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Three Visions of the New 'Media Union'

Digital image by Albert Kahn and Associates; photos by Bob Kalmbach

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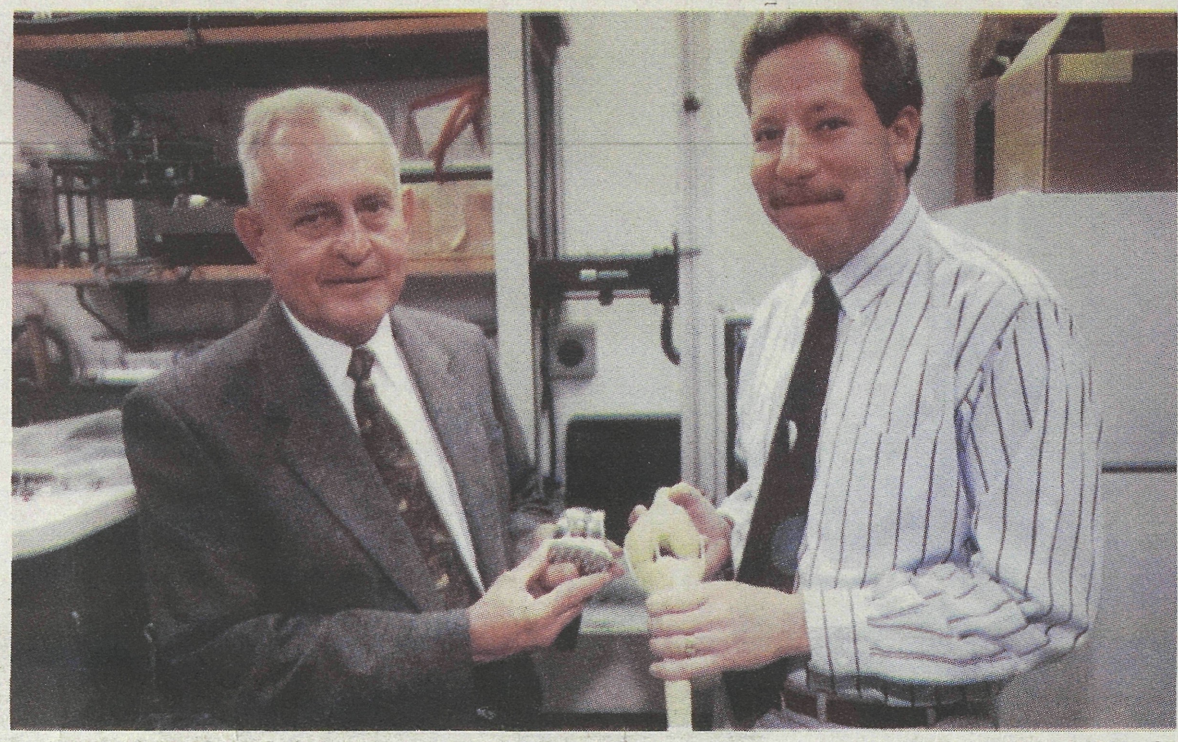
The Work of the Lord

Biomedical engineering team is making breakthroughs in skeletal repair

BY JOHN WOODFORD
PHOTOS BY JETTA FRASER

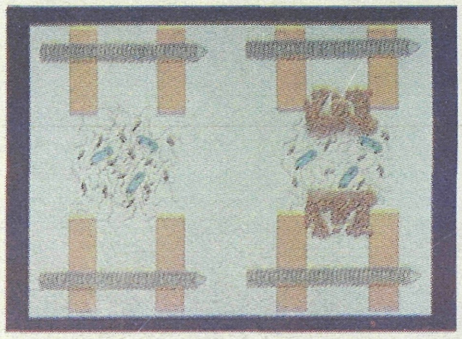


Chief of Orthopedic Surgery Matthews (left) holds the Instacone artificial knee, while biomedical engineer Goldstein holds a model of the natural joint. Goldstein is also the Medical School's assistant dean for research and graduate studies, professor of surgery, professor of mechanical engineering and applied mechanics, and a research scientist in the Institute of Gerontology.

Well, the Thigh Bone's connected to the Fake Bone; the Fake Bone's connected to the Shin Bone; the Shin Bone's connected to the . . .

In the song "Dem Bones," the thigh and shin bones are connected to the knee bone, and as with all other skeletal connections, the whole wondrous system is identified as "the work of the Lord." But even divine handiwork breaks or decays, and that's where biomedical engineer Steve Goldstein and orthopedic surgeon Larry Matthews step in, not as substitute deities but heavenly helpers, making artificial joints, improving new bone-like "glues" that help bones mend, and genetically engineering new tissue systems that stimulate bone cells to replace broken or weakened bone with fresh and strong bone.

In the U-M Orthopedic Research Laboratory (ORL) in the basement of the 400 N. Ingalls Building, Goldstein and Matthews are showing visitors the results of their 10-year collaborative project, the Instacone artificial knee. The Instacone is a testament to Goldstein's and Matthew's efforts, as Goldstein puts it, "to think like bone, and ask ourselves what forces turn bone on."



Tissue engineering: Goldstein and two colleagues have formed a bioengineering firm to develop a therapy that delivers a gene-carrying matrix (blue ovals, illustration at left) at a defective bone area held in place by pins. The genes cause cells to produce a protein that stimulates bone formation (illustration at right).

"Think of a bridge," Goldstein says, " in which little pieces of the structure are constantly falling off and need to be replaced quickly and effectively to keep the bridge standing and functioning during the whole process–this is what our skeletal system goes through.

"Now imagine that the repair process of a bridge is undertaken not by engineers and workers but by the bridge material itself. That is what bone does. Bone senses how it's being used and maintains a dynamic balance."

Bone's constant remodeling of itself involves complex mechanisms using special cells that suck up aging bone, and other special cells that lay down fresh bone. If bone is underused, as happens when astronauts travel in space, or even when a broken limb is in a cast, it thins and weakens. On the other hand, an overloaded bone thickens, strengthening the stressed area, as can be seen in the greater mass of a tennis player's dominant arm.

"If bone fractures under a load it can't take," Goldstein says, "it starts to heal. Nature can handle most repairs, but when a healer intervenes to help make sure the healing is straight and firm, both engineering and biology must be applied." Until our era, most improvements in orthopedic care derived from progress in engineering–better braces and casts, the invention 60 years ago of pins and screws that can stabilize fractures, and the development almost 40 years ago of artificial joints like the Instacone.

Perfect Hawkeyes at Michigan

Biomedical engineering student Nancy Caldwell (right) came to U-M two years ago with two friends and classmates from the University of Iowa, Trina Buhr (left) and Stephanie Caswell.

The trio graduated with 4.0 GPAs and are among 30 outstanding students selected nationwide each year to receive three-year doctoral Biomedical Engineering Research Grants from the Whitaker Foundation of Washington, DC.

Buhr is a biomedical engineering student working with a team that is developing a portable chair that can collect fitness data from the elderly.

Caswell, an electrical engineering student, is part of a team seeking to improve implantable defebrillators that regulate the heartbeats of persons susceptible to potentially fatal irregularities in the electrical signaling that regulates the beats.

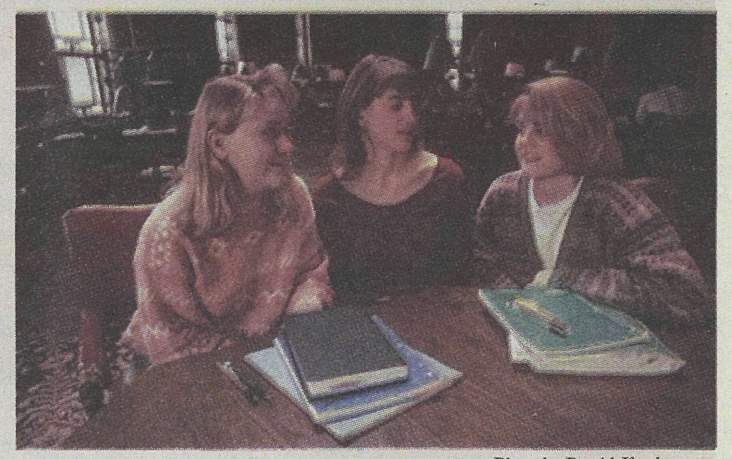


Photo by David Koether

Each year, about 150,000 Americans receive surgical replacements of their knees. They usually need artificial joints because age or other metabolic factors, such as disease or injury, compromise bone's ability to lay down enough new bone to enable the entire bone to hold up under normal stress.

The Knees Have It

"The cartilage that forms the load-bearing surfaces of bones at the joints is lubricated with synovial fluid," Goldstein explains. "The joints so formed have spectacular properties; their coefficient of friction is lower than that of any man-made contact bearing–more slippery even than steel on ice. But this tissue heals poorly, and injuries and age weaken it and decrease the lubrication. If it deteriorates too far, bone winds up rubbing on bone." This is the condition that often requires replacement of the knee with an artificial joint and bearing surface.

While most artificial joints provide relief and support, their components loosen and break down much more quickly than natural bone does, usually after 10 to 15 years, Goldstein says, "although some last much less long, and some a bit more; this limited effectiveness makes it a form of treatment that we don't like to have to use on younger patients."

In the last 10 years, as more was learned about the biology of bone, physicians and engineers have increasingly begun to look for biological healing factors that could enhance, and perhaps one day replace, traditional therapy. "So far, most of the breakthroughs have been a mix of ways to stimulate biological factors through the use of engineering methods," Goldstein reports.

About nine years ago, Goldstein and Matthews decided to see if altering the shape of an artificial knee's interface surface could stimulate bone's natural tendency to grow and strengthen, and thus create a tighter attachment between man-made materials and bone. After testing many shapes they found that a cone-shaped, porous titanium cleat stimulated the natural bone remodeling process.

Exactly why bone likes this shape has not been determined, Goldstein says, but he thinks it is related to the fact that "bone encounters a whole spectrum of different forces and stresses along the whole surface of the cone," with stress high at the tip and tapering to a low point at the base.

Once the patient's tibial surface is prepared, reverse cone-shaped holes are drilled into the bone; the holes are very slightly smaller than the 16 cones. All are drilled in about 90 seconds, and the implant with its extending cleats is hammered into position. Over the next six to 12 months, bone decides where it would like to grow into and around the implant. Most artificial joints are held by a bone cement called methylcrylate, which is not an adhesive, but more like wood filler or grout. "It polymerizes and hardens once in place, but doesn't have ideal mechanical properties and is considered to be a possible weak link in the therapy," Goldstein says.

"While this concept of 'ingrowth fixation' has been investigated for nearly 20 years," he adds, "and is used in some clinical implants, success has been inconsistent. We believe that the major reasons that have limited this biologic fixation are related to the specific design geometry of the devices. Non-optimal designs may make it difficult to obtain initial stability of the implant immediately after surgery and provide inappropriate mechanical stresses at the implant bone interface, preventing optimal bone remodeling and ingrowth."

Dr. Matthews confides that "when I hammer the artificial knee into place, it looks strong as heck. That gives me a great feeling. We've had the Instacone in our first two patients for about a year now. It seems to be doing very well."

Goldstein says he hopes long-term tests show the Instacone is good for 30 years, because "that would make prosthetic joints a much more attractive therapy for patients in their 40s, 50s and 60s, who now face the prospect of a limited life expectancy for their artificial joints." But even if the Instacone meets his wish, it is still "only an interim solution to solving the long-term solution of joint disease."

Skeletal Repair Systems

Goldstein and other researchers suspect the long-term solution will involve "a biologically derived material to replace cartilage, or a way to induce cartilage to repair itself." This quest has carried Goldstein and his colleagues into the burgeoning field of tissue engineering.

With a $750,000 grant from the Whitaker Foundation of Washington, DC, Goldstein, co-principal investigator John Faulkner and

X-ray comparison: An Instacone knee with cleats imbedded in tibial surface, and a real knee. The Instacone (at right) has a sheath of titantium beads welded around its cleats. Two patients received Instacone prostheses this year and both are doing fine so far, Dr. Mathews reports. He and Goldstein hope that Instacone will last for 30 years.

15 other faculty colleagues are developing research and training in the area of musculoskeletal tissue engineering. There are two main approaches in tissue engineering. One is aimed at replacing or augmenting damaged or diseased bone, tendon or muscles by stripping in a substitute tissue; the other involves biologically stimulating the growth of new, healthy bone, optimally by gene therapy.

An example of the first approach is the U-M lab's work with a mineral bone substitute that can be injected into a fracture, where it quickly hardens, stabilizing the bone and promoting rapid healing. It is especially useful in treating breaks in spongy, porous bone called trabecular bone, which forms near joints and is slower-healing than the denser bone on the shaft.

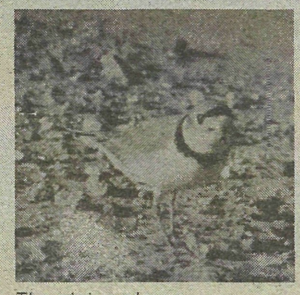
"We knew that the Norian Corporation of Cupertino, California, had developed a patented cement made of calcium phosphate, a mineral that is chemically similar to bone," Goldstein says. "The material mixes to a toothpaste consistency and hardens in about six minutes after injection at the site of fracture, where it forms calcium apatite, the main ingredient of natural bone."

The paste is so similar to bone that the cells that lay on new bone apply bone layers right on top of the material. "In time," says Goldstein, "it appears that the bone cells take the Norian away and replace it with natural bone. The material is currently under FDA clinical trials." Goldstein thinks the paste may improve treatment of fractures

Hello, young plovers, wherever you are . . .

Twenty-one pairs of piping plovers nesting on the northern beaches of Lake Michigan this summer have given researchers at the U-M Biological Station hope that this once-common inhabitant of the Great Lakes area may be making a comeback.

The Great Lakes' piping plover population dwindled from about 200 pairs at the turn of the century to only 11 in the early 1980s. Since then, researchers at the U-M Biological Station near Pellston, working closely with the US Fish and Wildlife Service and state agencies, have kept close watch on the last of Michigan's disappearing plovers. Students and scientists have banded birds, made detailed observations, set up protective predator exclusion cages, and served as "plover stewards" to divert people and pets from nesting areas during the summer breeding season.



Photograph by Francesca Cuthbert, U-Minnesota

The piping plover

BIOMEDICAL Continued

2-millimeter giant steps

Since 1991, researchers at the U-M College of Engineering's S.M. Wu Manufacturing Research Center have been helping the American auto industry build quality into domestically produced cars, vans and trucks—one millimeter at a time.

