond to them through collaborations, because we recognize that many answers emerge through interdisciplinary lenses. In fact, Emory has long considered strong interdisciplinary connections central to its academic and cultural identity, and we have consistently found that creating intellectual partnerships across campus best enables our success. The Graduate Institute for the Liberal Arts and women’s studies, founded in 1952 and 1986, respectively, are among the oldest programs granting interdisciplinary degrees in the country. Our African American studies department was the first in the region to grant undergraduate degrees. And we have continued to develop strong collaborations across the natural sciences, social and health sciences, and most dramatically arts and humanities. Indeed, Emory’s Vision and Mission statements maintain that creative interdisciplinary collaboration is central to our history as a contributor to and member of local, national, and international communities.

This collaborative infrastructure is now allowing Emory to lead in reaching beyond the institution, releasing the buildup of pressure of ideas into our community. The literary efforts of individuals like physicists Sidney Perkowitz and Ray DuVanrey to explain physical concepts to the public set the stage for the 2008 Evolution Revolution, a town hall meeting that engaged the public in discussing the future of evolution at the bicentennial of Darwin’s birth. The Atlanta-based Center for Chemical Evolution (CCE), a National Science Foundation/NASA-funded research center, has partnered CCE scientists with creative performing artists to present current research in chemical evolution and origins of life chemistry to public audiences around the world. The collaborative works of art they create serve not only to engage, educate, and inspire wonder in our Earth and the heavens, but also to change the nature of the questions being asked and the scientific lessons learned. Working hand-in-hand with these origins of life scientists, Lelavision, a Seattle-based performance arts duo, has created new dance, sculpture, and music to reveal the beauty of molecular evolution in their piece “The Accumulation of Change.”

Lelavision is just one of the artists collaborating with scientists to pull discoveries out of academic journals and place them in the context of human stories. Science taverns—opportunities for people who are interested in science but not necessarily science professionals to gather and learn—are flourishing in pubs and coffee houses around Atlanta. Almost 300 DeKalb high school students visited the Emory Performing Arts Center to mix science and art during the 2011 International Year of Chemistry. Fernbank Museum is hosting Lelavision in a performance with their 2011 Darwin Exhibit. And the Atlanta Botanical Garden committed its full scientific 2011 public programing series to CCE scientists. While some metropolitan areas have started weeklong and citywide science festivals, Emory has embarked in its own celebration of science, allowing engineers and composers, actors and psychologists, chemists and choreographers, among others, to take the stage together to contribute to a public understanding of cutting-edge science throughout the year in the Center for Creativity and the Arts’ Creativity Conversations. Though Atlanta does not yet have a formal science festival, interdisciplinary collaborations already in place create an extensive infrastructure to support the viral spread of academic ideas into our community.

While it is generally easier to recognize revolutions in retrospect, fundamental changes in how we communicate as a society offer a unique experience of transformations as they are happening. Social media technologies have awakened a culture of participation and collaboration, allowing individuals a powerful awareness of their impact on history through an increasingly public exchange of ideas. These technologies allow for collaborations, and in turn allow art to serve as a vehicle for a revolution in scientific engagement. The interactive theatrical production “Group Intelligence,” a collaboration of the CCE and Out of Hand Theater, exemplifies the potential for information dissemination and valuable scientific dialogue in a fusion of art, science, technology, and university-community partnerships. Workshopped on Emory’s campus and premiered in downtown Atlanta in spring 2011, “Group Intelligence”
How Then Shall They Learn?  
A call to revolution in the Remix Era

Evolution are seldom polite. They can spring from institutional settings, sometimes fostered by an institution’s capacities and people. Or they can be abrupt or violent, as in Egypt and Libya this year. Or revolutions can be democratic and deliberate, ebbing and flowing with art, taste, and the media. In any case, modern technologies have quickened the pace and the possibilities—and the force with which revolutions hit.

Benn Konsynski  
George S. Craft  
Distinguished University Professor Of Information Systems & Operations Management

Six years ago, there was no YouTube. Now, 35 hours of video are uploaded per hour to the site, which registers more than 2 billion views per day. More than 70 percent of that traffic comes from outside the United States. Five years ago, Twitter emerged; now it has slightly fewer than 300 million users. At the same time, Facebook had just begun to open to users beyond students and faculty; now its number of accounts is approaching 700 million. Just two months ago, Google Plus attained 50 million users in less than a month. We need focus on acceleration, not velocity—on how change is changing.

