

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
JANUARY 2, 1976

MTR  
W47  
GAP

NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-5193

MEMO TO NEWS PEOPLE

A news conference is planned for Donald "Deke" Slayton, commander of the Apollo-Soyuz space flight Tuesday (Jan. 6) at 5:30 p.m., in the University Alumni Club conference room on the 50th floor of the IDS Center.

Slayton is scheduled to speak to the club's President's Seminar at 8 p.m.

-UNS-

(A1-5;B1)

(FOR RELEASE WINTER 1976)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
Minneapolis, Minnesota 55455  
Telephone: (612) 373-5193  
January 2, 1976

MTR  
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JAGP

WINTER SKY PROVIDES  
SIGHTSEEING VACATION

by Jeannie Hanson  
University News Service Intern

If it's January, these must be the Pleiades. Or so the wintertime stargazer might say.

The winter sky over Minnesota in January and February looks bright and brittle. Between the stars the temperature drops to -450 degrees F.

From the slightly warmer vantage point of Minnesota, there is much to see in the sky, according to University of Minnesota astronomers John Warner and Kris Davidson, guides to the mid-evening winter sky.

Sirius, the brightest star in the night sky, is visible at this time of year. Called the "dogstar" because it is in the constellation Canis Major ("The Large Dog"), Sirius can be seen to the lower left of the constellation Orion in the south. "Ancient Egyptians used Sirius to foretell the flooding of the Nile in summer." Davidson said.

Sirius is 8.7 light years away, which means that the light we see from it now actually left the star over more than eight years ago, when Lyndon Johnson was President. Although it may not look it from such a distance, Sirius is actually ten times as bright as our sun and white hot instead of yellow hot, Davidson said.

Think warm: on Sirius it is now 10,000 degrees Celsius.

Sirius has a companion not visible to the naked eye---a dying star called "Sirius B." The two stars are moving through space together, Warner said. Sirius B has shrunk, a part of the dying process in stars, until it is only about the earth's size, though it weighs almost as much as the sun. The result, according to Warner is that it weighs 10 tons per cubic centimeter.

(MORE)

Visible to the naked eye is a group of relatively new stars, the Pleiades. High in the sky, a bit towards the west, they are a group of six or seven visible stars in a light cloud of gas and dust. With a pair of binoculars, one or two dozen stars of the cluster are visible. These stars were all born together, condensing out of the same cloud of gas and dust, about a hundred million years ago. The Greeks called them the Pleiades and thought of them as sisters banished to the sky, Warner said. "Little did they know that the stars actually are, in a sense, sisters."

The Pleiades are 400 light years away. The light you see now left the stars while Queen Elizabeth I was ruling England.

Much closer and more familiar are two of our neighboring planets, Mars and Jupiter.

Look for Mars to the left of the Pleiades. "First find a bright red star, Aldebaran," Warner explains. "Mars is a bit brighter, also reddish, above Aldebaran. Mars is close to the earth at this time of year, only 76 million miles away."

It gets considerably colder on Mars than in Minnesota: -100 degrees F at night on the equator and -250 degrees F on the side away from the sun in winter. But at latitudes comparable to Minnesota, it never gets below zero during the day at any time of "year" (which, on Mars, lasts 687 days, the length of time it takes the planet to circle the sun).

Jupiter can be found very low in the sky, straight to the west, in the constellation Pisces. It sets around 9 p.m. at this time of year. This planet is 300 times as massive as the earth and is, by far, the major planet in our solar system.

The farthest planet from the sun in our solar system can never be seen from the earth without a telescope. But its temperature is worth noting for those who do not fully appreciate Minnesota winters. On Pluto it is now -400 degrees F.

Star and planet-gazing may be chilly, though exhilarating, business in Minnesota in January and February. But not nearly as chilly as it would be on Pluto or between the stars.

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## NEWS RELEASE

The University of Minnesota St. Paul Student Center Film's Committee presents Winter Quarter, a film retrospective: "Social Issues of the 20th Century". The complete series is being offered at \$7.50 for a subscription ticket and \$1.00 a film when purchased on an individual basis.

Program notes will be provided for each film and there will be a discussion following led by a member of the University faculty.

### FILMS

- January 7: "All Quiet on the Western Front" - North Star Ballroom, St. Paul Student Center - 8:00 PM
- January 14: "Greed" directed by Erich von Stroheim - North Star Ballroom, St. Paul Student Center - 8:00 PM
- January 21: "Dancing Mothers" - North Star Ballroom - 8:00 PM
- January 28: "Grapes of Wrath" - North Star Ballroom - 8:00 PM
- February 4: "Dead End" - North Star Ballroom - 8:00 PM
- February 11: "Guadelcanel Diary" - North Star Ballroom - 8:00 PM
- February 18: "Best Years of Our Life" - Room B-45, Classroom Office Building, St. Paul Campus - 8:00 PM
- February 25: "All The Kings Men" - North Star Ballroom - 8:00 PM
- March 3: "Rebel Without A Cause" - Room B-45 Classroom Office Building, St. Paul Campus - 8:00 PM
- March 10: "To Kill A Mocking Bird" - Room B-45 Classroom Office Building, St. Paul Campus - 8:00 PM

Call 373-1051 for more information.

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UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
JANUARY 5, 1976

NEWS PEOPLE: For further information  
contact BILL HUNZICKER, 373-7512

MEMO TO NEWS PEOPLE

The University of Minnesota Board of Regents will discuss budgets and legislative requests and get another briefing on National Collegiate Athletic Association (NCAA) rule violations at their monthly meeting Thursday and Friday.

The Regents will meet as a committee of the whole at 8:30 a.m. Friday (Jan. 9) in the Regents' room (238 Morrill Hall) to hear a report on the University's presentation to the NCAA last month in San Diego. Budget principles for fiscal 1976-77 will also be discussed.