Seventy U-M scientists and students are currently working in 15 Chrysler and General Motors auto plants nationwide. U-M researchers analyze thousands of measurements recorded by laser sensing devices as auto bodies move through the assembly line and then use the data to help plant production workers identify and correct the source of manufacturing defects.

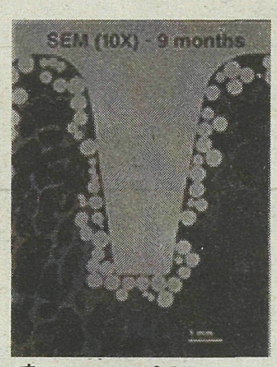
The goal is passing the 2-millimeter test—a stringent world-class auto body quality standard used by Japanese and European manufacturers. To meet the standard, auto body dimensions cannot vary more than 2 millimeters from design specifications. (One millimeter is about the width of a line drawn by a freshly sharpened #2 lead pencil.)

The more closely body parts fit together, the easier they are to assemble and the less wind noise and fewer water leaks they generate—both high on the list of consumer complaints and warranty repairs.

The 2-millimeter project is funded by the Auto Body Consortium—a coalition of domestic automotive manufacturers and suppliers. Initial funding was provided by the Advanced Technology Program of the National Institute of Standards and Technology.

An auto body in the S.M. Wu Manufacturing Research Center's laboratory with a laser sensing system manufactured by Perceptron of Farmington Hills, Mich.

suffered by the elderly, improve the affixing of screws or rods to bone with poor density, and lead to an improved, biologically active grout to hold artificial joints.



The geometry of the Instacone cleat is a result of years of computer analyes of lab tests. The porous titanium beads on the cone stimulate bone ingrowth, which is depicted in gray.

Tissue of Lives

Perhaps the most spectacular new technology Goldstein and his colleagues are developing is a genetic engineering breakthrough in which they hope to use DNA, which encodes and directs the production of proteins, as a pharmaceutical.

While some tissue-engineering labs are growing the desired tissue cells on a dissolvable matrix and implanting this temporary scaffolding at the site where new tissue would replace it, Goldstein and his colleagues are working on a new therapy that would permit placement of DNA at the site. After receiving their own DNA "medicine," patients would become their own bioreactor and make the protein that the DNA codes for right at the spot of the injury.

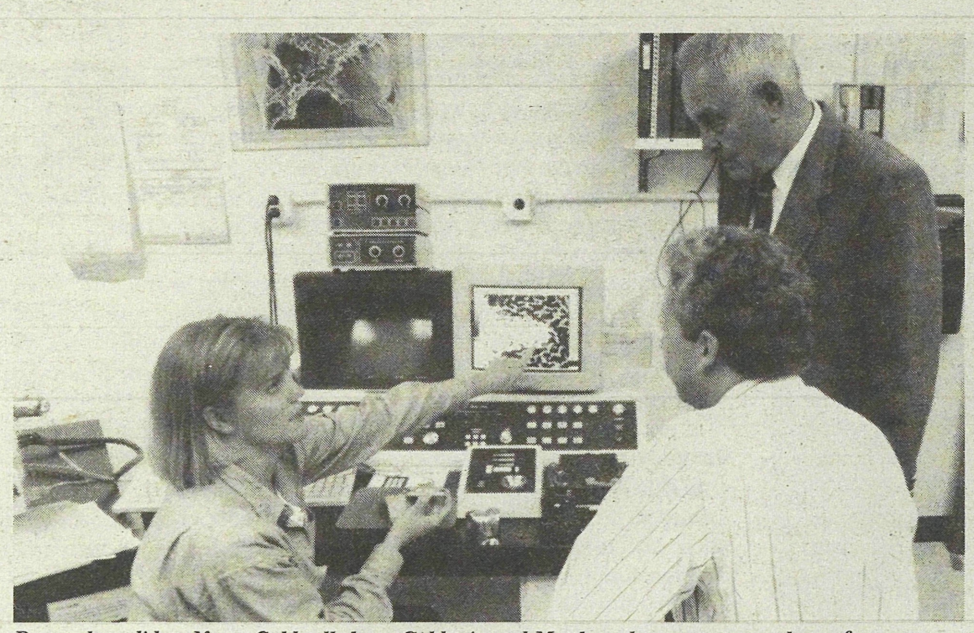
Pathologist Jeffrey F. Bonadio, pediatrician Robert Levy and Goldstein formed a spin-off company, Matrigen, a few months ago to develop the new technology. So far, they're evaluating it in stimulating bone formation in fracture defects.

"How we deliver the genes is special," Goldstein says. "It's a time-released system governed by a delivery matrix. Say a fracture is not healing well. We'd like to inject our 'carrier matrix,' which would deliver the DNA to the site. The matrix solution solidifies in the site and stimulates the patient's own cells to produce bone.

"We're hoping our work leads to clinical trials in the near future. It's part of a broader effort in tissue-regeneration technology. If it works, it may be applicable to many other tissue and organ systems."

Farther down the research road, tissue engineering like that in the Orthopedic Laboratory may lead to "bioartificial organs" that can be developed in the lab from the patient's own cells and tissues, and then used to replace the damaged or dead organ.

"All of these developments," Goldstein says, "reflect our commitment to basic science in our lab. Our team includes basic scientists, surgeons, graduate students in bioengineering and mechanical engineering, medical students and post-doctoral fellows. We want our work to bridge from the molecular scale all the way up to the patient."



Doctoral candidate Nancy Caldwell shows Goldstein and Matthews her computer analyses of experimental model surgeries. 'Specifically,' Caldwell says, 'I'm looking at the effect of different shapes on the growth of bone into the artificial pores built into the titanium surfaces of artificial implants.'

Tracking the wild radish

Experiments conducted at the University of Michigan Biological Station with wild radish have shown that different genetic strains of this common weedy plant vary widely in their ability to reproduce when exposed to higher-than-normal levels of carbon dioxide.

Since scientists expect levels of atmospheric CO2 to double in 60 to 80 years, if present levels of fossil fuel emissions continue, this could mean that the "genetic blueprint" of plants living in the year 2050 may be very different from similar plants growing today.

The study is the first to confirm that reproductive response to elevated CO2 can vary within a single wild plant species. Ohio State University scientists Peter Curtis and Allison Snow with Oregon State University student Amy Miller found substantial differences when they grew five genetic varieties of wild radish in experimental chambers with twice the levels of carbon dioxide found in today's atmosphere.

Although on average the radish plants produced more flowers and seeds when grown in a high CO2 environment than control groups grown with current levels of atmospheric CO2, responses among the different varieties ranged from no significant effect to a 50 percent increase.

According to Curtis and Snow, plant varieties able to thrive and reproduce in a high CO2 environment are likely to become dominant in the future.

Wild radish

Peter Curtis and Allison Snow, Ohio State University

ANNOUNCES IN LETTER HIS PLAN TO STEP DOWN NEXT SUMMER

Duderstadt to retire from presidency

James Johnson Duderstadt, the 11th president of the University of Michigan, announced Sept. 28 in a letter to the University community that he intended "to retire from the presidency and return to the faculty of the University next summer" after almost eight years at the University's helm.

President Duderstadt said that he and his wife felt that while "there is no perfect time to step aside from a leadership role," this might be the best year to do so since "through the efforts of countless members of the University, most of the goals we set in the late 1980s have now been achieved. Today, in 1995, by any measure, the University is better, stronger, more diverse, and more exciting than at any time in its history due to your efforts."

He pointed out that "national rankings of the quality of the University's academic programs are the highest since these evaluations began several decades ago" and that "through the remarkable efforts of our faculty, the University now ranks as the nation's leader in research activity."

"Despite a decline in state support over the past two decades," he continued, "the University has emerged financially as the strongest public university in America. Our endowment has increased four-fold to over $1.3 billion. And, with almost two years left in the Campaign for Michigan, we are already at 90 percent of our goal."

Duderstadt also cited the "remarkable transformation in our environment as we approach the completion of our massive effort to rebuild, renovate and update all of the buildings on our campuses."

Perhaps the most important results of his administration, he said, was that, "through efforts such as the Michigan Mandate and the Michigan Agenda for Women, we now have the highest representation of people of color and women among our students, faculty, and staff in our history."

At the end of the 20th century, Duderstadt said, Michigan stands as "the leading public university in America ... challenged by only a handful of distinguished private universities in the quality, breadth, capacity and impact of its many programs and activities. Throughout higher education, people now look to us as truly 'the leaders and best.'"

Duderstadt said he had timed his decision so that the U-M Board of Regents would have "ample time to complete the search for my successor" during the transition period.

"After 27 years on the faculty, then as dean, provost and finally as president, [Anne and I] are maize and blue down to the level of our DNA," Duderstadt concluded. "We look forward to serving the University in new ways in the years ahead. And we look forward to many more years of working with the marvelous people who make up the Michigan family. Thanks for the opportunity to serve! And Go Blue!!!"

President Duderstadt and Anne Duderstadt

Michigan Gov. John Engler injected controversy into news reports about Duderstadt's decision by saying that unhappy Regents had forced the president's hand. Duderstadt said Engler's charge "was news to me," and stated that he had "always enjoyed the support of the Regents" despite inevitable ups and downs in any power-sharing relationship.

Several Regents also challenged Engler's account of the events, including his fellow Republicans Andrea Fischer Newman of Ann Arbor, who said Duderstadt "was not forced out" and that his retirement "was an immense shock to me," and Daniel Horning of Grand Haven, who said he was "outraged" by Engler's remarks.

Under the terms of his retirement, Duderstadt will receive his full presidential salary of $260,709 during a one-year sabbatical, and be eligible to return as a "University professor of science and engineering" at a salary averaged from the three top Engineering school faculty salaries, or about $180,000 a year.

The U-M Board of Regents announced that they accepted President Duderstadt's decision "with regret," adding that he had "worked tirelessly and effectively to serve the best interests of the University."

Duderstadt also denied a spate of rumors. Some had the former Yale lineman becoming U-M's head football coach; others had him returning to the engineering school, moving to head another university or doing an about-face and continuing his presidency.

The rumors amused Duderstadt. He told the *University Record* that even though he'd been "deluged with proposals and probes" from many directions, including at least one major university's presidential search committee, "Anne and I are firmly committed to leading this institution and serving as president until midnight June 30."

'Almost Every Goal We Set Has Been Achieved'

On the day his retirement was announced, President Duderstadt was interviewed for radio broadcasts by Roger Sutton of U-M News and Information Services.

Duderstadt said that "the role of a modern university president these days is a very complex one; it involves a wide range of activities that do tend to take you away from what faculty love to do most, which is teaching and scholarship. There are a whole host of things that I have piled up over the years that I am really very interested in participating in."

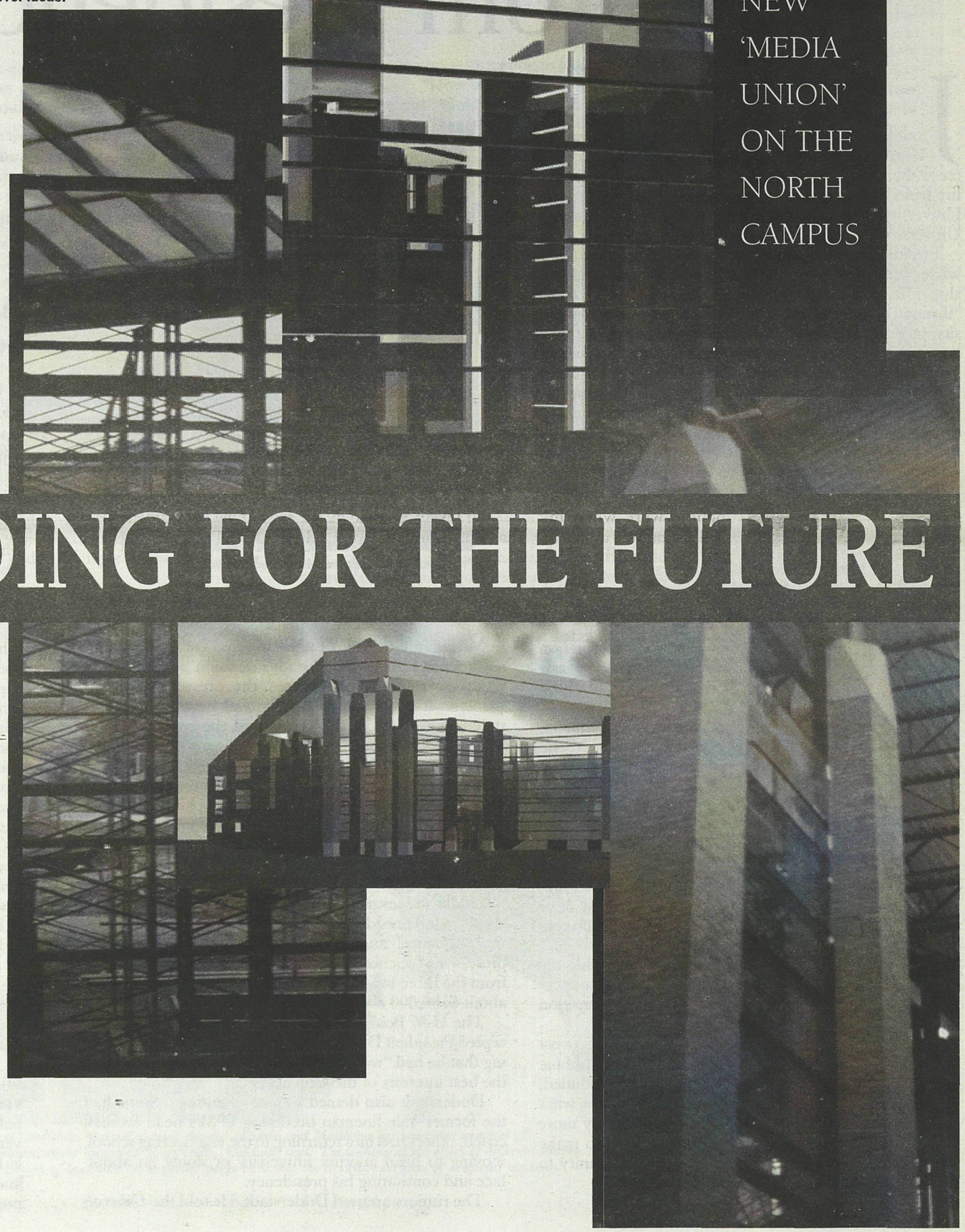
Asked to reflect on his and Anne Duderstadt's achievements as U-M's leaders, the president replied that their sense of accomplishment "was perhaps the key factor that drove this decision. We were walking round the campus in August and noticed all the new buildings that were coming on line and being finished. We started taking score and it turned out that almost every goal we set when we first took this job in the late 1980s has been achieved or exceeded–every one. And so it's natural to begin to think, 'What do we do next?' As we thought more and more about that, we realized that the next series of initiatives for the University would be ones that would have to be sustained for some time, probably after the turn of the century. We just did not see ourselves being in leadership roles for that length of time."