Technology changes the art of the possible and the possible in art. It permits, just as society demands, challenges to assumptions and assertions about virtually everything. It invites us to align our practices with our aspirations, to radically reconsider new approaches in areas such as health-care—and education. If we do not deliberate now, we will be responding to pressures that will overwhelm our freedom to make choices about them. We must, then, have earnest conversations about the way technology is enabling revolutions in education.

Most contemporary discussions on the future of education begin with a focus on preserving its traditional institutions. If we truly wish to explore the most strategic options, however, we must begin with the end, with the outcomes of education—what should students learn? How should they be prepared? In this rapidly changing world, we need to understand what civic and social engagement will look like in the new global society. Will Emory take full advantage of our interdisciplinary infrastructure to find creative ways to engage all world citizens in the ideas that are so rapidly changing how we understand our universe? Emory University and the Atlanta region can initiate this revolution by taking bold steps toward a future where the university boundaries are dissolved by community curiosity and by providing a venue where revolutionary ideas are freely debated, quickly absorbed, and rapidly integrated into the human experience.

We might also begin this radical reconsideration of education with the craft of teaching. Since I began my teaching career more than 30 years ago, I have been in continuous pursuit of effective pedagogy. My teaching will always evolve as I personally try new techniques, learn from them, and make adjustments—just as the structures within which I teach also evolve programmatically. Those structures establish clear constraints—how we award degrees, how we grade and compare grades, how we require and measure contact and commitment, and how we assert matriculation windows. Many of these restrictions, however, impede innovation in our institutional pedagogy. But if we summon the courage to challenge our assumptions and assertions, many extraordinary possibilities emerge. For example, if we seek not to teach to satisfy the constraints and restrictions, but to “make learning happen,” we might begin to see outcomes that are positive both for the institution and for society. But again, we need to begin with the desired outcomes—with true learning—and from there, design the institution with that vision in mind. Start with the individual and end with the social implications.

And yet so much about the centuries-old, entrenched structures and cultures of higher education resist this possibility. University practices have evolved from a focus on educating the elite to educate the masses. We now base our approaches to learning on economies of scale and scope. And we limit learning opportunities to concentrated moments in time, attention, place, and other factors constrained by physical realities. We do so even as technology increasingly allows us to challenge prevailing notions about time, place, proximity, roles, responsibilities, and authorities. How might we now challenge those past assumptions and assertions about educational environments, given the new capabilities technology offers—and the new social needs driven by emerging global and socioeconomic realities?

Here is an example: Instead of teaching in a classroom, we should be teaching in class-space. Learning communities are not defined by time and place, and in fact the “same time/same place” paradigm is an expensive pursuit in this era. Perhaps we might look to the world of business, which is adapting new forms of meeting, cooperation, and collaboration that diminish historic burdens (and costs) and create new collaborative opportunities.

The old governance and hierarchies do not support these sorts of transformations. We are moving too little, too slowly. If our current progress were a basketball player, we might say, “He’s short, but he’s slow.”

But new possibilities still offer transformative strategic options. For example, in my domain, commerce, we are able to challenge the historic allocation of decision rights and authorities and the mechanisms of measurement and control. Who may make a decision on the purchase of a good or of a product allocation? That right might move entirely beyond my enterprise, given the proper control mechanism—such as a vendor’s.
uprising’s leadership, that appointed a caretaker government, oversaw the temporary reform of the constitution, and established the rules for upcoming parliamentary and presidential elections. Progress toward the “purification” (tahir) of the state establishment of officials formerly allied with the regime has been slow. While a few hundred police officers were relieved of their duties in June, a fundamental restructuring of national ministries and the country’s provincial and local-level government has been postponed to an unspecified time in the future. Moreover, the new parties being formed by leaders of the uprising are still at an early stage of development and have had little time to mobilize voters before the start of parliamentary elections in November. And when these elections take place, the majority of Egyptian citizens are more likely to choose candidates who can provide them with services, who are linked to established families, or who appeal to religion, than to engage in a careful evaluation of the merits of different party programs. Wealthy businessmen and prominent clan and tribal leaders formerly associated with the ruling party, as well as the Muslim Brotherhood, are hence likely to be in a stronger position than the youth organizers of the uprising to determine the composition of the commission that will be formed by parliament to draft a permanent Constitution. In short, it is far from clear whether the young democracy activists who led the uprising will be able to carve out a meaningful role in the new political order.