The newly appointed student representatives to Regents' committees will be introduced at the monthly full board meeting which will follow at 10:15 a.m. in the Regents' room.

Committees will meet Thursday (Jan. 8).

The physical plant and investments committee will meet at 1:15 p.m. in 300 Morrill while the faculty and staff affairs committee will meet in the Regents' room.

The student concerns committee will meet at 3 p.m. in 300 Morrill while the educational policy and long-range planning committee will be meeting in the Regents' room.

The physical plant committee will discuss a building request to be presented to the 1976 Legislature and the student concerns committee will hear reports on a proposed student-run FM radio station and on the relationship between enrollment and dormitory occupancy rates.

-UNS-

(A1-5;B1;C1)

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NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

INDIANS, NEWS MEDIA  
TO BE DISCUSSED

(FOR IMMEDIATE RELEASE)

"American Indians and the News Media" will be discussed on the Native American Program on KQRS radio Sunday, Jan. 18, at 8 p.m.

Increasing audience demand for sensitivity in reporting minority news, the importance of investigative journalism for American Indians, and special programs for training minorities in journalism, will be among the topics discussed.

Tom Beaver, newsman for WCCO television in Minneapolis and a Creek Indian from Lawrence, Kans., and Gerald Vizenor, an Ojibway poet and author of several books including "The Everlasting Sky" and "Tribal Scenes and Ceremonies" and former staff writer and editorial writer for the Minneapolis Tribune, will be the participants.

Laura Wittstock, a Seneca and former executive director of the American Indian Press Association, will be the moderator.

KQRS is at 1440 on the AM dial and 92.5 on the FM dial.

The half-hour program is sponsored weekly by the University of Minnesota American Indian studies department.

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(A1,2,4,5,9,10,27,28;B1)

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NEWS PEOPLE: For further information  
contact JUDY VECK, 373-7515

'MUSIC IN MINNESOTA'  
TOPIC FOR TV SERIES

(FOR IMMEDIATE RELEASE)

"Music in Minnesota," a 10-program television series, will be presented on KTCN-TV (Channel 2) at 9 p.m. Tuesdays from Jan. 6 through March 9.

Minnesota's contributions to America's musical heritage will be emphasized in the programs hosted by Johannes Riedel, University of Minnesota musicology professor.

Performing groups will range from the Minneapolis Civic Orchestra to the Finnish Ladies Aid from French Lake, Minn. All types of music will be presented.

The series will begin with a program on Black, Chicano and Native American music Tuesday (Jan. 6). Topics for the other programs in the series are Jan. 13, Scandinavian music; Jan. 20, other ethnic music; Jan. 27, big band music (1920-1950); Feb. 3, church music; Feb. 10, ensemble music; Feb. 17, music in various educational institutions; Feb. 24, classical music of significant American composers; March 2, classical music of significant American composers at the University and other institutions, and March 9, classical music of the young generation.

The series is produced by Media Resources at the University as a service of Continuing Education and Extension.

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(A2,4,5,9,19,20,24,25,27,28;B1;C1,C4)

UNIVERSITY OF MINNESOTA  
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JANUARY 5, 1976

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NEWS PEOPLE: For further information  
contact BILL HUNEZICKER, 373-7512

#### MAGRATH TO LEAVE HOSPITAL

(FOR IMMEDIATE RELEASE)

University of Minnesota President C. Peter Magrath, who has been carrying out many of his administrative duties from a hospital bed, will be allowed to return to his home Wednesday for a "carefully monitored convalescent period," his doctor said Monday.

Magrath, 42, has been hospitalized since December 12 with a mild case of Guillain-Barre Syndrome, a toxic/allergic reaction to a virus by the insulation around the nerves, according to Joseph A. Resch, a University neurologist and assistant vice president for health sciences.

Resch said Magrath will make a complete recovery from the rare illness, which is confined to the nerves in his limbs and has not affected the central nervous system.

The result of the illness has been weakness and the prescription for recovery is rest and immobility. Magrath has been allowed to leave the bed once a day and will gradually increase his activity as it can be tolerated at his home, Resch said.

The University President will continue to conduct his business from his home in St. Paul. He is allowed to read, use the dictaphone and meet with people in his room at University Hospitals and will continue to do so at home.

Magrath will participate in the meeting of the Board of Regents this week through a telephone hookup between his home and the campus.

-UNS-

(A1-5,8;B1,12;C1,4,21,22;E4)

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JANUARY 6, 1976

MTR  
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JAP

NEWS PEOPLE: For further information  
contact ELIZABETH PETRANGELO, 373-7510

BLAKE APPOINTED  
TO U OF M POST

(FOR IMMEDIATE RELEASE)

J. Paul Blake, 25, has been named assistant director of University relations at the University of Minnesota, effective Jan. 1.

In his position, he will be responsible for the coordination of activities performed by the news, publications, special events and community relations sections of the University relations department.

Blake formerly was public relations manager for the Toro Company, Bloomington, Minn., and a public relations writer for Northwestern Bell Telephone Co., Minneapolis, Minn.

He has also served as seminar instructor for Princeton University's Cooperative School Program and staff assistant for Drake University's Office of University Relations.

Blake earned a bachelor's degree in journalism from Drake University in 1972. Born in Neptune, N.J., he graduated from Weequahic High School in Newark, N.J., in 1968.

Currently he lives at 5200 W. 102nd St., Bloomington, Minn.

-UNS-

(A1-5,15,27;B1;C1)

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NEWS PEOPLE: For further information  
contact ROMAELE SAYRE, 373-7516

AMERICAN EXPERIENCE SERIES  
PLANNED AT COFFMAN UNION

(FOR IMMEDIATE RELEASE)

The American experience, as viewed by artists, poets, women, historians, children, migrant workers, Army veterans and others will be the subject of "Angles of Vision," a series of lectures, films and discussions winter quarter at Coffman Union at the University of Minnesota.