Reminded of a former University of Wisconsin president's advice that university presidents probably shouldn't serve more than five to seven years or so because of the stress and strains, Duderstadt said he agreed.

"Maybe there's something about public universities these days where eight years is enough. I know it's twice as long as most presidents serve in public universities–it's more typical of private universities. But eight years is a long time, particularly in my case when I was also acting president and provost for two years prior to that, so it's almost a 10-year stint. That is a long, long time."

BUILDING FOR THE FUTURE

THE NEW 'MEDIA UNION' ON THE NORTH CAMPUS



The ITIC planning committee began 'blue-skying' what they'd like in ITIC five years ago. They visited Silicon Valley firms that designed their buildings to foster creativity and asked students and others on campus what they'd like to see in the building. 'The result,' says ITIC Director Frank, 'is a premium on spaces that ease casual meetings because chance encounters generate the most interesting and novel ideas.'

By John Woodford

Imagine receiving a beautiful $38-million building full of $7 million worth of equipment, from desktop computers linked to the latest audiovisual, to virtual-reality and digital recording technology. A building with studios and spaces for dance and theater; with graphic design studios, with furnishings custom-designed to promote comfort and collaboration, with electronic libraries and interactive multimedia equipment–and with almost no marching orders, rules or limitations on how you would use these resources.

No one would build such a facility without prescribing how it would be used, you say? Well, the University of Michigan has done just that.

The building is dedicated to creative collaboration among students, faculty, staff and researchers interested in the fields of music, art, engineering, architecture, education, the humanities, medicine and manufacturing.

This January, the state-funded, 225,000-square-foot, four-story Integrated Technology Instructional Center (ITIC) will open its doors and offer campuswide users a new learning, teaching and performing environment.

ITIC is a pet project of President James J. Duderstadt who, as a nuclear engineer and former dean of the College of Engineering before becoming U-M's provost and then president, has long had a keen interest in forging concrete links between technological, creative and pedagogical endeavors.

Duderstadt sees ITIC as a "Media Union"–an educational building that, unlike others on campus, "is not owned by any single department or school, but truly a meeting place open 24 hours a day, seven days a week, to the entire University community."

ITIC is more than a high-tech playpen, however. Duderstadt sees it as a facility required to help the state and nation move through "transformations in knowledge that may ultimately prove as profound as the Renaissance or the Industrial Revolution."

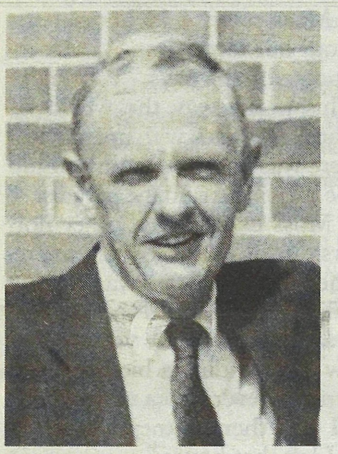
This "knowledge revolution," he says, may well "lead to a shift in our intellectual culture. While the 'analytic' professions such as law and

Images by Albert Kahn and Associates, architects for the ITIC project.

business dominated the 20th century, there is a great deal of evidence that the 'creative' professions such as art, medicine, organic chemistry, literature and engineering will dominate the 21st. Instead of manipulating and rearranging knowledge, it is becoming increasingly clear that the driving intellectual activity of the future will be the act of creation itself."

With the world of industry undergoing profound structural changes under the impact of computers, networking, satellites, fiber optics and related technologies, Duderstadt emphasizes, it is vital that the state of Michigan and the nation "grapple with the challenges and possibilities that this new world brings." ITIC will be a training ground for those who will do the grappling.

Here are some of the ways three ITIC executive committee members foresee how that training may evolve:



Paul C. Boylan, vice provost for the arts and dean of the School of Music: "An academic phenomenon that has emerged in the last two decades is that students are much more visually oriented than people were when my generation was in school. How these students process information is influenced by their incessant interaction with media—with video games and MTV and all the rest—and they seem to visualize, assimilate and process imagery much more quickly and thoroughly than previous generations.

"Linked with these new mental processes are the technological advances that have resulted in the capacity to store in digital form vast amounts of information. These students have available to them new information systems that provide immediate access, retrieval, analysis and organization of this information, and the students must learn how to present the resulting ideas cogently.

"What are the most effective ways to teach this new generation? That's something that ITIC will help us study and learn. We have to take a new look at how students of this generation learn so we can be more effective teachers, and create more effective learning resources for them—not just in the classroom but in their living environment as well.

"We in earlier generations have considered traditional values of learning to include memorization of math tables, accurate spelling, mastery of certain forms of syntactical organization and communication. But the need for those older methods and rules is mitigated by new software technology which provides calculators, spell-checking, sentence analysis. So our previous strategies may not be as relevant to this new generation. We just don't know that they are. ITIC may help us find out. We are going to see some enormous tinkering in ITIC."

Douglas E. Van Houweling, vice provost for information technology: "When I was an undergraduate, I ran a printing service for our residence hall association. I did the layout myself; and typed copy on a big special IBM typewriter that couldn't backspace. Then I got the plates made and saw the publications through printing. We did all kinds of things, brochures, newsletters, calendars of events and custom-made Christmas cards.

"If I were asked to do the same thing as a student here at Michigan, next year I'd go out to ITIC and prepare multimedia presentations for all sorts of events and put them on the Web. I'd make videos for groups to use to advertise their events. If jazz concerts or leadership conferences wanted publicity, instead of brochures, I'd place illustrations, snatches of sound, perhaps animation, right on the Web. Or I might produce a virtual reality presentation for a dance recital.

"ITIC's library function is also important. Most people think of libraries as places to store information that has been put in the can, so to speak. We'll have some materials like that. But whether it's books, videos, computer graphics packages or video presentations, everything in the library will be coupled with the creative sections of the building, so that what's created can go right into the library, and what's in the library can be conveniently retrieved by creative people here and throughout the world.

"ITIC will provide facilities that—on the few campuses that have such resources—are situated only in advanced research laboratories. But here they will be available to all students, faculty and staff from wherever they come on campus. What will students do at ITIC? It will all depend on their creativity, and I think we have many extremely creative people on campus.

"Almost all movies today include objects that are virtual, and then merged with the rest of the movie, sometimes in ways that cannot be detected. This lets the creators present events that never happened in the real world, but seem to within the context of the movie. *Forrest Gump* is an obvious example. Well, how will that kind of capability affect the learning environment? We're exploring that at Michigan. We're already using simulated environments to help social work students learn how to conduct group therapy sessions and to help business students come up with a strategic plan. Students are involved in creating these new learning environments, and my guess is they'll play an increasingly greater role in the process."

Randall L. Frank director of the ITIC:

"Students in any field will come up with ways to make a multimedia 'paper,' as it were—we're really going to need a new name for the new academic and intellectual productions. Physics students will be able to make a visualization of the ways that a physical principle or law operates.

"The building's layout creates particular kinds of study spaces that foster collaborative efforts. There are 25 group collaboration rooms for students. The rooms are equipped with work stations that facilitate working on group projects. Design studios have transparent walls that are intended to encourage and inspire collaboration. The idea that seeing the projects under way may spark ideas in other students passing by. Wherever users of the centers sit down, they will have a computer that connects them with the Internet. Right from opening day there will be 1,200 network interfaces via plug-in jacks for laptop computers or portable digital assistants.

"ITIC will have an ongoing educational program. Experts will be on-site, ready to help those who show up with just the germ of an idea that they don't yet know how to carry out. We'll also run short courses on the use of the technology, which is getting easier to use all the time. Even now, there are things an individual can easily learn how to do that only a few years ago took a special Hollywood studio to do."

The ITIC executive committee also included Edie Goldenberg, dean of the College of Literature, Science, and the Arts; Daniel E. Atkins III, dean of the School of Information and Library Studies; Robert M. Beckley, dean of the College of Architecture and Urban Planning; Allen J. Samuels, dean of the School of Art; and Glenn Knoll, interim dean of the College of Engineering.

The President's Office has produced an information-packed booklet on the ITIC. Readers who wish to receive a copy may request one through *Michigan Today*.

WE ARE GOING TO SEE SOME ENORMOUS TINKERING IN ITIC—PAUL BOYLAN

THYLIAS MOSS

A POET OF MANY VOICES AND A SPELLBINDING DELIVERY

By Eve Silberman

Her hands clasped, her head lowered, Thylias Moss sits in a chair in a small room at Ann Arbor's Concordia College and waits for what she calls her "poetry experience" (she dislikes the term "poetry reading") to begin. The 4'10" associate professor of English at Michigan looks timid and schoolgirlish in her high-buttoned blouse, short skirt, tights tucked into rolled-up socks, and high-laced shoes.

But once introduced, she springs to her feet as though just wound up. Thanking the audience for coming, she playfully reminds them, "We poets don't have the benefits of rock stars," whose audiences, she notes, are familiar with their work. "We are always flattered when someone in the audience yells, 'Please read!'"

Although no one shouts, "Please read," the attendees soon look absorbed–and occasionally dazed–as Moss zings from poem to poem and persona to persona. She sounds like a squeaky-voiced little girl when she delivers "When I was 'Bout Ten We Didn't Play Baseball." She assumes a weary-voiced Black dialect (*"Let me clear up a nagging misunderstanding:/ This is the way to make the white woman's bed"*) when she reads "The Linoleum Rhumba," a poem inspired by her mother, who has worked most of her life as a maid. And her voice becomes powerful and sermonizing when she delivers "There Will Be Animals!" a poem alternatively playful and despairing as it suggests that the true beasts are those with two legs: *"The lion lying with the lamb, the grandmother/ and Little Red Riding Hood/walking out of a wolf named Dachau."*

At times she coaxes the audience into participating, challenging them, in one instance, to tell her what line upset her mother in the poem "She's Florida Missouri but She Was Born in Valhermosa and Lives in Ohio" (Florida Missouri Brasier is her mother's name).

"*Those feet wide like yams*" someone calls out.

Moss laughs and agrees. "Oh, that troubled her! And she made me look at her feet: 'Do they look like yams?' Well, I have already written this; what am I supposed to say?" The audience eats up the merry dialogue.

After the reading, a woman who says she teaches at Concordia College declares she's never heard any poet read so well. "I like all her voices!" she exclaims.

"I am an exceedingly shy person," Thylias Moss says in her office the day after the reading. But offering up her poetry to audiences transforms her. "I'm a performer. If I have to go out and be myself, that would not work." Reciting her poetry, however, gives her "a sense of completion" because she can expose her listeners to "all the rhythms and cadences of the language" that they can't get through reading. It is an "exhilarating experience" not only for her but, she hopes, for her audience, too.

And apparently it is. Moss won the annual $10,000 Dewar's Profiles Performance Artist Award in poetry in 1991. She has four collections in print, including her most recent, *Small Congregations, New and Selected Poems*, published by Ecco Press this year. She also received the Witter Bynner Prize awarded annually by the American Academy and Institute of Arts and Letters to a "distinguished younger poet."

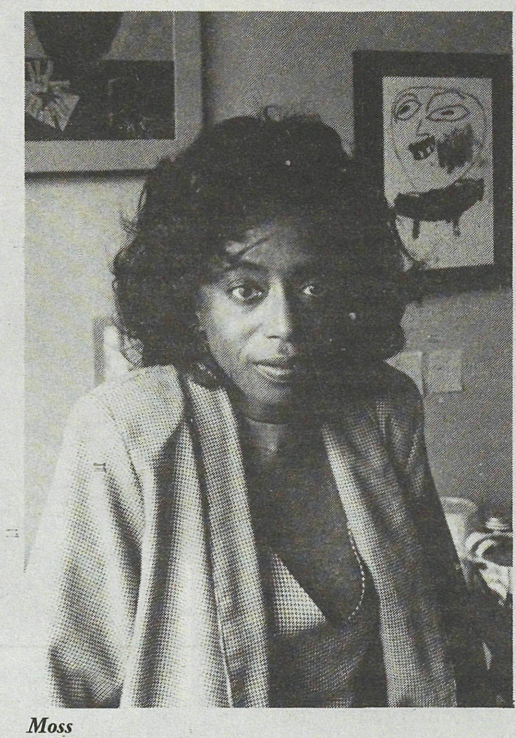


Photo by Bob Kalmbach

Moss

Although serious poetry reaches a very small number of readers, poetry readings–whether on campuses or at bookstores–are enjoying a resurgence of popularity. Moss's emphasis on the oral artistry of poetry means she's in the right place at the right time. "I don't know many poets who have better eyes and better ears," the poet Charles Simic, her former teacher in graduate school at the University of New Hampshire, has said of Moss. "She knows that language is both the individual and the community."

Moss has branched out, publishing a children's picture book, *I Want to Be* (Dial Books for Young Readers, 1995), with a second children's book, *Someone Else Right Now*, scheduled for publication soon. Keenly interested in children's literature, she is teaching a seminar for first-year students this fall, "The Literature of Invented Realities," which will focus on the escapist element in that genre. She also recently finished her autobiography, encouraged by the interest a short sketch of her life last year in the *Wall Street Journal* generated in several publishers. On hold is a draft of a novel. Secretive about its plot, she says only that it is not based on her life. She adds, however, that she will not be "another Black woman providing a first book commiserating a kind of desolation of spirit. That seems to be so common for African American writers. Mine is different. It is rather about the rise and triumph of the spirit, not its dissolution."

Moss's professional success is a victory over a childhood that contained beauty but also extraordinary pain. She grew up in Cleveland, the precocious and adored only child of Calvin and Florida Brasier, a tire recapper and a maid. Her father created the name Thylias because "he decided I needed a name that hadn't existed before."

Her first five years were spent happily with her parents in the attic apartment of a home owned by a Jewish couple who Moss believes were Holocaust survivors. The Feldmans treated her like a grandchild, recalls Moss–playing with her, celebrating Jewish holidays with her, giving her presents. She still keeps the meticulously carved toy stove that Mr. Feldman made, and which is the subject of one of her poems.

After the Feldmans sold their house and moved, the Brasiers remained in their apartment. The new homeowners had a 13-year-old daughter, Lytta, who baby-sat Thylias after school and treated her cruelly. Thylias lived in fear of Lytta, who stole her piggy bank full of silver dollars and once forced her to slash her nails across the face of another girl.

Moss never told her parents about her tormentor. "I accommodated," she says. "I thought, 'This is the way the world is.' Once I was back with my parents, there was paradise. Why would I be the one to ruin the paradise?"