Finally, the protestors’ demands for higher wages, more jobs, and better housing, health care, and schools cannot be met with easy-fix solutions. Rather, they will require new initiatives entailing massive administrative reforms and infusions of technical expertise and capital that will be difficult to implement by any new government, however noble its intentions. Indeed, one of the central challenges facing Egypt’s new elected leaders will be to manage citizens’ expectations while creating new opportunities for them to participate in shaping the country’s future.

Transforming the state

Regardless of the context and the circumstances, revolutionary changes in the institutions of a state and society do not materialize overnight. But this is particularly the case in Egypt, where those who assumed power in the wake of mass revolt have prioritized maintaining order and stability over radical transformation. At the same time, those pushing for more extensive and rapid change must contend with the fatigue that has set in among many Egyptians who, after the disruptions of recent months, want things to return to normal. A case in point is the growing frustration expressed by many Egyptians with the few thousands of protestors still camped out at Tahrir Square. They have sealed off the area from traffic, creating massive logjams and impeding the flow of people and supplies across the city. For a brief time, the protestors also closed the Mugama’a, the vast headquarters of the Egyptian state bureaucracy located on the square, a move that deepened the impression that the protestors had gone too far. Walking across the square this past July, I passed by the Mugama’a, which had recently re-opened for business. Across the entrance was a large, hand-written sign, declaring that it “was open by order of the revolutionaries” (maftuh bi-amal al-thawwar). And I could not help but be struck by the poignancy of the protestors’ efforts to assert their authority at a time that they were becoming increasingly marginalized in practice.

Egypt’s uprising managed to bring down a dictator, but it did not and will not automatically lead to a broader restructuring of state power. As Peter Jones, a political scientist at the University of Ottawa, observed, Egypt may best be described as a case of “regime change without a change of regime.” If a revolution has begun in Egypt and other Arab states, it is not so much a discrete event as a process that will remain fluid and susceptible to a wide range of outcomes for a long time. The protestors at Tahrir Square risked their lives to promote a transition to a democratic order. But as scholars of democratization have observed, the building of robust democratic institutions is likely to be a difficult and protracted process, simultaneously requiring the formation of a new government committed to democratic principles, the reform of authoritarian state institutions, and the development of robust political parties and civil society organizations capable of representing the interests of different sectors of society and providing a counterweight to the state. In sum, it requires the reconstitution and redistribution of power across all levels of state and society, a monumental undertaking that will take generations to complete. And the difficulties associated with a transition to democracy are arguably even more vexing under conditions of resource scarcity and deep class, religious, and ideological divisions that hinder the kind of broad national consensus needed for new directions in state policy to succeed.

The events of the Arab spring have inspired a new sense of hope in a region long mired in political, intellectual, technical, and economic stagnation. But the outcomes of the Arab “revolutions” launched in the name of democracy and freedom remain clouded by uncertainty, and their success will hinge on the willingness and ability of new leaders to address popular demands while eliciting patience and forbearance for what is sure to be a long, hard road ahead.
that God has written on the hearts of all people teaches many other rights that are essential to the protection of a person and a people to the cultivation of life, liberty, and the pursuit of happiness and holiness.

By 1650, Protestants had used this categochical logic to develop and defend almost every one of the rights and liberties that would appear, a century and a half later, in the United States Bill of Rights of 1791—freedoms of religion, speech, press, and assembly, rights to bear arms and be free from forced quartering of soldiers, rights to jury trial in civil and criminal cases, and the full panoply of criminal procedural rights (from no unreasonable searches and seizures to no cruel and unusual punishment), along with the guarantees of due process when government threatened to take their lives, liberties, or properties.