The seven-week series will begin Thursday (Jan. 8) at 8 p.m. in the Coffman Union Great Hall with the Middle Spunk Creek Boys, a group of local bluegrass players explaining and discussing their music.

A lunch time series of lecture/discussions will begin Jan. 13 and continue through Feb. 10.

First speaker in the series will be music professor Dominick J. Argento discussing his Pulitzer Prize-winning Bicentennial opera on Edgar Allan Poe.

The oriental influences on American literature as seen by mystical poet Pierre Delattre will be discussed on Jan. 20. The approaches to and significance of Minnesota women's history will be the subject of a panel discussion on Feb. 3.

"There's No Such Thing as Away," a multi-media presentation on the growth mentality of America will be presented Feb. 10. All programs are at 12:15 p.m.

A documentary on American expatriate writer Gertrude Stein will begin the Sunday evening film series Jan. 18 in the Great Hall.

Other topics and films to be shown will be:

- Jan. 25---racism---"Shadows," directed by John Cassavetes and "The Emperor Jones," based on the Eugene O'Neill play with Paul Robeson.
- Feb. 1---labor struggles---"Inheritance" on garment workers, "Migrant," dealing with farm workers.
- Feb. 8---science fiction films on Cold War topics---"The Next Voice You Hear," and "This Island Earth."
- Feb. 15---race hatred---"Bad Day at Black Rock," racial trouble in a Western town.
- Feb. 22---problems of veterans---"The Best Years of Our Lives."

Students and professors from American studies, history and political science will lead discussions after each film. Film starting times are 6:30 p.m. on Jan. 25, Feb. 8, and Feb. 22, and 7:30 p.m. Jan. 18, Feb. 1 and Feb. 15. All events are free and open to the public.

-UNS-

(A1,2,4,5,6,10,21,27;B1)

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SCHOLASTIC APTITUDE:  
ARE SKILLS DECLINING?

by Maureen Smith  
University of Minnesota Writer

Wendell Glick was distressed to discover the other day that half of his students in his American literature class couldn't read the Declaration of Independence.

Carla Phillips has had junior honor students in history who couldn't write a coherent paper. George Shapiro has encountered juniors and seniors who couldn't write a complete sentence.

Norman Dahl thinks that spoken English has deteriorated more perceptibly than written English. Julie Carson listens to inarticulate student leaders and concludes that "we have developed a nonverbal culture."

Reading, writing, speaking. Are students and other Americans losing these basic language skills? Some University of Minnesota faculty members think so, and there is evidence in state and national test scores to suggest that they're right.

Back in 1963 the average score of high school seniors on the verbal section of the Scholastic Aptitude Test (SAT) was 478. By 1975 that average had dropped to 434. The average score on the mathematical section fell from 502 to 472 over the same 12-year period.

Although scores have been dropping for a dozen years, the decline from 1974 to 1975 was the largest ever recorded by the College Entrance Examination Board---10 points on the verbal section and eight points on the mathematical section.

A similar pattern of decline has been reported by the American College Testing Program (ACT). About 996,000 high school seniors took the SAT and 850,000 took the ACT tests in 1974-75.

Dallis Perry, assistant director of the University's Student Counseling Bureau, said data for Minnesota "show the same sort of decline and just about to the same extent."

(MORE)

One intriguing fact, Perry said, is that "the scores started going down in Minnesota two years after they started going down nationally. Our experience has paralleled the national experience, but for some reason it came a little later." Perry has worked with the Minnesota Scholastic Aptitude Test (MSAT), which was given to almost all high school juniors in the state from 1959 to 1973.

The most striking pattern in the national SAT results is the decline in the number of students scoring in the upper ranges of the 200-to-800 scale.

At a time when the total number of students taking the tests increased from about 985,000 in 1974 to about 996,000 in 1975, the number of students scoring above 450 on the verbal test dropped by about 30,000. From 1972 to 1975, the number of students scoring above 450 fell by almost 75,000.

The number of students scoring above 600 on the verbal test fell from 98,766 in 1974 to 79,133 in 1975---a drop of almost 20 per cent.

What this apparently means is that brilliant students are getting rarer and rarer.

Carol Pazandak, assistant dean of the College of Liberal Arts (CLA), said faculty members shouldn't be encountering worse students than they have ever seen before. As long as tests are comparable from year to year and admissions requirements remain the same, she said, the range of abilities shouldn't change.

What faculty members may find, Pazandak said, is that more of their students are clustered near the bottom of the range. "A sociology professor might say that three out of 20 papers are unacceptable now, compared to one out of 20 a few years ago," she said. "But he shouldn't be saying that his worst papers are worse than any he's ever seen."

(Some of this year's CLA freshmen may be students who wouldn't have been admitted last year, Pazandak said, but that is because of a quirk in admissions requirements that came with the change from MSAT to the Preliminary Scholastic Aptitude Test (PSAT). CLA's goal for years has been to admit students in the top half of their high school classes. As it turned out, PSAT made 52 per cent eligible. It was then discovered that MSAT, which had originally qualified 48 or 49 per cent of the high school students, was qualifying only 42 per cent by 1974. "We're still in the process of re-viewing," Pazandak said.)

(MORE)

It is tempting to look at the falling test scores and try to find excuses, Pazandak said. "Maybe the test isn't valid, maybe it's out of date. I don't think we can cover it up that way. I think we're looking at a real decline."

Not all faculty members agree that the verbal skills of students have fallen off in recent years. Richard Horberg, who teaches rhetoric on the St. Paul campus, said that, if anything, his students are better than they were 10 years ago.

Philosophy professor Burnham Terrell said he has had "more smashingly good undergraduate philosophy students" in the last two or three years than in any other three-year period. He attributes this clustering of quality to chance:

"Sometimes you have a good vintage, sometimes a bad. That depends on how much sun there's been and when the rain falls."