Moss experienced other horrors during the four years she remained in that house. When she was 7, she was passing by a friend's house when the friend jumped from a window to escape a would-be rapist. That same year, on her way to the library, she saw a boy riding a bicycle killed when a truck ran him down. "I never said a word of this to anybody," she said. "I was there witnessing things that only happened when I left that house."

At school, there was pain of a more subtle sort. Although she started out at a friendly, racially mixed school where her intelligence and her gifted violin playing were recognized, she had to leave that school at age 9 when her family moved. At the new, mostly white school, she was treated indifferently, and denied a school-issued violin. "It was clear to me that all this happened because of race," says Moss, who vows to take up the violin again someday.

Moss grew withdrawn at school, seldom speaking in class even though she was a leader in her neighborhood. She found solace in writing, however. She'd written her first poem at age 8 on the back of her church bulletin, which she began editing at 15. And through church sermons, she says, her sense of language and of the power of the spoken word was heightened. She was awed, she says, "by my awareness of what these ministers were able to accomplish with voice alone."

It was also through church that she met her husband, John Moss, who was then in military service and is now a U-M administrator. They married when she was 19, and she spent two unhappy years at Syracuse University. She left Syracuse to work for several years at a Cleveland business, starting out as an accounts payable clerk and ending up as a junior executive. Increasingly unhappy despite her success on the job, she quit and enrolled in Oberlin College in 1979, and wound up graduating in 1981 with the top academic record in her class. Moss got her master of fine arts in creative writing from the

ONE FOR ALL NEWBORNS
By Thyllias Moss

They kick and flail like crabs on their backs.
Parents outside the nursery window do not believe
they might raise assassins or thieves, at the very worst
a poet or obscure jazz musician whose politics
spill loudly from his horn.
Everything about it was wonderful, the method
of conception, the gestation, the womb opening
in perfect analogy to the mind's expansion.
Then the dark succession of constricting years,
mother competing with daughter for beauty and losing,
varicose veins and hot-water bottles, joy boiled away,
the arrival of knowledge that eyes are birds with clipped wings,
the sun at a 30° angle and unable to go higher, parents
who cannot push anymore, who stay by the window
looking for signs of spring
and the less familiar gait of grown progeny.
I am now at the age where I must begin to pay
for the way I treated my mother. My daughter is just like me.
The long trip home is further delayed, my presence
keeps the plane on the ground. If I get off, it will fly.
The propeller is a cross spinning like a buzz saw
about to cut through me. I am haunted and my mother is not
dead.
The miracle was not birth but that I lived despite my crimes.
I treated God badly also; he is another parent
watching his kids through a window, eager to be proud
of his creation, looking for signs of spring.

From *Small Congregations*, Ecco Press, Hopewell, NJ

University of New Hampshire, where Simic "lit a fire" in her. She produced poetry that dealt not only with the pain of her past, but also with the possibility of recovery and revival.

Moss's Haven Hall office suggests much about her personal and poetic journeying. On her desk are photos of two beaming boys; her sons Dennis, 9, and Ansted, 4. Books of poetry line her office shelves, and on a wall hangs a relic of segregation: a sign saying "Colored Waiting Room."

As a small child visiting relatives down South with her parents, Moss noticed those signs. Many of her poems deal with the African American experience, bearing titles like "Lunchcounter Freedom," "The Lynching," and "*Nigger* for the First Time." She is chary, however, of being classified as a "Black Female Poet." She'll accept the label if it is applied, she says, because "I am a person whose ancestors were brought to this country from Africa. But it has not very much of anything to do with how I view the world." And although she admires groundbreaking contemporary writers like Toni Morrison and Audre Lorde, she declares firmly, "If no Black woman had ever written anything, I would have written. I don't mind adding to the African American female aesthetic–whatever that is. I hope it is not easy to define."

Eve Silberman is a freelancer and the profiles editor of the Ann Arbor Observer.

WORLD-WIRED POETRY

By M.Q. Thorburn

Around the Interactive Communications and Simulations office (ICS) in the School of Education, Prof. Frederick L. Goodman frequently resorts to the paradoxical comment that ICS and the International Poetry Guild are "well-known as the best-kept secret in education."

The International Poetry Guild (IPG) began as "a response to a call from the field," says IPG Director Jeffrey A. Stanzler. Ray Wilcox, a high school English teacher doing graduate work with Goodman, had participated in the Arab-Israeli Conflict simulation with a group of his students, and suggested that ICS do something for English teachers and students.

Wilcox worked with ICS Director Edgar Taylor, Goodman and Stanzler, who was then a graduate assistant at ICS, to take the idea of a poetry simulation and bring it to life on Confer, the U-M's pioneering computing conferencing system. IPG made its on-line debut in 1990.

Participating schools, which subscribe to IPG for $325 a semester, have come and gone over the past five years, but IPG has built a core group of schools that keep coming back. Last year, 60 schools participated in high school and middle school versions of IPG, with 19 U-M students serving as mentors to the young poets. Participation truly is international, with students coming from Department of Defense schools in Germany, Japan, Korea and Great Britain; several Canadian schools; and various schools across the United States.

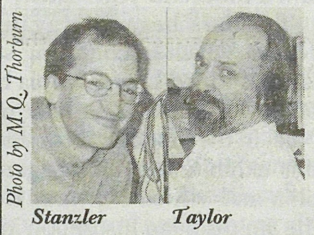


Photo by M.Q. Thorburn

Stanzler *Taylor*

Unlike activities such as theater or sports, poetry is often solitary, Stanzler notes. IPG links young poets with "peers in other schools and the U-M student mentors, who take their work seriously and honor the effort that goes into the work."

In addition, "IPG allows students a chance to utilize computer technology, and to learn from people other than their everyday teachers," says Mechelle Zarou '96, a creative writing major and IPG mentor from Northville, Michigan.

The IPG process is relatively simple. Students enter their poems into the guild via modem. The students at each school are then able to access all of the poems entered by all of the other schools. The mentors respond to students' poems, offering advice, constructive criticism, and lots of encouragement. They also enter items into the conference on a number of different poetry-related topics, such as poetry readings, poetic techniques, and the work of famous poets.

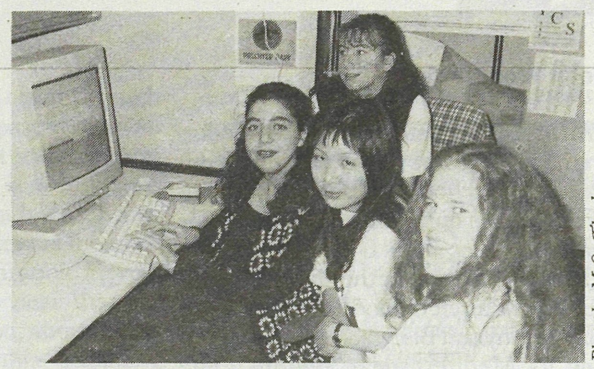


Photo by M.Q. Thorburn

Interacting poetically in the School of Education's International Poetry Program are student mentors (l-r) Zarou; Bonnie Kwong '95 of Ann Arbor; Joanna Zahler '96 of Woodbridge, Connecticut, and Shannon Armitage '96 of Brighton, Michigan.

Telecommunication technology is the tool that enables IPG to exist. Using nothing more than a personal computer, a modem and a telephone line, participating schools connect to IPG, uploading their poems and downloading poems from the other schools. The technology has its drawbacks, however. "It's very hard to convey an attitude of friendliness over the computer," says Zarou; on the other hand, she notes, "It's good, in a way, because it encourages all of us to understand the impact of words and to not take them lightly."

M.Q. Thorburn '95, an English major from East Lansing, Michigan, is ***Michigan Today's*** *student intern.*
Readers may contact ICS by phone: (313) 763-5950; fax: (313) 763-1504; or e-mail: info@ics.soe.umich.edu or the Web Home Page: http://ics.soe.umich edu

7 get Guggenheims

Seven U-M faculty members were among the 152 artists, scholars and scientists awarded 1995 Guggenheim Fellowships.

The fellows are appointed "on the basis of unusually distinguished achievement in the past and exceptional promise for future accomplishment," the John Simon Guggenheim memorial foundation said.

This year's fellows included faculty from 72 colleges and universities, although many fellows are not affiliated with academic institutions.

U-M professors sharing in the total $4,272,000 are listed below with their academic field and the projects that the grants will support:

Ruth Behar, anthropology: The sexual politics of the Cuban revolution.
E. Valentine Daniel, anthropology: The anthropology of Sri Lankan violence.
Yuri Gurevich, computer science: Foundation issues in computer science.
Raoul Kopelman, chemistry and physics: The molecular lens.
Bruce Mannheim, anthropology: Language, nationality and rebellion in southern Peru.
Brinkley Mesick, anthropology: Sharia law in an Islamic state.
Thylias Moss, creative writing: poetry (see story on p. 8).

NUBIA: RENOWN UNEARTHED FROM RUINS

By John Woodford

"Africa has no history." Hegel's disdainful remark has come down to us from the 18th century, echoed not only by contemporary scholars but even, according to *The Haldeman Diaries*, by a US president. Africa has long lain under the charge that no noteworthy ancient civilizations arose among the myriad Black societies that lived below its Mediterranean regions. The Kelsey Museum of Archaeology's current three-month exhibition, "Ancient Nubia: Egypt's Rival in Africa," will go far toward correcting that misimpression.

The exhibition, which opened Sept. 29 and runs through Dec. 15, contains more than 230 objects that span the millennia from 3500 BC to 100 AD from a Black African civilization that arose immediately south of Egypt more than 5,000 years ago. The curator of the exhibition is David O'Connor, who headed the Egyptian section of the University of Pennsylvania's Museum of Archaeology and is now at the Institute of Fine Arts at New York University.

From C.R. Lepsius, Denkmaler aus Aegypten.

Royal cemetery near Meroe, with distinctive Nubian flat-topped pyramids.

Nubia's northern region began at the site of the present-day Aswan Dam, and curled 868 miles down the Nile Valley. By 1700 BC, Nubians lived in sizable cities for those times, forming a class society comprising workers, farmers, priests, soldiers, bureaucrats and an aristocracy, and developing technological and cultural skills on a level with the other advanced civilizations of their day.

Nubia was known as the Kingdom of Kush in the Bible, and the Greek historian Herodotus wrote that Nubia was renowned for its fair rulers and "pious and just" citizens. Nubia traded, conducted diplomacy and occasionally battled with Egyptians, Romans, Judeans and Assyrians. Nubia was colonized by Egypt from around 1500 to 1000 BC, but in 750 BC, the era of the Greek poet Homer, the Nubian King Piye turned the tables, conquering a weakened and disunited Egypt and becoming the first of several Nubian pharaohs who ruled a unified Egyptian and Nubian state for the next century.

Nubians produced and traded gold, ivory, incense, ebony, animal skins, grains, cattle, cotton and smelted iron. They controlled trade between Mediterranean lands and the African societies to the south and were middle men in the slave trade. Nubia, itself, however, O'Connor says, seems never to have served as any more significant source of slaves to Egypt than did nearby Semitic and West Asian lands.

Nubia's fortunes rose and fell over the millennia, as all civilizations have done. Its last high point in ancient times was the state of Meroe (MAYR-o-way), a great cultural center whose scribes developed an alphabet around 180 BC to better express the Nubian language, which until then had been written with Egyptian hieroglyphs. The Meroitic alphabet is still largely undeciphered, and until linguists crack its code, the sizable number of remaining written records are inaccessible. O'Connor says once the linguistic puzzle has been solved, we'll know more about the last days of ancient Nubia, which faded around 400 AD. In 500, Nubians turned from their own Egyptian-influenced religion to Christianity, and the region converted heavily to Islam a thousand years later.

Scholars began excavating northern Nubia (which in confusing scholarly parlance is called Lower Nubia because it lies on lower lands along the north-flowing Nile) in the first decade of this century. Yet this exhibition—which began in Philadelphia and visited Newark, Rochester and the Smithsonian Institution in Washington DC before coming to the Kelsey, and is bound next for Baltimore and Minneapolis—is the first major public presentation of Nubian history, culture and artifacts.

Why did Nubian history lie in general obscurity despite the consistent interest in it shown by generations of African American scholars? Ethnocentric bias played a big role in the underappreciation of Nubia, O'Connor says. In his catalog for the exhibit, he notes that many Western scholars have conveyed the idea that Nubia was either backward in comparison with Egypt and other societies of the time, or that Nubians borrowed all of their advanced technologies and ideologies from Egyptians. He cites as an example of "scholarly biases" the practice of translating the Egyptian words *heka* and *wer* as "ruler" or "king" when they are applied to heads of Near Eastern kingdoms or states, "but as 'chief' for the Nubian [leaders], although nothing in the text warrants the differentiation."

Peter Lacovera, an Egyptologist at Boston's Museum of Fine Arts, told the *Washington Post*, "What we realize now is that the Nubians weren't copying the Egyptians; they were innovators in their own right. In fact, they were often more innovative than the Egyptians in their use of different materials and in their artistic styles. Nubian ceramics were well beyond Egypt in technology and decoration." Nubians also built more pyramids than the Egyptians, although the Nubian version is smaller and has a flat rather than pointed top.

U-M Assoc. Prof. Thelma K. Thomas, an art historian and the Kelsey Museum's associate curator, points out that George Reisner, who pioneered in Nubian archaeology with his excavations in the early 1900s of a 5,000-year-old Nubian royal cemetery, seems to have been unsettled by his discovery.

Reisner argued that the pottery he had unearthed represented a culture that must have been essentially Egyptian—that is, non-Black, according to the widespread view of that time of a hierarchy of races. He theorized that this original culture soon declined as a result of the "increasing change in the racial character of the people. The negroid element became dominant."

Illustration by Michael Graham

Mounded royal tombs containing artifacts buried with the dead circa 1600 BC were found in the ruins of the city of Kerma.

Reisner had to twist his argument through "a good deal of mental gymnastics," Thomas continues, when he attempted to account for facets of Nubian culture that were distinct from Egypt's. She cites the following passage from his report:

"Thus a race was revealed which had only a political and geographical connection with Egypt. It was racially and culturally descended from the people living in the same place in the Old Kingdom. The Nubian race was negroid, but not negro; it was perhaps a mixture of the proto-Egyptian and a negro or negroid race, possibly related to the Libyan race. It lay outside the cultural influence of Egypt and, seeming to lack power or opportunity of self-culture, developed through several phases of the same quasi-Neolithic state in which we first find it."

Thomas, who is "fascinated by such historiography and by the still-growing accumulation of various versions of ancient Nubian history," says that today statements like Reisner "ought to leap out from the page as offensive as well as misguided."