This new Protestant political theory—that the state was formed by a political covenant with fundamental rights whose pervasive breach triggered the right to revolution—became a standard argument in the “age of the democratic revolutions,” as historian R.R. Palmer once called it. In France, the most famous exposition of this argument came in the 1579 tract Vindiciae, Contra Tyrannos, which even the eighteenth-century Jacobins would later cite with reverence in the build-up to the French Revolution. In Scotland, the most powerful exposition was George Buchanan’s Dialogue Concerning the Rights of the Crown and the People of Scotland (1579/1601), which would become an anchor text for later Scottish Enlightenment theories of “common sense” that were so influential on both sides of the Atlantic. In the Netherlands, these ideas were axiomatic for the powerful Calvinist logic of revolution against Spanish tyranny, which was set out in more than 10,000 pamphlets and sermons published from 1570 to 1650. The Dutch revolutionary writers were soon outdone by the 22,000-plus Calvinist tracts published in England from 1640 to 1660 in defense of the Puritan revolution against the tyrannical King Charles and the ultimate execution of this tyrant by public beheading in 1649. And the English were outdone a century later by the New England preachers who rallied the American revolutionary troops with hellsire and brimstone sermons that rang with the familiar Protestant adage: “resistance to tyranny is obedience to God.”

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Agency for Healthcare Research and Quality and the U.S. Department of Defense, as a basis of the revolutionary idea that medical and nursing students should learn team communication skills together. Starting four years ago with just 200 nursing and medical students, this program has evolved to now include more than 450 students a year enrolled in six different programs within the medical school and the nursing school. We are currently conducting a robust evaluation of this program with the help of colleagues at Georgia Institute of Technology.

The Institute of Medicine released the report on The Future of Nursing in October 2010. Among its four key messages was that nurses need to be full partners with physicians and other healthcare professionals in redesigning health care in the United States. The Nell Hodgson Woodruff School of Nursing is using strategic partnerships such as these to help prepare future nurses with the skills and knowledge they need to partner with colleagues in the hard work of reaching the six dimensions of quality health care described in Crossing the Quality Chasm—care that is safe, effective, patient centered, timely, efficient, and accessible.

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questions about the learning strategies best suited to involving students actively in the methods of our disciplines, the level of guidance necessary in our courses, or the explicit connections we make to other disciplines. We see this diversity as a reflection of the ongoing and dynamic nature of a process that began three years ago and has yet to play out fully.

The extent to which the new GEP will be truly transformative at Oxford and beyond will depend, if we look playfully at the revolution analogy a final time, on whether the revolutionaries can govern successfully and achieve their goals. Significant faculty development initiatives have been undertaken to date, and organizational structures are in place that regulate the review and approval of Ways of Inquiry courses as well as the development of the Themed Clusters and the General Education Honors Program. Plans for more comprehensive modes of program assessment as well as for contributions to the Scholarship of Teaching and Learning are underway as well. These accomplishments should inspire confidence that the revolutionary qualities of Oxford’s GEP will be transformed into sustainable and replicable structures.

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merchandising decision or an information system that enables new strategic options for rights, governance, and authority.

There is no intrinsic value in change simply for its own sake. Leveraging new capabilities enabled by technology is no guarantee of effective results. Indeed, bad design and poor execution happen far too often. So it is worth asking, What mechanisms might we need to preserve going forward? What might be at risk if we were to radically redesign the systems of the university? For both the creation and dissemination of knowledge, our solutions should enrich the services we provide—not merely economize. Are the changes we are considering going to help individual learners attain the knowledge and skills they require to remain nimble through the fast-paced change in the decades ahead? It is a tremendous challenge to think of a “class size of one,” but every student requires a different strategy. We must make learning happen for individuals throughout their lives.

The university itself needs to conduct experiments with its future—to test new paradigms of identity, economics, engagement, and service in the creation and dissemination of knowledge. MIT’s Open Courseware and Stanford’s online courses (AI, Database, and Machine Learning) are worthy experiments. Are they bold enough? I have my doubts.

We are living in the Remix Era. Key skills are the ability to “elementalize”—to break things apart, recombine them, and mix them with other things to make something entirely new. We cut, paste, and enrich—and so it must be for the coming revolution in education.