Some of the faculty members who expressed the deepest concern about the verbal skills of their students weren't so sure that students a few years ago were any better. "Whether we are really speaking of a decline here is something I'm not sure of," said Gerhard Weiss, professor of German. Carla Phillips of history and Norman Dahl of philosophy made similar disclaimers.

Other faculty members did speak of a decline. Julie Carson, director of freshman English, said composition courses are now built on the assumption that students are coming in with weaker writing skills than in the past. Wendell Glick, professor of English on the Duluth campus, said it is his perception that fewer and fewer students are able to read and understand such writers of good prose as John Stuart Mill and Henry Thoreau.

Journalism professor George Hage said his experience has been that journalism students are better writers than most, but even among his students he has observed a decline in proficiency. Speech professor George Shapiro said students are becoming less able as speakers.

Shapiro's concern about the spoken language was echoed by Carson and Dahl. Even the brightest students often speak poorly and don't seem troubled about it, Carson said. Dahl said student speech is characterized by incomplete sentences, ideas that are hinted at and not spelled out, and the phrase "you know" sprinkled through every

utterance. In all of this, he suggested, students are influenced by "the things one picks up from the community of speakers."

Roberta Armstrong, coordinator of research for Admissions and Records, cautioned that faculty observations might be skewed toward the pessimistic. When teachers are relying on their memories and perceptions, she said, they may tend to romanticize "the good old days when knighthood was in flower and students were brighter and salaries, relatively speaking, were higher."

All of the faculty members who were interviewed were careful not to generalize beyond their own experience. They knew that their own students might not be a representative group and that their impressions were only impressions. But most of them expressed concern about students' verbal skills.

Nobody pretended to have the explanation for the apparent decline in skills, but a lot of people had ideas. Television and the public schools were frequently cited as contributors to the problem.

Dallis Perry said he divides the possible explanations into two categories. One is that "students are indeed less well prepared." Under this category, he said, it is appropriate to talk about changes in school curricula and the pervasiveness of television, both of which may have brought a decreased emphasis on reading.

Another possibility, Perry said, is that it is the students' attitudes that have changed. The drop in test scores "coincides with the change from a seller's market to a buyer's market in education," he pointed out. "When test scores were at their peak, competition for getting into college was at its peak. Maybe that's why we're losing the very high scores. The test isn't so important."

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(A1,2,4,5,27;B1;C1,4,19,20,21;D12;E4,5)

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NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

CORRECTION

A composition by University of Minnesota music professor Dominick Argento was incorrectly identified in the Jan.6 University News Service release, "AMERICAN EXPERIENCE SERIES PLANNED AT COFFMAN UNION."

Argento received his Pulitzer prize for the song cycle, "From the Diary of Virginia Woolf." He has been commissioned to do an opera on the last days of American author and poet Edgar Allan Poe as a University Bicentennial project.

Argento will discuss the Bicentennial opera at a noontime lecture discussion on Jan. 13, at Coffman Union.

-UNS-

(A1,2,4,5,6,10,21,27;B1)

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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
Jan. 11-17

- Sun., Jan. 11---Art Exhibition: "Ecuador---From the Andes to the Galapagos" by Paul Chesley. Jaques Gallery, Museum of Natural History. 9 a.m.-5 p.m. Mon.-Sat., 9 a.m.-9 p.m. Wed., 2-5 p.m. Sun. Through Feb. 1. Free.
- Sun., Jan. 11---University Gallery: Water Colors of the Norwegian Battalion by Claus Hole. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through Feb. 6. Free.
- Sun., Jan. 11---The Whole Coffeehouse: Storms and McGraw. Doors open 8:30 p.m. \$1.
- Mon., Jan. 12---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., Jan. 12---St. Paul Student Center: Acrylics by Nell Hillsley; Intaglio Prints by Pat Doolittle; Drawings by design grad students; Handcrafted Jewelry by Mary and Jim Norbloom. 8 a.m.-10 p.m. Mon.-Fri. Through Jan. 30. Free.
- Mon., Jan. 12---West Bank Union Gallery: Nine Photographers from Minnesota College of Art and Design; Paintings and Drawings by Larry Weinberg. West Bank Aud. 8 a.m.-7 p.m. Mon.-Fri. Through Jan. 23. Free.
- Mon., Jan. 12---University Gallery: Paintings and Drawings by Sara Hauge. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through Jan. 30. Free.
- Mon., Jan. 12---Convocation: "Flying Saucers Are Real," illustrated lecture by Stanton T. Friedman, nuclear physicist. St. Paul Student Center North Star Ballroom. 11:30 a.m. and 7:30 p.m. Free.
- Mon., Jan. 12---Film: "The Long Voyage Home" directed by John Ford. Museum of Natural History aud. 3:15 p.m. Free.
- Tues., Jan. 13---Discussion: "Starvation: Our Concern or Theirs," by Third World Institute. St. Paul Student Center North Star Ballroom. 12:15 p.m. Free.
- Tues., Jan. 13---Lecture: "Bicentennial Opera on Edgar Allen Poe" by Dominick Argento. Mississippi Room, Coffman Union. 12:15 p.m. Free.
- Tues., Jan. 13---U Artists Course: Ruth Welting, coloratura soprano. Northrop Aud. 8 p.m. \$3.50, \$2.50, \$1.50.
- Wed., Jan. 14---Forum: "The Battle of Berlin," film/lecture. 320 Coffman Union. Noon. Free.
- Wed., Jan. 14---Film: "America: Gone West," by Alistair Cooke. St. Paul Student Center North Star Ballroom. 12:10 and 7 p.m. Free.
- Wed., Jan. 14---Table Tennis Exhibit. Coffman Union Great Hall. 12:15-1:15 p.m. Free.
- Wed., Jan. 14---Ethnic Affairs Film: "Tupamaros." The Whole Coffeehouse. 7:30 p.m. Free.