Versions of Nubia's past are concocted not only by those who would belittle Nubia but also by those who seek to glorify it as a Golden Age state that gave birth to Egyptian civilization.

Some members of the African American community seize upon utopian depictions of ancient African societies as a corrective, however exaggerated or even erroneous, to the belittling versions of African cultures that arose as ideological justifications of the slave trade.

Thomas offers as an example of Afrocentric "popular re-imaginings" a comic book about an ancient Nubian super-hero, *Heru, Son of Ausar*, whose creator Roger Barnes includes a bibliography of African and African American historical interpretations of Nubia.

All over the globe versions of ancient history remain hotly contested by those who excuse or vindicate present policies on the basis of rights they claim through their interpretation of the past. American scholars have reported that some of their Egyptian colleagues think it is ludicrous to devote attention to ancient Nubia, which they have been taught to view as merely a poor country cousin of pharaonic Egypt.

It's more surprising to hear that the Sudanese establishment, too, shows minimal interest in ancient Nubia. Sudanese archaeologists say that some leaders of the current Islamic state see little value in valorizing the achievements of "pagan" originators of their culture.

Nonetheless, Thomas emphasizes, African archaeologists and historians, including Egyptians and Sudanese, are now playing major roles in reconstructing and reinterpreting Nubian and other early African civilizations that now present the largest remaining uncharted territory for researchers into ancient life.

Attention Expanding

The Kelsey Museum is seizing upon this awakening interest by using the Nubian exhibition "to expand our own attention to Africa beyond Egypt and Timis, two areas that are well represented in our collections and related research," says Becky Loomis, Kelsey's education and development officer, who has arranged numerous events to acquaint U-M students, regional school systems and the local community with the exhibition. Meanwhile, Kelsey Assistant Curator Janet Richards is investigating additions of Nubian materials for Kelsey's permanent exhibit.

Professor O'Connor will give a public lecture on the exhibition Tuesday, Nov. 14 at 7 p.m., Auditorium C, Angell Hall. For other information, call (313) 747-0441.

Initial funding for "Ancient Nubia: Egypt's Rival in Africa" *came from the Pew Charitable Trusts and the National Endowment for the Humanities. Financial support was also provided by the University's International Institute and the Office of the Vice President for Research. All images used in this article are from the exhibition catalog by David O'Connor and may not be reproduced without permission of the University Museum of Archaeology and Anthropology at the University of Pennsylvania.*

Three cups from Karanog graves (circa 1 AD). At left, a herdsman follows his dog—two cattle are on cup's far side. The faces on the ceramic cup shows scarification pattern on forehead, a form of identification still practiced in Sudan. The eye-motif motif may have been magically potent, perhaps representing 'life' or 'protection.'

A royal personage, apparently symbolically seizing an enemy army (circa 1 AD).

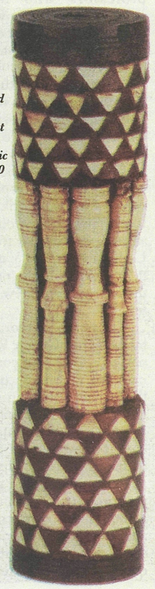
A figurine (called a 'shawabti') representing the dead person was often buried with the elite. This image is of the pharaoh Taharka (690-664 BC), one of the Nubian rulers of a unified Nubian-Egyptian state.

Meroitic-era potters paid more attention to naturalistic representation of animals, like this antelope, than to the human figure (Karanog, 100 BC).

Wood and ivory box shows multicultural texture of ancient society. The partially draped female figures derive from Roman art, the sphinxes from Egyptian culture, and the lion-like faces represent the Nubian god Apedemak.

Afrocentric Comic Books, Mariches, NY, 1993.

Heru, Son of Ausar, a Nubian comic book hero. Author Roger Barnes's Afrocentric saga mixes history with pseudo-history and inflates Nubia's contributions to Egyptian civilization.



A tube for carrying kohl (a powder used to darken eyelids), found in cemetery at site of Karanog, dating from Meroitic Period (100 BC-300 AD).

VIETNAM

'A Vital Service To Their Country'

U-M faculty's historic teach-in of 30 years ago

By Matthew Newman

The University of Michigan has long been recognized as one of the focal points for protest against the Vietnam War during the late 1960s and early 1970s. March 24 marked the 30th anniversary of one of the most significant anti-war demonstrations to be held at the university, the first "teach-in."

The U-M teach-in was among the first of a form of campus protest that was to spread nationwide. The teach-in became a new means of mobilizing students to examine policies of their government that they previously took for granted.

Throughout the fall of 1964, in spite of increasingly harsh criticism by the *Michigan Daily*, the Vietnam conflict did not appear to be a major issue on campus. This began to change in February 1965, when President Lyndon B. Johnson ordered the bombing of North Vietnam. The president's escalation of the war outraged many professors who had worked hard for his victory over the avowedly hawkish Barry Goldwater in the 1964 election. By March 1965, many faculty members believed it was time to act against the war.

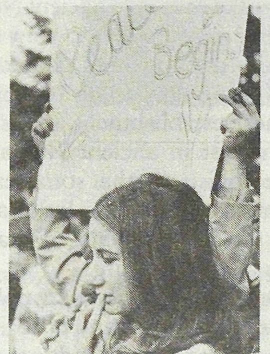
On March 11, 15 to 20 University professors met to discuss tactics. Sociologist William Gamson proposed a one-day strike or "moratorium" during which faculty protesters would refuse to teach classes and instead devote the day to teaching interested students about US involvement in Vietnam. After seeking the support of their colleagues, the number of professors committed to the moratorium grew to 49, only three of whom were tenured.

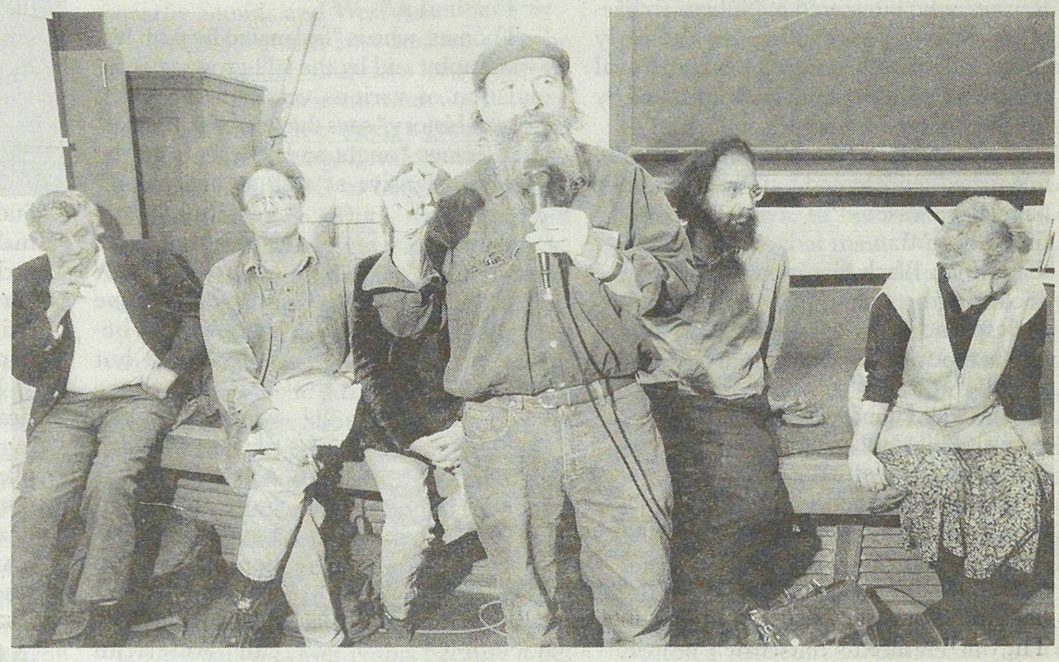
The proposed moratorium was immediately criticized by then-Gov. George Romney and the state Senate, which passed a resolution condemning the moratorium and demanding that the faculty members be punished. Nonetheless, the faculty group remained firm. "We respect the governor's feelings and the state Legislature's," Gamson, speaking for the group, responded, "but in the end, we have to answer to our consciences and meet our responsibilities to students, University and country."

In contrast to their public display of resolve, many faculty protesters began to doubt the wisdom of a moratorium. Their concern was that a strike would divert attention from the issue of the war itself. One member of the faculty group, Prof. Anatol Rapoport, recalled, "It quickly became apparent that the Vietnam issue was about to be completely submerged in the ensuing fight about legality, the ethics, the prudence and the effectiveness of the work moratorium as an instrument of protest by academics."

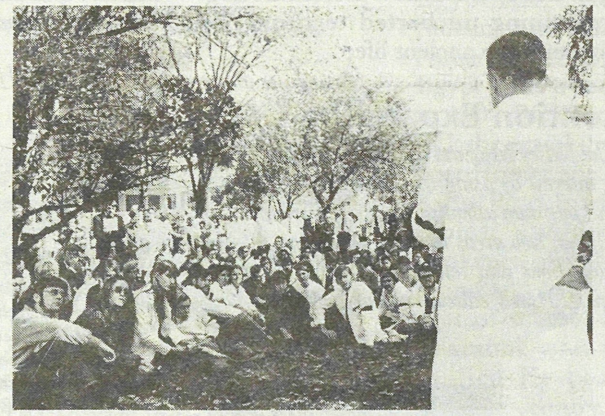
One week before the moratorium was to take place, faculty organizers met to coordinate their plans. At the meeting, those faculty members who were uneasy about the moratorium forced the group to reconsider the tactic. After a discussion that continued until 4:30 the next morning, some faculty members suggested that rather than refraining from teaching they should intensify it by holding special lectures and classes at night.

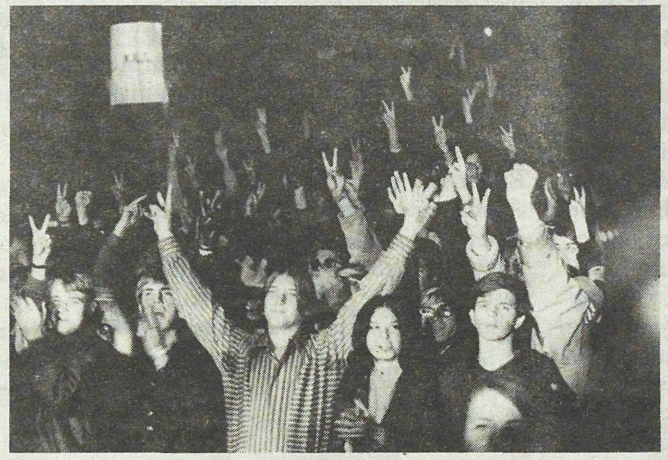
The change to a teach-in benefited the protesters in several ways. Although state governmental officials were still not pleased with the activities of the faculty, they no longer called for punitive action against the protesters.





Ann Arbor News Photo by Paul Warner





Photos courtesy of U-M Bentley Historical Library

Last March 24, organizers of and participants in the 1965 teach-in returned to Angell Hall to give today's students 'the notion that they can make a difference,' said Elizabeth Kaufman of Ann Arbor (far right). The idea for the teach-in was born in her and her late husband's (Prof. Arnold Kaufman) living room. Others who were at the '65 events were (l-r) Prof. J. David Singer, Bill Ayers, Bernadine Dohrn, Alan Haber (at microphone) and Prof. Frithjof Bergmann. About 100 students attended the '95 teach-in.

Three scenes from the 1965 teach-in.

Support for the teach-in among faculty members surged from the original 49 to over 200. Perhaps of greatest importance, a relieved University administration gave its support to the teach-in, permitting school auditoriums and P.A. equipment to be used for the event. Curfew for female students attending the late-night teach-in was suspended, helping both to boost attendance and convey to students the importance of the event.

In the days leading up to the teach-in, the organizers visited dorms, Greek-system and cooperative houses to encourage student participation, and local religious leaders spread word of the teach-in to their congregations.

The professors' protests against the war had gained so much credibility that Michigan Supreme Court Justice Paul Adams announced his intention to attend on the ground that "these professors are doing a vital service to their country in promoting debate on the question of US policy in Vietnam." While Ann Arbor preparations proceeded, organizers were urging colleagues at other schools to hold their own teach-ins. By March 24, the day of Michigan's teach-in, 35 other colleges and universities were planning similar events.

The teach-in began at 8 p.m. Organizers who had hoped for an attendance of a thousand were astounded when more than three times that number appeared. It was the largest demonstration in University history. The four Angell Hall auditoriums were packed, and the audience also filled the neighboring courtyard and many building passageways to hear three lectures criticizing their government's Vietnam policy.

A midnight rally followed the lectures, and then faculty and students divided into small discussion groups. More than 600 students were still present at 8 a.m., perhaps the strongest evidence of student interest in the event. The teach-in also received extensive media attention. Journalists from all over the country were on hand, and a Detroit television station covered it live.

Three bomb scares over the course of the evening illustrated the intense opposition to the teach-in by those who considered debate over and opposition to US policy during a military conflict to be unpatriotic or disloyal. The first threat was delivered in East Quad as students gathered to watch a movie on Vietnam before attending the teach-in. The other two bomb threats occurred in Angell Hall during the teach-in, forcing helmeted police to clear the building and search for explosives. Undaunted, the speakers continued their remarks outside in the bitter cold until it was safe to return.

The three lectures were delivered by policy experts from outside U-M, two of whom had spent time in Vietnam. The first speaker, Robert Browne, was an economist at Farleigh Dickenson University, who had spent three years in Vietnam as a State Department adviser. Browne argued that the war in Vietnam was unwinnable. Given the positive coverage of the war in the mainstream news media at that time, Browne's view was one that most in the audience had not heard.

The second speaker was John Donahue, a Michigan State University anthropology professor who had done field work in Vietnam. He emphasized the long history of foreign aggression against Vietnam and charged that the United States was merely the latest in a line of aggressors, and not a benevolent savior.

Last to speak, Arthur Waskow of the Institute for Policy Studies, concluded his lecture outside after the third bomb threat. Waskow said US policymakers were demonstrating a "new arrogance" that rested upon "an old assumption that military means still apply to political ends. …We have not yet learned that the political freedom of the Vietnamese people cannot be advanced by a military policy that relies on burning villages with napalm and on torturing the villagers for information. Tactics like this can produce chaos or advance totalitarianism, but they cannot protect or advance liberty."

More than 80 counter-protesters attended the teach-in. Some participated in a discussion challenging the three speakers, but most sought to disrupt the event by heckling and chanting.

The teach-in proved to be a forum that appealed to broad sections of the student body. Indeed, it created a new relationship between students and faculty. Following the event, the Faculty-Student Committee to Stop the War in Vietnam was formed to organize other protest activities. As Waskow observed, "This teach-in is in the true spirit of a university where students and faculty learn from each other and not from the calendar."