Revolutions are seldom polite.
Endnotes
The Xinhai Revolution & U.S. Foreign Policy

Kwi-Bo Huang
Associate Professor, Department of Diplomacy, National Cheng Chi University, during the panel discussion “The Revolution of 1911 & Its Continuing Impact on Political, Economic, and Social Development in Mainland China and Taiwan,” Sept. 6, 2011, sponsored by the Halle Institute

Why did the Xinhai Revolution [of 1911 in China] succeed? Domestically, mediocre governance and corruption were important factors, and another very important factor was the U.S. Secretary of State John Hay’s open world policy in 1899, which called for equal access to trade in China and respect for China’s territorial integrity. This also meant that the U.S. would like to keep the status quo in China, and would also like to help China avoid being torn up by Western powers. So the open-door policy helped China in the sense that the revolutionary army could have a chance to fight against the Qing court without being colonized by various Western powers. And of course assistance of overseas Chinese. According to some scholars, about 80 percent of Sun Yat-Sen’s finances during the revolutionary period was from overseas Chinese.

Islamophobia Before and After 9/11
M. Khurram Baig
Georgia Association of Muslim Lawyers, from the panel discussion “Islamophobia and the Impact on American Life,” Sept. 13, 2011, sponsored by the Center for Ethics, the Muslim Student Association, and American Friends Service Committee

What was the state of Muslims and Islam in America pre-September 11? The reason I think that has to be addressed is because what you will find when you conduct that examination is that by and large Muslims were an unknown entity. They were a marginalized entity. They were an entity that was always here. They lived next door, they went to your schools, but you didn’t really know anything about them. What has happened post 9/11 is that there has been a reshaping and a retasking of Islam and Muslims by those who are not friendly to Islam or Muslims, which has shaped the national discourse, which has shaped the national perspective. The one group that really holds the key to combating that are the Muslims. You have to ask yourself, What have we as Muslims done to combat that negative perception that’s being promulgated and put out there? Muslims have to take the lead in being involved in their communities, because it goes back to my opening point: you cannot hate the other when you know the other. But when you don’t know the other, you can hate the other with vengeance—and very easily. But when that other is the PTA president, is your city councilman, is your volunteer firefighter, is your kid’s tutor, it’s a lot harder to hate the other. What I advocate is, as Muslims, we have to take an active role in our communities. We cannot afford insularity; we cannot afford to be an unknown entity.

Religion and the Legal System
Mary Ann Glendon
Learned Hand Professor of Law, Harvard University, from her talk, “Religious Freedom—A second Class Right?” Sept. 20, 2011, sponsored by the Center for Ethics, the Muslim Student Association, and American Friends Service Committee

The Supreme Court of the United States has long been a stronghold of the attitude that religion is essentially a private affair. Since the 1940s, Supreme Court majorities have tended to treat religion as primarily an affair between an individual and his or her god, and to give rather short shrift to the settings where religious beliefs and practices are generated, regenerated, nurtured, and transmitted from one generation to the next. That has important political as well as religious implications, because as de Tocqueville pointed out long ago, the various social bonds, the defining texture of civil society that stand between the individual and the state, play a key role in safeguarding a whole range of democratic freedoms. And as Richard Garnett, a law professor at Notre Dame, has cautioned, there’s reason to worry that the individual conscience standing alone is not up to the task of creating and maintaining the conditions that are necessary to secure religious freedom. Garnett said just as we take for granted freedom of speech, that freedom of speech requires institutions like newspapers, and universities, and libraries, and associations and media, so freedom of religion involves the institutions that protect and nourish individual free exercise. The tendency of our legal system to neglect the freedom of those supporting entities is punctuated with many exceptions. Nevertheless, the tendency seems to be accelerating . . . as religious freedoms come into conflict with various nondiscrimination norms or with abortion rights or with various sexual liberties. The freedom of religious institutions to choose their own personnel and even to publicly teach and defend their positions on various issues is under challenge from a variety of directions. To cite one recent example, the proposed regulations just issued by the Department of Health and Human Services have a definition of religious employer that is so narrow as to exclude most groups that want to claim it.

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