(OVER)

- Wed., Jan. 14---U Film Society: "Osessione." Museum of Natural History aud. 7:30 and 9:45 p.m. \$1.25 members, \$1.50 public.
- Wed., Jan. 14---Film: "Greed," directed by Erick von Stroheim. Discussion follows. St. Paul Student Center North Star Ballroom. 8 p.m. \$1.
- Thurs., Jan. 15---Dance Films. The Whole Coffeehouse. Noon. Free.
- Thurs., Jan. 15---Film: "North by Northwest." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Fri., Jan. 16---Concert. The Whole Coffeehouse. Noon. Free.
- Fri., Jan. 16---Jazz Concert: Everyday People. St. Paul Student Center North Star Ballroom. Noon. Free.
- Fri., Jan. 16---Film: "Murder on the Orient Express." 175 West Bank aud. 7:30 and 10 p.m. \$1.50 students, \$2 public.
- Fri., Jan. 16---U Film Society: "Taking Off," 7:30 p.m., and "Firemen's Ball," 9:30 p.m., directed by Milos Forman. Museum of Natural History aud. \$1.75 members, \$2 public.
- Fri., Jan. 16---Coffeehouse Concert: Jerry Rau plus Loren Deutz. Refreshments. St. Paul Student Center Rouser Room. 8 p.m. \$1.75.
- Fri., Jan. 16---Dance-A-Thon for muscular dystrophy. Coffman Union Great Hall. 8 p.m.- 1 a.m. \$1.50.
- Fri., Jan. 16---The Whole Coffeehouse. Doors open 8:30 p.m. Tickets may be purchased in advance at MSA Store or at the door.
- Sat., Jan. 17---Film: "Murder on the Orient Express." 175 West Bank aud. 7:30 and 10 p.m. \$1.50 students, \$2 public.
- Sat., Jan. 17---U Film Society: "Taking Off," 7:30 p.m., and "Firemen's Ball," 9:30 p.m., directed by Milos Forman. Museum of Natural History aud. \$1.75 members, \$2 public.
- Sat., Jan. 17---Dance-A-Thon for muscular dystrophy. Coffman Union Great Hall. 9 a.m.-1 a.m. \$1.50.
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NEWS PEOPLE: For further information  
contact JUDY VICK 373-7515

JOHN FORD FILM SERIES AT 'U'

(FOR IMMEDIATE RELEASE)

A free, public series of six films by American director John Ford will be presented at the University of Minnesota in January and February.

The films will be shown at 3:15 p.m. Mondays in the Bell Museum of Natural History auditorium.

The scheduled films made between 1935 and 1961 are as follows: Jan. 12, "The Long Voyage Home," based on three-one act plays by Eugene O'Neill, starring John Wayne; Jan. 19, "Wagonmaster," starring Ben Johnson; Jan. 26, "She Wore a Yellow Ribbon," starring John Wayne; Feb. 2, "The Rising of the Moon," with Noel Purcell, Cyril Cusack, Jack MacGowran and members of the Abbey Theatre Company; Feb. 9, "Two Rode Together," starring James Stewart, Richard Widmark, Shirley Jones, Linda Cristal, Andy Devine and Ted Knight, and Feb. 23, "The Whole Town's Talking," from the novel by W. R. Burnett, starring Edward G. Robinson.

The series is sponsored by Audio-Visual Library Services, the American studies and humanities programs and the departments of concerts and lectures and English.

-UNS-

(A1,2,4,5, 24,25;B1)

UNIVERSITY OF MINNESOTA  
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JANUARY 9, 1976

NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

'U' STILL NOT RELEASING  
NCAA REPORT TO PUBLIC

(FOR IMMEDIATE RELEASE)

University of Minnesota Vice President Stanley B. Kegler says the University can make no official statement on recommended penalties or the specifics of allegations of violations of National Collegiate Athletic Association (NCAA) rules by the Gopher basketball team.

In discussing the NCAA issue with the Board of Regents, Kegler confirmed information contained in a copyrighted story by Terry Brown published Friday (Jan. 9) in the student-run Minnesota Daily, based on a copy of the report of the Assembly Committee on Intercollegiate Athletics (ACIA) to President C. Peter Magrath and the NCAA.

Kegler said, however, that the University was still obligated, under NCAA rules, to withhold the information in the report until the NCAA has seen the final report and announced its penalties against the University. He said the University risks additional penalties if it releases specific information before the process is completed.

"We had hoped to be coming back from (the meeting with the NCAA committee on infractions Dec. 13 in) San Diego able to release the information," Kegler said. Kegler would not comment further on the contents of the report and "we are precluded from releasing it," he said.

The Daily reported that some of the rule violations involved Jimmy Williams, assistant basketball coach who came to Minnesota with Coach Bill Musselman, who resigned last fall as the NCAA rule violations were being investigated.

"So, although Williams has freely admitted violating NCAA rules, University administrators are quick to emphasize that it was because Musselman told him to," the Daily reported.

Williams made a personal appearance in his own behalf before the committee on infractions last month, Kegler told the Regents. He said that he and Paul Giel,

(MORE)

director of men's intercollegiate athletics, made presentations to the NCAA on Williams' behalf.

Williams, the Daily reported, is involved in more than 20 NCAA allegations, involving the gift of plane tickets to two athletes at Musselman's request, the loan of small amounts of money to other athletes and other lesser violations.

According to the Daily, the ACIA recommended that the University "formally sever its relationship" with Harvey Mackay, a long-time supporter of Gopher athletics and president of the Mackay Envelope Co.

"He has admitted to making illicit promises to several recruits, to buying tickets at well over the face value from several players, and to providing other substantial benefits to various basketball players," the Daily quoted from the report.

Two current members of the basketball team volunteered the information that they had sold their complimentary tickets but the report does not identify the players, the Daily reported.

"Although NCAA rules specifically require that any player selling tickets be immediately ineligible to compete, ACIA does not believe that such discipline is necessary or fair in this case," the Daily reported.