The Michigan teach-in became a model for other colleges. After speaking in Ann Arbor, Browne flew to New York for a Columbia University teach-in attended by 2,500 students. In the following weeks, teach-ins took place at Michigan State, Western Reserve, the University of Chicago, University of Pennsylvania and University of Buffalo.

On May 15, 1965, professors from across the country staged a national teach-in in Washington DC that included members of Congress and State Department officials among its attendees. Television networks and major newspapers covered the event, and radio stations broadcast the proceedings to 122 campuses throughout the nation.

Spurred by U-M's faculty, the American academic community played an increasingly strong role in opposing the war in Vietnam. Once isolated and ignored, concerned scholars were now forcing their way into the national consciousness to voice rational objection to federal policies.

The intellectual nature of the teach-in gave the movement a respectability that previous anti-war protests lacked, thereby broadening broadened mainstream opposition to the war. The fusion of scholarly argument and personal concern gave the academic community a powerful new role in the emerging debate over Vietnam.

Matthew Newman '94 of Ann Arbor studied the U-M teach-in for his undergraduate honors thesis. He is now studying philosophyy, politics and economics at Oxford University.

MEDICAL SCHOOL ALUMNA ON 55-CENT STAMP

Alice Hamilton was 93 when she signed a letter protesting US military involvement in Vietnam, but that was in 1964, a year before the historic teach-in at the University and shortly before her death.

Hamilton was born in New York in 1869 and grew up in Indiana. She received her medical degree from Michigan in 1893. This summer, a postage stamp was issued honoring Hamilton for her efforts to protect the health of industrial workers and for being the first female member of the faculty of Harvard University.

In 1919, after living for 22 years at the Hull House settlement in Chicago, Hamilton was appointed assistant professor in a new industrial hygiene program at Harvard's Medical Schools and School of Public Health.

According to the *Harvard Gazette*, many males objected to her appointment, two conditions of which were that she was barred from the Faculty Club and ineligible for complimentary faculty football tickets. Harvard refused to accept women as public health students for 26 years after her appointment.

Hamilton published the first American textbook on industrial toxins, *Industrial Poisons in the United States*, and was a pioneer in revealing the dangers to workers of lead and of substances used in the rubber and munitions industries. She also traced work-related injuries of stonecutters and masons to the use of jackhammers, and showed that carbon monoxide emissions in steel mills were eroding workers' health.

After her retirement, Hamilton served as a consultant to the US Department of Labor. Her survey of the rayon industry led to passage of Pennsylvania's first workers' compensation law for occupational diseases. While serving as president of the National Consumers League, she published her autobiography, *Exploring the Dangerous Trades.*

The Alice Hamilton stamp is part of the Great American series. In ceremonies introducing the stamp, Harvard Dean of Public Health Harvey Fineberg said Hamilton "was the first physician to use the scientific approach to study threats to health in the workplace."

LETTERS

Michigan Today **welcomes readers' letters, but cannot publish or acknowledge all of them. Letters may be edited for space, clarity or taste.**

Wordsworth Reciter Revisited

THE JUNE issue carried a letter from Josephine Work Balassone '32 asking for the name of a professor who read Wordsworth beautifully in 1931–1932. The professor she remembers so fondly–as do I–was almost certainly Bennett Weaver, whose course in the Romantic poets was deservedly popular. In my experience, he read Wordsworth as no one else ever has. In the summer of 1931 I was enrolled in that course. On August 1, without warning, Culver Military Academy canceled my teaching contract. The Depression was upon us; there were no cadets for me to teach! To whom did I turn for advice and counsel? Professor Weaver.

Through his good offices, the University lent me the tuition for the second semester of the 1931–1932 academic year. I enrolled in two courses under Prof. Clarence Dewitt Thorpe (his *The Mind of John Keats* (Oxford University Press, 1926, is still a recognized authority); ultimately, Thorpe offered me a teaching position at the University School (long since gone), but the Michigan Legislature, in that ominous spring, cut one million dollars from their appropriation for the University and Michigan State at Lansing. My job was swept away.

L. Knowles Cooke '32 MA
Villanova, Pennsylvania

I THINK the wonderful teacher of Wordsworth and the other Romantic poets was almost certainly Bennett Weaver, unforgettable by any students who had the luck to get into his jam-packed classes in the early 1930s. (C.D. Thorpe was an outstanding Keats scholar). Weaver was also brilliant on Robert Browning.

And you were fortunate if you could get into the enormously popular Shakespeare lectures by Oscar James Campbell. In June 1935, Louise Bredvold became head of the English Department, Campbell went to Columbia, and Howard Mumford Jones to MIT and Harvard. It was the end of an era, in the depths of the Great Depression.

Eugene S. Brewer Jr. '35
Owosso, Michigan

A Worthy Guide to Food

I ENJOYED reading about Michigan's strong suit in food critics, but you forgot one, Helen Worth '35, who went on from Michigan to write five cookbooks, including the classic *Cooking Without Recipes* (Harper & Row, 1965, Bobbs-Merrill, paper). She has taught food and wine appreciation, and continues to teach gourmet cooking and culinary fine points through her Helen Worth Cooking School.

Helen now lives in Charlottesville, Virginia, where she moved as a newlywed in 1980 with her husband, Arthur Gladstone, a macrophotographer who specializes in insects; she writes verse to accompany his photographs. They have presented their show "Small Secrets" at the US National Arboretum and the American Museum of Natural History.

Susan Tyler Hitchcock '71, '72 MA
Covesville, Virginia

Ed. Note: Worth is still giving classes that earned her school the title "the Radcliffe of cooking schools" in New York. Her books have been adjudged classics by no less than the late U-M alumna M.F.K. Fisher.

The Point of a Painting

ABOUT ACZEL'S Holocaust painting: I am no art critic, and I would never claim that from my vantage point as a non-Jewish American citizen, I am able to fully comprehend the horror of the Holocaust. But I feel that Barbara Forman Aronson (June, "Letters") was missing the point when she said that because Aczel's painting portrayed Hitler in an exalted position, it would be considered an affront to every Jew. I thought that the classical, romanticized depiction of Hitler and his exalted position in the painting was precisely what gave it power and made it speak to today as well as the past.

A painting depicting Hitler as a disgusting demonic figure, huddling in the depths of dark forces, makes us feel better because it is not hard to recognize and reject evil with an ugly face. "I would never follow such an evil leader," we can say with assurance. It lets us off easily.

The fact that millions of Jews were degraded, tortured and slaughtered to truly unbelievable extremes, is indeed terrifying. But what is even more terrifying to me is that a fascist, genocidal, murderous egomaniac could have been seen by so many, for so long, as the savior of a nation and culture. This is the horror that the exalted, romanticized Hitler in Aczel's painting tells.

The painting made me feel quite ill, even panicky. It made me ask myself, "Would I have seen through him? Do I see through the leaders of my own time, with all of their rhetoric?" Will we learn that "getting a good person in power" is not the solution, nor is "having a jerk in power" the essential problem, but, rather, that people in power are there because they speak to what we ask them to? I believe that our only real safeguard against large-scale atrocity is in vigorous standards of human rights and decency that we individually and consistently live by, starting right now, and pass down to our children primarily by the way we live.

Vera Goodenough Dyck '89
Chalfont, Pennsylvania

Ed. Note: Bara Zetter's search for information about the painter Aczel continues. As we were going to press, Zetter '91, '93 MA, was investigating a claim by a Canadian that he is the painter who reportedly died of TB in Germany after the liberation of Auschwitz. Zetter's research in Hungary did not significantly add to what we reported in our March issue.

Jam Handy and Prof. Trueblood

LETTERS IN the last two issues refer to Prof. Thomas Trueblood, who taught public speaking and also served as coach of the Michigan golf team, as well. Having been on the golf team of 1926, '27and '28, I thought I could add a little bit of humor about that very fine gentleman.

As golf coach he could add very little about the mechanics of the game. But he added one piece of advice which was very helpful when followed, and which he drilled into us at every practice session. It was: "Up and out in two, boys." As any golfer would know, it meant, when hitting a short approach shot, get it close enough to the pin to make the next putt.

Now for the humorous part of that admonition. We had played Purdue in Lafayette on a Thursday and were to play Illinois on Friday. The Professor was to call us at 4:30 a.m. to catch a 5:30 train for Urbana. Well, he got confused on our room number and awakened a man who called the front desk and told the night clerk that there must be some nut calling at 4:30 a.m. and shouting, "Up and out in two boys!" We did make the train, anyway.

Ralph M. Cole '28
Indianapolis

PROFESSOR Trueblood's role in "The Suspension of Jam Handy" reminded me of another student whose life he influenced. Trueblood was president of the National Association of Elocutionists when they met in June 1899 for their annual convention at Chatauqua Institute, New York. Trueblood chose as orator of the convention Charles Casper Simons '98, who coached the debate team for Trueblood and was enrolled in the law department. Simons had won first honors in a speech contest with his oration on "John Brown." Trueblood asked his student to deliver his tribute to the fiery abolitionist at the conference.

The choice of topic might have been considered inappropriate, because there were Southern elocutionists at the convention. The introduction was delivered without much reaction; but when Simons intoned, "The South had slain the man, but the spirit which animated him was beyond the reach of earthly power," the Southerners were distressed. He went on to proclaim that John Brown "taught the South that a new era had begun, that not by persuasion, threat or rant, but by force was slavery to be exterminated." The Southern members of the association walked out of the amphitheater in angry protest.

Neither Trueblood's career nor Simon's future was adversely affected by this incident at Chatauqua. Simons got his law degree in 1900 and began his practice in Detroit. He was elected to the Michigan State Senate in 1903 at the age of 26. In 1923, he was appointed US District Court Judge for Detroit. He was named to the Court of Appeals at Cincinnati in 1932 and became Chief Justice in 1952. He remained on the bench until 1959, when at the age of 83, he retired. He died in 1964.

Nels Juleus
Meadville, Pennsylvania

A LETTER in the June issue referred to Prof. Thomas Trueblood and a class he seemingly conducted long before I got to Ann Arbor (1929–1934). When I was Golf Team Captain in '33 (the year ahead of Johnny Fisher–you hurt my pride by adding a year to Johnny's reign), Truby, as he was referred to when out of earshot, was still a most active and attentive coach. But the only club or clubs I recall seeing him handle in those days, was a Left-Handed Putter!

A. H. Jolly Jr.
San Diego

A Sad Business

I WAS quite saddened by your June article and issue about "Michigan Means Business," which is true, but it also conversely implies that the University is not really about learning and mutual understanding, but about corporate spin-offs for the military-industrial complex.

Such research in America as lasers always holds an ulterior motive–a profit/gain motive; the route to human betterment is not so direct in America. In our present economy, any new ideas improving humanity are first funneled through lucrative military R & D budgets and the vast autonomous military-industrial-university complex. This is unfortunate, besides being wasteful and paranoid in content.

Though I understand the reason for your writing of this issue, which is more PR about U of M than insightful analysis about the social and political implications of laser research, I shudder to think what this kind of journalism will do to our younger generations inundated by talk of guns, violence and joining the army in warfare because of no employment.

It is generally an unspoken truth in military circles, especially during the past ignoble Cold War, that universities and their research centers work for the Pentagon by virtue of the enormous financial grants and subsidies they receive from the government. You were somewhat candid about this in your articles, but you failed to make the connections and future ramifications of such an untenable relationship.

Anatoli Ilyashov '72 MA
Los Angeles
Aprés nous, le deluge

OF ALL the deluge of U-M publications we receive (spouse, myself and two kids), I most enjoy *Michigan Today*, and especially two sections, U-M Books, which has led me to some real gems I would certainly have otherwise missed, and "Letters," the best of all. I have three questions for your astute readers:

(1) Has any record been kept of how many times M's brilliant lawyers have successfully blocked the Engin' Arch? I realize it isn't much of an accomplishment, the engineers being zero competition and all, but the statistics over the last 100 years would be interesting.

(2) Did anyone from the class of '51–52 Dent. ever graduate? I recall a bunch from the Romeo area who I'm sure never made it. If they weren't expelled, they *should* have been.

(3) In my early days at Ann Arbor, an indulgent prof took me on a tour of the closed-off 3rd floor of Romance Languages, the old Civil War Hospital. He loved that ghastly old tomb. I remain astounded, even to this day, to have seen some gorgeous, ornate, inlaid lacquer objects, mostly furniture, obviously Chinese in origin.

He said these were gifts from the Chinese to the presidents of U-M (Angell) and of the U of Kansas, for their role in the settlement of the Boxer Rebellion, in which the US and China established a perpetual scholarship fund in lieu of the huge "reparations" the other countries were demanding. Wonder what ever happened to the fund, and to the furniture?

Thomas G. Caley
Metamora, Michigan

Statistics Prove U-M Role

YOUR ARTICLE "U-M Recalls WW II" reminded me that while eating in Okinawa with a group of eight junior officers including myself, we spoke of our universities, and it actually was the case that seven of us were Michigan graduates, so we chose to draw the conclusion that 87.5 percent of our forces were Michigan graduates!

George Adomian '44
Athens, Georgia

Willow Run Neighborhood

EIGHTEEN HUNDRED veterans and their families lived in Willow Run Village in 1946–47. Some 600 single veterans lived in bachelor quarters separate from our "courts." The war was over, the Depression ended, rank was no longer a factor, and we were all ready to re-start our lives.

As non-residents of Michigan we had no choice but to live 11 miles and 30 minutes by University bus from the campus. The tiny apartments were heated by a coal stove, cooking was done on the same stove; water was heated by the same miserable monster. Coal was delivered, except during the infamous coal strike, to a box 10 feet from our door. Ice was delivered to fill the ice box.

Under the aegis of the Dean of Students, Anna Rankin Harris and I worked to organize activities for the wives of those veterans who spent long days on the campus. Our proudest success was the Cooperative Nursery School which we organized with advice from the University co-op school in Ann Arbor. We sponsored a bridge club, an art class, a music listening group, dances and potluck suppers.

Three years after leaving Willow Run, my husband died, and my son and I returned to finish my own MA. Despite the easy availability of concerts, plays, foreign films, Audubon lectures, great library and bookstores, it was a bleaker experience. I would not want to repeat Willow Run at any age, but I'd love to see the sense of common interest and community recreated.

Phyllis (Graham) Pooley Stigall '52
Scarborough, New York

Sighing Language

LIZ DALTON's article on the Language Across the Curriculum program (June '95) should cause modern language students to heave a sigh of relief. I was "internationalized" many years ago while working and studying in Europe. Unfortunately, my French diploma from a Swiss university made me a misfit when I returned to the US to find teaching jobs pared to the bone. One "second language" was not sufficient. My career path may have been better served with courses in international law, trade or Russian.