A series of articles in the Minnesota Daily in 1973 reported on the selling of complimentary tickets and the ACIA admits that corrective action was not taken at that time. "The report also admonishes the Big Ten for saying there was no need for the University to pursue the matter at the time."

According to the Daily, the report was most critical of the "excessive zeal with which prospective student-athletes were pursued in an attempt to recruit them to attend the University of Minnesota and to play on its basketball team." The ACIA recommends that this be corrected by adherence to NCAA rules in the future.

ACIA said it had faith in Giel's integrity but suggested that Magrath remind Giel "that he is responsible for the conduct of athletic department staff and that he institute changes in his administration in order to insure that Minnesota will not be cited for violations again," the Daily reported.

(MORE)

The Daily said Musselman, who has not allowed himself to be interviewed by University investigators, has admitted to two violations, the giving of rent money to former Gopher Ron Behagen and plane tickets to another player, Rick McCutcheon, and his family.

The ACIA report, once considered the University's final report to the NCAA, will be changed after the University looks further into some charges and submits more information at the NCAA's request, according to the Daily.

The ACIA also talked to the need for "strong faculty control over intercollegiate athletics on the Twin Cities campus," the Daily said.

ACIA is currently the instrument of faculty control. It is a committee of the Twin Cities Campus Assembly, a body of two-thirds faculty and one-third students. The committee appointments are made by Magrath at the recommendation of the Assembly committee on committees.

Kegler said the University would make its final report public after the NCAA has completed its deliberations.

"We have gone over the Daily story and it is a factual representation of the Assembly committee's report to the president," Kegler said. He said he could not comment further on the report and he would not release it until the NCAA had completed its deliberations.

"We intend to talk about each of the 112 paragraphs. We intend to name names where names are appropriate and where we have found substance to the allegations," Kegler said. "For those where there is no substance we will describe the allegations without reference to names."

Kegler said the 4,000 pages of rough transcripts would be a "treasure" of rumors and could be the basis for boundless speculative stories if they were made public at this time.

Kegler's report to the Regents was intended to be a general discussion of his eight and one-half hour presentation to the NCAA committee on infractions last month. Kegler said he, his assistant John Nichols, Williams, and David French, faculty representative to the Big Ten, made the University's case.

"The committee seemed rather open-minded," Kegler said. "They considered the evidence in what I would consider an even-handed way."

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JANUARY 12, 1976

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'U' SPONSORS FREE MUSIC EVENTS

(FOR IMMEDIATE RELEASE)

This winter the University of Minnesota music department will sponsor 15 free public events on the Minneapolis campus, two at Walker Art Center in Minneapolis and one at Hamline Methodist Church in St. Paul.

Elliott Schwartz will open the winter season with a lecture on electronic music with improvisation and student participation at 3 p.m. Friday, Jan. 23, in Scott Hall auditorium.

Schwartz, a composer, is chairman of the music department at Bowdoin College in Brunswick, Maine.

Other on-campus events include: a trumpet recital by David Baldwin, Scott Hall, 8 p.m., Feb. 4; Concert Band Ensemble, Northrop, 8 p.m., Feb. 6; Brass Choir, Scott Hall, 8 p.m., Feb. 11; Waltz 'n Schmaltz with Clifton Ware, tenor, and Sarita Roche, soprano, and the Livingston Consort, Scott Hall, 8 p.m., Feb. 14; University Symphonic Chorus and University Orchestra, Northrop, 8 p.m., Feb. 20; Jazz Ensemble and University Symphonic Band, Northrop, 3 p.m., Feb. 22; Robert Samarotto, clarinetist, Scott Hall, 8 p.m., Feb. 23; New York Brass Quintet Clinic, Scott Hall, 11:15 a.m., Feb. 26; New England Consort of Viols, Scott Hall, 7:30 p.m., Feb. 26; Symphony Band Ensemble and Jazz Ensemble, Northrop, 3 p.m., Feb. 29; Concert Band Ensemble, Northrop, 8 p.m., March 5; University Symphony Orchestra, Northrop, 3 p.m., March 7; Chamber Singers and Concert Choir with members of the Minnesota Orchestra, Northrop, 8 p.m., March 9, and University Jazz Ensembles, Northrop, 3 p.m., March 14.

A repeat performance of Waltz 'n Schmaltz at 8 p.m. Sunday, Feb. 15 and a concert by the Men's Chorus at 8 p.m. Friday, Feb. 27, are the two events planned for Walker Art Center.

The Brass Choir will perform at 8 p.m. Sunday, Feb. 29 at Hamline Methodist Church in St. Paul.

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(A1-5,24,25;B1;C1,4;E8)

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NORWEGIAN-AMERICAN ARTIST  
EXHIBITS WORKS IN 'U' GALLERY

(FOR IMMEDIATE RELEASE)

A collection of drawings and watercolors by Norwegian-American artist Claus Hoie is on exhibit in the University Gallery at the University of Minnesota through Feb. 8.

The works were executed during World War II, when Hoie was a member of the Norwegian-speaking 99th Infantry Battalion of the United States Army. They record the battalion's activities, from the mountain training at Camp Hale, Colo., to life on board the troop ships, action on the European front and the liberation of Norway.

The battalion was organized specifically to participate in any Allied activity or invasion of Norway. After taking part in the Normandy invasion and the Battle of the Bulge, they finally arrived in Norway near the end of the war to disarm the German soldiers still there. The battalion performed its final task in June, 1945, when it served as the Guard of Honor at the return of King Haakon to Norway.

Hoie's works are in the permanent collections of five museums. He recently received the gold medal of honor of the American Watercolor Society and the painting award of the National Institute of Arts and Letters.

Hoie will be the guest at a public reception in the gallery Thursday, Jan. 22, from 6 to 9 p.m. The gallery, on the third floor of Northrop auditorium on the Minneapolis campus, is open free to the public from 11 a.m. to 4 p.m. Monday through Friday and from 2 to 5 p.m. Sunday.

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(A1,2,4,5,21,24,25,26;B1;C1,4)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

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(For more details, contact News Service writer whose name is given by each item.)

'OSSESSIONE' TO PLAY AT 'U'

(Sharon Emery)

"Osessione," Luchino Visconti's adaptation of James M. Cain's "The Postman Always Rings Twice," will have its first Twin Cities showing Wednesday (Jan. 14), at 7:30 and 9:45 p.m. in the Bell Museum of Natural History auditorium at the University of Minnesota.

The 1942 film, made during Mussolini's Fascist regime, is a story of love and intrigue set in the Po Valley. It depicts characters of everyday life through the use of non-professional actors and regional locale.

Other films directed by Visconti are "Death in Venice," "The Stranger" and, more recently, "Conversation Piece" with Burt Lancaster.

The showing begins a series which will run through mid-March and will consist of offbeat first-run films and revivals including Peter Sichel's "Complete Guide to Wine," scheduled for Jan. 21.

The series is sponsored by the University Film Society. Admission to each film is \$1.50.

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SIEBER TO CONDUCT HARTFORD 'POPS'

(Judy Vick)

University of Minnesota faculty member Richard Sieber will conduct the Hartford (Conn.) Symphony "Pops" Orchestra Saturday, Jan. 24, in a concert featuring Dave Brubeck and his sons, Darius and Dan, the "Two Generations of Brubeck."

Sieber, who has previously conducted for Brubeck in his Midwest appearances, is associate director of music for Continuing Education in the Arts at the University of Minnesota.

The concert will be at Bushnell Memorial Hall in Hartford, Conn.

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(A1,2,4,5,24,25;B1)

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JANUARY 12, 1976

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contact BILL RICHARDSON, 373-5193

ASTRONAUT BRINGS VISION OF NEAR  
FUTURE TO 'U' ALUMNI CLUB SEMINAR

(FOR IMMEDIATE RELEASE)

Astronaut Donald "Deke" Slayton brought his Navy P-38 to a stop right on time at the Twin Cities military air field last week.

Slayton, the commander of last summer's Apollo-Soyuz space mission, was on a less dramatic expedition this time---bringing a University of Minnesota pennant and himself for presentation at the University Alumni Club's President's Seminar.

The pennant flew with Slayton, a 1949 aeronautical engineering graduate of the University, on his historic international space mission.

That flight, criticized by many as a public-relations event, served mostly political purposes, Slayton admitted.

"It got everyone working together," he said, "which was no small accomplishment."

Slayton is now an assistant manager of the National Aeronautics and Space Administration's (NASA) shuttle-craft project, which involves the planning and construction of a reusable space vehicle which, he said, might have more immediate social uses than Mars or moon landings.

"I foresee hospitals in orbit in crafts somewhat like this shuttle," he said. "For so many ailments, zero gravity would make treatment a lot easier. You wouldn't have any bedsores, that's for sure."

The shuttle, a craft that looks like an airplane mounted on a rocket, would be in use by the 1980s, Slayton said, assuming continued support of NASA, by Congress and the public.

But many NASA programs have been cut and the public is becoming blase about space events that were science fiction a decade ago. The tremendous cost of space programs is one encouragement for international cooperation, he said.

(MORE)

SLAYTON

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"A few people are beginning to see the practical aspects of space exploration, but most still think of it like the Indianapolis 500," he said.

Slayton has been with the space program since its beginning and, at 51, is the oldest astronaut on flight status. He attributes that status to "keeping my mind on my job and my body in condition," which must have also been his credo in the late 1940s when he whizzed through his undergraduate studies at the University in two and one-half years.

"In college," he said, "I had straightforward goals."

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(A2,5;B1;C4)

(FOR RELEASE ANY TIME)

Feature story from the  
University of Minnesota  
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January 13, 1976

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PSYCHOLOGIST WARNS AGAINST  
BUSINESS USE OF LIE DETECTORS

by W. R. Hafling, Ph.D.  
University Science Writer

Honest people can and do fail lie detector tests. In the business setting where there are no detectives to follow up on the truth or falsity of people's answers to a polygraph test, people are denied jobs or fired because of their test results. The stigma of a failed polygraph test can haunt a person for life.

In a series of published articles, Psychology Professor David Lykken of the University of Minnesota has outlined several reasons why the use of polygraphs in the business setting should be banned.

Lykken's testimony before the Minnesota State Legislature was instrumental in passing a 1973 statute making the business use of lie detectors a misdemeanor. Nevertheless reports of such use continue.

Betting Against the Odds

One main objection Lykken has to the use of polygraph tests by business is that such tests do not have 100 per cent validity. One hundred per cent validity would mean that the test would distinguish all of the liars from all of the non-liars.

Though Lykken estimates the actual validity of such tests may be as high as 70 per cent, he shows that even if they were 90 per cent valid, many innocent people could fail them. This is because a very high percentage of the people involved in the business setting, as opposed to the criminal setting, are likely to be telling the truth.

According to Lykken's calculations (published in the American Psychologist, Oct., 1974), "If five per cent of all those tested are liars, then even with a test having 90 per cent validity, fully 68 per cent of those who 'fail' will be innocent truth tellers.

"Widespread use of these methods in the private sector must inevitably work an unjust hardship on many innocent but autonomically reactive individuals."

#### Applied Psychology Without Psychologists

"It is always the human polygraphist who is the 'lie detector,' never the machine," Lykken said. Furthermore, it is a psychological test. Yet trained psychologists have had little to do with the whole lie detector business.

As Lykken points out in Modern Medicine (Oct. 1, 1975), "The man who administers this subtle psychologic test, most demanding of psychologic sensitivity and judgment on the part of the examiner, frequently is not a psychologist but a cop."