Hopefully, the LAC program soon will include interdisciplinary courses in French. My struggle with language and literature continues as I begin a thesis on the tribulations of three 18th-century French women novelists.

Margery A. Crumpacker
New York City

THE BATTLE OF LEXICON

The role of the U-M's English Language Institute in spreading English's banner around the world

By Kathy Hulik

He has a comb.
I have a watch.
She has a key.
You have a pencil.
She has a toothbrush.
He has a fork.
They have an umbrella.

From *English Pattern Practices,* Robert Lado and Charles C. Fries, the University of Michigan Press, 1943.

Swales and Morley.

Those sentences, in multiple variations, were repeated by literally thousands of foreign students who made their way through the U-M English Language Institute (ELI) as they expanded their English-speaking skills in the 1940s and '50s. Now those phrases are as outmoded in teaching English as a second language as a World War II jet fighter, but when ELI was founded in 1941, those phrases were ammunition in the diplomatic wars of that era.

The fascist powers' efforts to penetrate Latin America before World War II included teaching Italian and German. To promote Pan-American cooperation, President Franklin D. Roosevelt formulated the Good Neighbor Policy, aimed at countering the influence of totalitarianism in Latin America. The policy included English instruction in the predominantly Spanish-speaking countries as a part of cultural exchange programs. But that raised the question of how best to teach English as a foreign language.

The US State Department, with funds from the Rockefeller Foundation, aided in setting up a conference at Michigan in 1939 to devise a method of teaching English; two years later it supported the establishment of the Institute under the directorship of Prof. Charles C. Fries of the Department of Linguistics.

"Fries's influence on the ELI and on the teaching of English throughout the world was enormous," says H. Joan Morley, associate professor of linguistics and a member of the ELI faculty in the North University Building. "Until this Institute was founded, there was no oral methodology for teaching English. A fast method was desired, and Fries developed the Oral Approach, which presented grammatical forms and patterns as exercises that were listened to, repeated and varied in a series of drills."

But the original ELI method involved much more than military-like language drilling. In addition to a series of eight-week sessions held throughout the year, students were immersed in an English-language environment. During the '40s and '50s, staff members lived in the dormitories with the students, ate lunch and dinner with them, chatted with them in daily social periods and organized weekly Friday evening programs where students made formal presentations in English on a selected topic, then joined in an informal gathering of games, singing and dancing.

As the ELI grew in importance, its reach spread over the world. It was offering non-U-M students intensive English training and a teacher education program so that they could go on to other universities where English was the language of instruction or go back to their home countries to become English teachers, scholars, government officials or businessmen. It developed a series of textbooks on teaching English that sold over a million copies all over the world.

ELI has always conducted research into language learning and teaching, and constructed and administrated a worldwide testing and certification service with 150 examiners in 110 countries testing the level of English proficiency.

The ELI's success inspired other US universities to launch competing centers, often with ELI alumni at the helm. By the 1970s, however, some members of the linguistics community felt that the audio-lingual method, with its emphasis on drills, had the appearance of behavioral psychology, with a stimulus/response basis that was too simplistic.

One result of the ELI's farflung influence, however, was that by the mid '80s there was no longer anything distinctive about it. So when John Swales took over as director in 1985, he decided it was time for bold renovation.

"The ELI was marginalized in the University," Swales says. "We were not making as much money as in the '70s, schools in coastal areas were able to attract the new immigrants, and a number of foreign governments that had been sponsoring ELI students were able to cut deals with other universities and get their students admitted elsewhere." Michigan, on the other hand, did not guarantee admission to successful ELI students and, also unlike some of its new competitors, ELI classes did not count as credit toward a degree.

The number of students fell from 200 - 250 a semester to 80 - 100. Peter Steiner, the dean of the College of Literature, Science, and the Arts at the time, asked why the Institute identified only students outside the University as its clients when U-M's 2,000 international students also needed help with their English skills. Steiner's question was the catalyst ELI needed. "We turned ourselves into an operation that primarily serves the University of Michigan," Swales says. With the exception of a small number of students in the summer who are not U-M students, ELI clients are now exclusively from the U-M, and the Institute once again has become specialized.

Now that its central mission is to assist non-native speaking students acquire the sophisticated level of English necessary for successful participation in the academic community, the courses are on such subjects as academic writing; research papers and thesis writing; term paper writing; dissertation prospectus and dissertation writing; discussion and oral argumentation; and speaking in research contexts. About a fourth of U-M's 3,300 international students are taking ELI courses in any given semester, Swales estimated.

There is an advanced intensive summer program for business and management students, and Swales recently decided to offer a course in English for legal studies, another first for ELI, he believes.

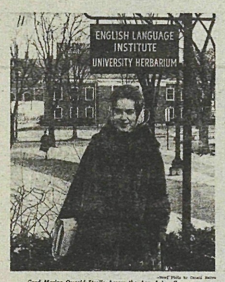
"Our biggest lack for graduate students at the moment is an advanced course in critical reading," he says. "We should be teaching professional reading–that is, if you received this manuscript, would you accept it?"

The ELI has remade itself again; its emphasis today is not overtly or covertly political, but almost wholly linguistic and academic. "We focus on the language needed by students to accomplish the tasks they must do," Morley puts it. "We are a leader again."

A FAMOUS ELI STUDENT

Among the thousands of non-native English speakers who came to the English Language Institute seeking to master the English language was Marina Oswald, the widow of Lee Harvey Oswald, the accused assassin of President John F. Kennedy.

Marina Oswald had moved to the United States with her husband in 1962 after being trained as a pharmacist in Russia. She arrived in Ann Arbor from her home in Dallas for an intensive eight-week course in English instruction in January 1965, two months after Kennedy's slaying there. She returned to Texas, rejoining her 3-year-old and 1-year-old daughters, after completing her ELI course.



Coed Marina Oswald Strolls Across the Ann Arbor Campus

Marina Registers at U. of M., Looking Like a Typical Coed

By ERIC LUNDGREN

ANN ARBOR, Feb. 3 — [illegible] turned to chin and pearls [illegible] tall with her hair bobbed, Mrs. Lee Harvey Oxwald looked far [illegible] her experience were the six hours disclosed where she is [illegible] instruction, and that she [illegible] paying, or whether her [illegible] of the agreement forbade any [illegible] athletes, Zone Lee, 5, and Ra- [illegible] chel, 3, are here.

"TELL A GOOD STORY"

"They said that she had [illegible]

EXAM IS FIRST

According to the Rev. Kinnet

Marina Oswald said her book agent advised her not to grant interviews during her eight-week stay at the U-M's English Language Institute in 1965.

According to reports in the *Ann Arbor News*, the 23-year-old widow's first impression of Ann Arbor was about the people: "They are like the weather-crisp and cool. In Dallas, people are warm like the weather."

After her graduation, Oswald was asked to pose for a picture shaking the hand of ELI's director at the time, Prof. John C. Catford. She reportedly smiled and said, "This will look just like a Russian newspaper picture. They always are filled with pictures of people shaking hands." When a photographer asked her which side of her profile she preferred him to take, she replied, "It doesn't matter. It is ugly from either side."

The news story continued: "She insisted on posing with her instructor, [the ELI's] Mrs. Edward M. Anthony. 'With my favorite teacher,' Mrs. Oswald said with another smile. And with a final icy glance at the newsmen, she turned with a smile to her classmates."

ENGLISHES ARE THE INTERNATIONAL LANGUAGE

"English language expertise is becoming a priority academic/professional requirement whether international higher education graduates choose to return to their home countries or whether they choose to stay in the United States," notes ELI's Joan Morley.

"English is today the dominant language in science and technology, medicine and health care fields, commerce, business and industry, and much more. It should come as no shock to find that three-quarters of the world's information stored in computer banks is in English."

According to a recent *Wall Street Journal* article, a billion persons in the world are able to speak English, with more speaking it as a foreign language than as their mother tongue. But the language that non-native speakers actually speak can be thought of as many different Englishes. Some speak only about computers, or oil, or commodities trading or swine; they customize English into forms useful for specific purposes, and those who speak these forms are usually unable to converse comfortably about matters outside their field of interest. Phrases like "get the hang of it," "to go along with" and "getting at" for example, mystify many non-native speakers.

Ambiguities in English can even be deadly. An air traffic controller in Madagascar radioed, "Clipper 1736 report clear of runway." The pilot interpreted that as a clearance for takeoff, rather than an order to report that he had cleared the runway, collided with an incoming airliner, and 600 people died. Such linguistic mistakes have claimed at least 3,000 lives, an expert told the *Journal*.

Alan Firth, a British scholar who specializes in foreign varieties of spoken English, told the *Journal*. "What happens to this language is no longer our prerogative. English is no longer our possession. It's not a monolith. It's in an incredible state of flux."

U-M BOOKS

Recommended Reading: Books by U-M faculty and graduates, and works published by the University of Michigan Press.

IN OUR OWN HANDS: A HISTORY OF STUDENT HOUSING COOPERATIVES AT THE UNIVERSITY OF MICHIGAN

By Amy Mericle et alia, Inter-Cooperative Council, Ann Arbor, 1994, $15.

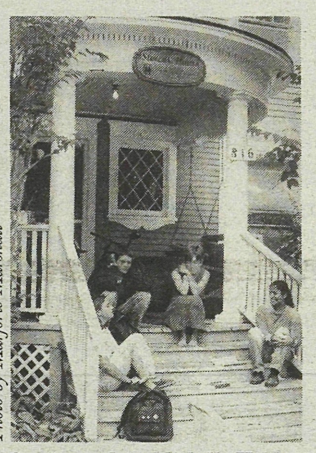


Photo by Marjorie Marshall

Co-op members Michelle Held, Emily Cross, Elisa Rosier and Mona Patel (l-r) of Stevens House enjoy a chat. In 1944, the Stevens, at 816 S. Forest became the ICC's first purchase.

Founded in 1932 by students who needed affordable housing during the Great Depression, the Inter-Cooperative Council has grown to become one of the largest student housing co-ops in the nation, with 19 houses and 575 members. ("Because of the housing crunch, we're as much in demand as we've been since the '70s," says ICC Director Amy Clark '91.)

This book tells a story not just of its economics, but of its principles of racial and sexual equality and living and learning communities, a story that has proved th e ICC ti have been far ahead of its time. Splendid illustrations and the reminiscences of members down through the years make this a delightful addition to U-M history.

UNSPORTSMANLIKE CONDUCT

By Walter Byers, University of Michigan Press, Ann Arbor, 1995, $27.50

Did he suddenly "get religion," or is he an opportunistic traitor and snitch? That's what watchers of the amateur athletic scene were asking when Byers, the executive director of the National Collegiate Athletic Association, published his explosive book earlier this year. Byers charges the NCAA is a misguided monopoly that controls college sports for its own interests, demeans and exploits college athletes and requires Congressional and judicial intervention. In his "bill of rights" to free athletes from their "plantation" relationship with universities, Byers argues that players deserve much more of the money they earn for schools, and should be free from restrictions on switching schools and hiring agents.

THE DARKER SIDE OF THE RENAISSANCE

By Walter D. Mignolo, the U-M Press, Ann Arbor, 1995, $39.50

The author, who recently moved from U-M to Duke University, carries readers on a dense, exciting meditation on the development of colonialism by exploring the impact of literacy, and of contrasting writing systems, upon the conquering Spanish and the colonized Amerindians. Language, history, map-making and historiography are all unfolded and examined in rich detail. A profoundly modern work–but not written in modernist jargon.

UNDER THE MOON: THE UNPUBLISHED EARLY POETRY

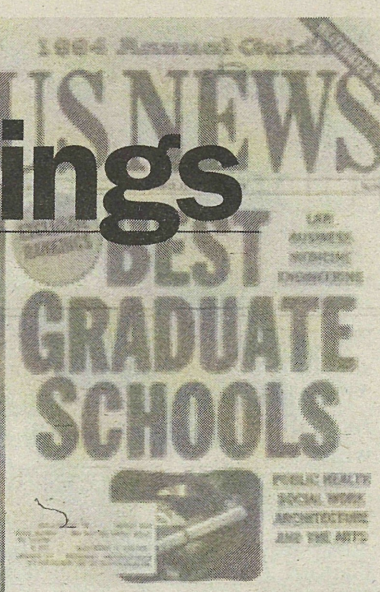
By William Butler Yeats, edited by George Bornstein, Scribner, New York, $22

Professor Bornstein of the U-M English department has collected and edited 38 works by one of this century's greatest poets. Bornstein culled some poems from Irish archives and found others in Yeats's library, now the property of his children, Anne and Michael, who entrusted Bornstein with this literary legacy from the years 1880-95. Some of the works are juvenalia that the poet may well have intended never to see the light of day. But all of them, Bornstein points out, show Yeats developing his rhyme and meter, and tackling themes of nature, nationalism and love that are the lifeblood of his mature verse.

About Those Rankings

(Some find them pretty rank)

By John Woodford



When the trumpeter Miles Davis was asked what he thought about his shifting position in the annual *Downbeat* magazine rankings of musicians, he replied, "What do they think we are? Racehorses?"

The fact of the matter is, America loves rankings, averages, rating systems, top-10 -20 -25 lists, statistical representations of performance and perceived quality–from politics to entertainment to sports to education, we're a nation awash in numerical hierarchies. Perhaps that's why several U-M academic leaders reacted to the latest higher education rankings in terms Miles Davis would have appreciated.

"I do think this 'Top 10 thing' is a bit infantile," said Robert Weisbuch, professor of English and interim dean of the U-M's Horace H. Rackham School of Graduate Studies in his initial response to the publication of a four-year survey of 274 US universities by the National Research Council (NRC), a group of experts on graduate education. The reputational study, "Research-Doctorate Programs in the United States: Continuity and Change," was guided by the Committee for the Study of Research-Doctorate Programs in the United States and sponsored by the Conference Board of Associated Research Councils.

Even though the NRC showed U-M as tied for tenth place in the top 10 list of graduate programs, Weisbuch advised at the conclusion of his report on the study that the University community should always bear in mind that "we should, and do, know ourselves much better than a stranger can. We're constantly evaluating and re-evaluating ourselves. Perhaps it's best to forget about rankings and do all we can to make Michigan fulfill its potential."

The NRC ranked the U-M anthropology program tops in the nation, and 13 other graduate programs also ranked in the top 10: psychology (second); political science and classics (both third); sociology and industrial engineering (both fourth); aerospace engineering and mechanical engineering (both fifth); electrical engineering (sixth); philosophy (eighth); mathematics, French and music (all ninth); and civil engineering (10th).

The NRC also showed U-M as having risen in the rankings in 19 of the 24 disciplines included in the last NRC survey in 1982.

Such results hardly distressed Weisbuch. Nor, he later told the U-M Regents during a presentation on academic rankings, does he think infantile practices are necessarily without value. But he pointed out that even though 38 U-M programs were ranked in the 41 academic categories the NRC reviewed, Rackham offers 69 additional degree programs in disciplines that were not surveyed.

Each year the U-M Office of Academic Planning and Analysis responds to more than 30 questionnaires that are used to survey colleges and universities for the purpose of listing "top schools," "best buys," "most selective," "top partying" and such. Some questionnaires are used, however subjectively, to construct a measure of quality; others are used to compile descriptive campus guidebooks.

Assessing the latest *US News* rankings (the magazine introduced its annual feature in 1983), Christopher Shea wrote in the Sept. 22 *Chronicle of Higher Education,* "The college issue is among the magazine's best sellers, and a college guidebook based on the issue sold nearly a million copies last year." Yet, Shea noted, a higher education consulting firm surveyed a random sample of 500 college-bound seniors and found that while more than half had consulted various magazine rankings, "they said the rankings' influence on them had been merely a fraction of that exerted by college literature and the opinions of counselors."

In *US News's* 1995 survey, Michigan dropped from its 21st spot to 24th in the top-25 ranking. University officials felt they had a duty to respond to the highly publicized rankings even though criticism of the methodology is seen by some as "sour grapes."

In "knowledge-intensive missions," President James J. Duderstadt said at the public informational discussion of the recent rankings at the September Regents meeting, "there is no bottom line but a matrix of indicators of quality" that embraces respect of peers, intellectual breadth, diversity and leadership.

How well *US News* captured such intangibles in its statistical exercise was called into question, Duderstadt said, by the fact that the University of California at Berkeley finished tops in the NRC study based in large part on the judgment of 8,000 leading faculty, but failed to make even the top 25 in *US News's* ranking.

Furthermore, that the U-M could wind up so low after sharing eighth place (with Duke University, the University of Chicago, Cornell University and Columbia University, all private institutions) in *US News's* ranking of universities by their academic reputation among their peers, was another sign, Duderstadt said, that the methodology was "biased toward private education."

The welcome news of the third-place rankings of the College of Engineering and the Business School in the magazine's separate report on undergraduate professional programs did not mitigate criticism of the methodology employed in the major report.

Marilyn Knepp, director of Academic Planning and Analysis, explained to the Regents and audience how survey methodology can produce such wildly disparate results. The U-M placed 142 out of 229 in *US News* assessment of "alumni satisfaction," Knepp said, because that measurement is determined solely by the percentage of alumni who have donated to the institution in the last year. The U-M is fifth in the *amount* of money given by alumni annually, according to Thomas Kinnear, vice president for development.

US News's methodology, in short, favors private schools, especially selective, older, well-endowed privates; thus, the University of Virginia (19th, down from 17th last year) joined Michigan as the only public institutions in *US News's* top 25. The weight given to SAT scores, student selectivity, spending per student and student/faculty ratio all slant the conclusions away from public higher education.

No one, however, argued that the University community should ignore magazine rankings. The lists may be "somewhat arbitrary," said Walter L. Harrison, vice president for University Relations, "but studies show they influence top academic students' decisions on where to go to college, and also to professional schools." For that reason alone, he said, it is important for universities to inform the public about the complex data and issues that lie behind the rankings.

In his initial response to the rankings, President Duderstadt said that it would "take some time to analyze the rankings," but that it was safe to say that the University "continues to be the national leader in the social sciences, among the leaders in the humanities and engineering, and improving in the sciences. While there are some areas of concern, these rankings do indicate the exceptional strength of our faculty and the quality of our academic programs in these important areas of graduate education."

. . . let us count the ways

Each attempt to rank universities rests upon an opinion about what constitutes academic quality and a presumption about how to measure it, notes Marilyn Knepp, director of academic planning and analysis. What follows is Knepp's description of the methodologies used by some of the better-known publishers of rankings:

US News and World Report's undergraduate rankings are devised by combining measures of an institution's academic reputation, student selectivity, faculty resources, financial resources, graduation rates and alumni satisfaction.

The Gourman Report rates undergraduate and graduate programs overall and by field. The author, Jack Gourman, does not specify what processes he uses to compile his rankings.

The National Research Council Graduate Rankings is a reputational survey that asks more than 8,000 faculty to rate programs in their fields.

Business Week ranks business schools by surveying graduates of prominent business schools and executives of companies that recruit graduates of these schools.

Money magazine's Best Values Rankings uses "quality" indicators, such as the graduation rate and student-faculty ratio, to predict a university's tuition rate and then calculates the differences between predicted and actual tuition. The more tuition falls below the predicted rate, the higher the school ranks on the scale of value.

Knepp advises readers of rankings literature that in interpreting them they should: understand whether a ranking is aimed at describing overall quality as opposed to other objectives, such as best programs, best buys, etc.; consider whether your own views on quality agree with the designers of the rankings; view ranked institutions in groups rather than relying on absolute numerical order ("Institutions ranked within a dozen places of each other are probably very similar in quality"); and look at the consistency of an institution's ranking over time and across studies–**JW**.

$1.5 million gift funds chair for Korean Studies

The University has received a $1.5 million gift from the Korea Foundation to endow a professorship for the new Korean Studies Program.

Choi

The Distinguished Korean Foundation Professorship will be filled by a senior scholar who will teach one course in Korean music, one in Asian languages and cultures and one in Korean civilization. The professor also will direct the program, which will be housed in the International Institute.

In announcing the gift, the Korean Foundation President, Chang-Yoon Choi, said the foundation believed the University "will grow and develop into a leading center for Korean studies in the Midwest."

Prof. David W. Cohen, director of the International Institute, noted that the state of Michigan "is as involved in international business as any other state. Korea is important in the international auto industry, sciences, technologies and engineering. Also, we have strong support from the local Korean community and our alumni in Korea."

Library on 'The Net'

The University's School of Information and Library Studies has opened the world's first Internet Public Library (IPL), making library services free and available to patrons around the world.

Janes with student Nigel Kerr and IPL mascot J.J.

"The IPL uses the connecting power of the Internet to link users and service providers in exciting new configurations, extending far beyond the walls of traditional public libraries to secure the best services for its global network of users," says Joseph Janes, assistant professor of information and library studies. "The IPL is prepared to provide essential library services to a target audience estimated to number a quarter of the entire American population by the end of the century."

The IPL was created by U-M graduate students as a part of their course work under the direction of Janes. Users will find the IPL much like their town library, but with a new face on some familiar services. "The IPL," Janes says, "offers an online story hour and opportunities to talk with noted children's book authors; the chance to have everyday reference questions referred to an international network of subject specialists and get answers in real time; and a place for librarians to find out how to get on and take advantage of the 'information superhighway.'"

The user, once determining which of the services (among them, reference, youth and librarian services) would be most useful, can tour through various data base and home page offerings, ultimately reaching the information sought.

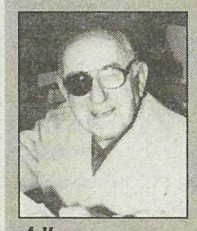
Several thousand people a day are now "walking through the doors" of the IPL. Some just look around and leave. But others use the tools available to find the information they need. "We quickly came to see that our audience was based not only in Tawas, Muskegon and Menominee in Michigan, but in Fiji, South Africa and New Zealand as well," adds Janes. "Our audience is composed not only of other librarians, but members of the business community, school children, university students and foreign governments as well."

The IPL is a World Wide Web resource and can be reached at: http://ipl.sils.umich.edu/. For additional information about the IPL through e-mail, contact *ipl.comm@umich.edu*

JUDAICA COLLECTION GAINS CURATOR, EXHIBITS ADLER HOLDINGS

The U-M Center for Judaic Studies has received a lead gift by alumnus David Hermelin and other supporters of the Center in honor of Hermelin's father, Irving M. Hermelin. The gift will contribute to the endowment of a curatorial position for the Judaica Collection of the University Library.

The Judaica Collection holds more than 37,500 titles in Hebrew and Yiddish alone. Holdings in other languages include another 25,000 volumes. The collection is particularly strong in modern Hebrew literature, the history of Israel, and Biblical studies. Hebrew and Biblical studies have been taught at U-M since the late 19th century; approximately 900 students enroll in Judaic courses annually.



Adler

More than 100 items from the collection's holdings donated by Dachau-survivor Joseph Adler are on display on the 7th floor of the Harlan Hatcher Graduate Library through Nov. 10. The exhibition is open 10 a.m-5 p.m. Monday-Friday and 10 a.m-noon Saturdays.

Adler was arrested by the Gestapo near his home in Dusseldorf and sent to the concentration camp. Through the efforts of his family and friends, he was released after four months. He and his wife and two children then immigrated to the United States. That was 57 years ago. Now he is 100 years old.

The agony of Dachau was forever burnt into his memory, and for the rest of his life, Adler collected Judaica and Holocaust materials so the world would not forget what happened under the Nazis. Photos, letters, stamps and posters issued by and under the National Socialist Party are included in the exhibition

Padnos

ALUMNI ISSUE FOOTBALL CD-ROM

Before Ben Padnos, 21, entered the University four years ago, he had already sold a successful sportscard store and worked as a sports reporter for his hometown newspaper, the *Holland (Michigan) Sentinel.*

Continuing to move swiftly, Padnos left U-M after his sophomore year to help start Stella Interactive of Carlsbad, California, a firm that produces and publishes CD-ROM reference products geared for computer-using sports fans. Stella Interactive was founded in 1994 by U-M alumnus Richard B. Beedon '75, who is president and CEO. Another U-M grad, David S. Upton '77, is regional manager.

As director of marketing, Padnos recently announced Stella Interactive's publication of *Michigan Football CD-ROM.*

"Working with Fritz Seyferth and Tirrel Burton of the U-M athletic department," Padnos reports, "Stella Interactive has created an interactive tour of Wolverine football history with visual and audio highlights, action from big plays."

Portions of the cost ($59.95 is the suggested retail price) of the multimedia college sports series go to U-M. For information on availability, call 1-800-619-4691 toll free.

WAR PAINTER

By Joanne Nesbit

From under the wings of aircraft in line on a carrier's deck, from high in a carrier's central tower while surrender ceremonies were in progress, from the heart of bombed-out Yokohama, and from San Diego to Tokyo Bay, William Lewis recorded a sailor's view of the war in the Pacific during World War II. But he did his recording not by pen, typewriter or camera, but with a brush.

"Dear Mom, send me my paints," he wrote after a call to active duty in 1941 interrupted his studies at Michigan. She did. And so began a four-year trek that took him and his paints from the deck of a converted yacht in the basin at San Diego to the Asian theater of World War II.

While awaiting deployment from the West Coast aboard the former yacht, transformed to the *Marcasite*, the sailor/artist began his documentation of the life and death of men and ships.

Lewis didn't stop his painting after the fighting ended. He drew pictures of sailors boogying on the flight deck with gunners sitting atop the turrets. He painted the sunset and moonrise in Tokyo Bay, and Mt. Fuji looming over the waterfront dotted with a collection of American and British ships. He painted Yokohama as he saw it when he went ashore Sept. 21,1945 –a burned-out street car in the downtown area, crowds of "desperate, frightened and awfully shabby" people in a narrow street, rubbish piled high on both sides and the gutted remnants of buildings.

Ashore in Tokyo, Lewis found the central section "astonishingly like an American city. The buildings were built largely of reinforced concrete and steel, so the effect of smashing up a city like that had a greater impact on me than even the burning out of Yokohama. It was terribly depressing and rather scary because of the sense that this was a modern city. This looked like an American city, and here it was in this desolate condition. One of the things that surprised me was the general use of English in central Tokyo. Signs were as likely to be in English as in Japanese."

Lewis recorded his somber feelings in watercolors immediately after he returned to his ship. In these watercolors and drawings Lewis first explored themes that would become the heart of his work– "what the human race has done to itself and the landscapes in the last 200 years, with its industrial revolution, wars and national delusions."

William Lewis resumed his studies at U-M, graduated in 1948, and joined the School of Art faculty where he continued teaching until his retirement in 1985. An exhibition of his World War II paintings, "'Dear Mom, Send Me My Paints': An Art Student in the United States Navy, 1941-1945" will run through Dec. 22 at U-M's Clements Library.

The Rubble of Yokohama–1945

Professor Lewis's father saved historic newspapers that Lewis later stored in his own basement. They proved to be of great interest to historian John C. Dann (right), director of the William L. Clements Library, and are now part of the Lewis exhibit.

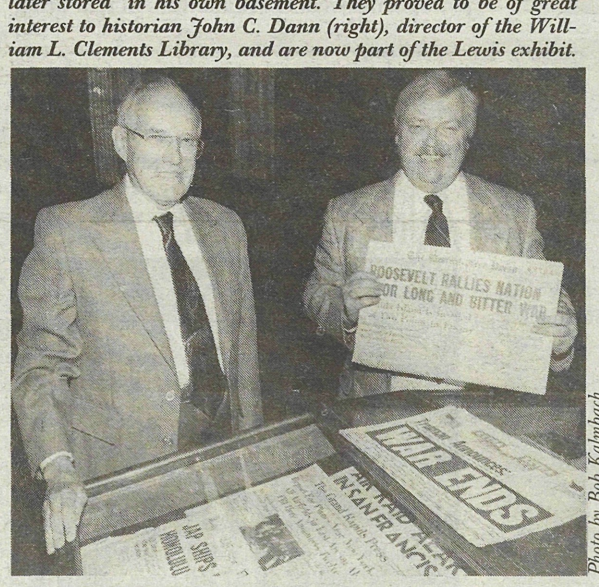


Photo by Bob Kalmbach

Photo by William Mumler, circa 1865; subject unknown

That's Positively (or Negatively) Spooky!

In 1861, William Mumler began making large sums of money for the day ($10 a photo by 1869) for offering 'scientific,' photographic proof of the existence of spirits. Mumler would make a portrait of a bereaved person and, lo and behold, when he developed the negative, the 'spirit image' of the sitter's deceased loved one had appeared mysteriously on the print.

Mumler was once arraigned on charges of deceiving the public, but his acquittal was seen as further vindication of the existence of ancestral, household spirits. Clements Library Curator of Manuscripts Rob Cox tells the story of Mumler and othr photographers of the dead and living dead in 'The Transportation of American Spirits: Gender, Spirit Photography and American Culture, 1861-1880,' in* Ephemera Journal *7, 1995.

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OUR NEW SIZE:

We reduced *Michigan Today's* page size to offset steep postal costs. But we also added four pages to maintain our news space.