Most people are familiar with the polygraph test from long exposure to it in mass media, such as TV police stories. The machine essentially measures changes in certain physiologic responses such as heart rate, respiration and the electrical resistance of the skin on the palm of the hands.

"Don't let the fancy apparatus mislead you," Lykken warns. "There is no pattern of physiologic response that will tell you if someone is lying. There is no unique reaction that all people involuntarily display when they attempt to deceive but not when they are merely upset, frightened or angry.

"All that the polygraph can do is indicate that a stimulus has elicited an arousal reaction, perhaps an emotional or stress response, and that one question seems to be more disturbing to the subject than another."

#### Use In Crime Investigation

Criminal investigators give the test only to likely suspects---not to every person seeking to obtain and hold a job. Furthermore, in criminal cases other evidence is needed to back up a polygrapher's decision before bringing a case to trial.

For these reasons, Lykken agrees with the cautious use of the polygraph in police work. The difference, as he points out in Psychology Today (March, 1975) is that, "The Constitution protects a criminal suspect from going to prison for failing a lie-detector test, but nothing protects a man from losing gainful employment for the same reason."

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JANUARY 13, 1976

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NEWS PEOPLE: For further information  
contact JUDY VICK, 273-7515

YVONNE WANROW TO SPEAK AT 'U'

(FOR IMMEDIATE RELEASE)

Yvonne Wanrow, an American Indian woman of the Colville tribe will speak at the University of Minnesota Tuesday, Jan. 20.

Her talk at noon in room 320 Coffman Union is sponsored by the American Indian Student Association and is open to the public with no admission charge.

She will also participate in an open discussion at 3:30 p.m. Monday (Jan. 19) in room 130 Ford Hall, sponsored by the Women's Studies Program.

Wanrow was found guilty in 1973 of second-degree murder and first-degree assault and was sentenced to 25 years in prison for the shooting death of a man who attempted a sexual attack on her son, and an assault against the man's companion. Her guilty verdict was recently reversed and she was granted a new trial.

The prosecution is appealing the reversal and the case will be argued Monday, Feb. 23, before the Washington State Supreme Court in Olympia, Wash. All nine judges are expected to be present.

Petitions now being circulated on Wanrow's behalf request an immediate dismissal of all charges against her.

Wanrow will also have a news conference Thursday (Jan. 15) at 10 a.m. in the Minnesota Press Club, Radisson Hotel, downtown Minneapolis.

She will appear with Native American folk singer Floyd Westerman at a benefit for the Yvonne Wanrow Defense Committee Saturday (Jan. 17) at 7 p.m. at the Minneapolis Regional Native American Center.

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(A1-5,21,27,28;B1;C18)

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JANUARY 13, 1976

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NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-5193

BUSINESS CONFERENCES  
SCHEDULED FOR WINTER MONTHS

(FOR IMMEDIATE RELEASE)

Decisionmaking, motivation, transactional analysis and assertiveness training for women managers are all part of the January and February schedule of business conferences sponsored by Continuing Business Education at the University of Minnesota.

Fifteen conferences are planned, ranging from "Manufacturing Methods Improvement" to "Time Management for Secretaries." Two groups of courses are included in the offerings, the "Effective Secretaries" and "Effective Management" series.

The secretarial series includes "Interpersonal Communication for Executive Secretaries," Jan. 15; "Transactional Analysis in the Office," Jan. 22; "Time Management for Secretaries," Jan. 29, and "Elements of Human Behavior for Executive Secretaries," Feb. 6. The management series is composed of "Problem Solving," Jan. 20; "Motivation," Jan. 27; "Decision Making," Feb. 10; "Leadership and Team Building," Feb. 20, and "Time Management for Managers," Feb. 24.

Non-series conferences include "Accounting for Nonaccountants," Jan. 12, 19, 26 and Feb. 2, 9, 16 and 23; a basic seminar in communication and persuasion, Jan. 21-22; "Time Management for Managers," Feb. 3; "Manufacturing Methods Improvement," Feb. 17-18; "Assertiveness Training for Women Managers," Feb. 19; a basic workshop in employment interviewing, Feb. 25-26, and "The Changing Role of the Sales Manager," Feb. 4-5.

Locations vary, although most are planned for hotels near corporate districts. Most fees are \$65 for one-day courses and \$130 for two-day conferences.

Advance registration is required through Continuing Education in Business, Nolte Center, University of Minnesota. Further information may be obtained by telephoning 373-3680.

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(A1,2,5,15;B1,7)

(FOR RELEASE ANY TIME)

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Minneapolis, Minnesota 55455  
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REASONS OFFERED FOR  
DECLINE IN VERBAL SKILLS

by Maureen Smith  
University of Minnesota Writer

Something is happening: Back in 1963 the average score of high school seniors on the verbal section of the Scholastic Aptitude Test (SAT) was 478. By 1975 that average had dropped to 434. Between 1974 and 1975 the average dropped 10 points, the largest decline ever recorded by the College Entrance Examination Board.

Ever since the scores for 1975 were reported, people across the country have been debating about what they mean. Some people say television has created a generation of nonreaders. Some people blame the public schools. University of Minnesota faculty members are among those who are trying to come up with an explanation.

An important distinction to consider, according to Roberta Armstrong, coordinator of research for the University's Admissions and Records office, is "whether students are coming in with lower aptitude or lower skills. If it's skills, we're talking about what happens in our high schools. If it's aptitude, I don't know what we're talking about. Our gene pool? Strontium 90 in the atmosphere?" The decline is much more likely to be in skills, she said.

Carol Pazandak, assistant dean of the University's College of Liberal Arts, agreed. "I just can't believe we're not as competent a population as we used to be," she said.

Armstrong said the change might be in students' attitudes. "In the early 60s when I was in high school," she said, "everybody was gungho on college. I think that's changed somewhat. There maybe is something a little different in the climate. College is no longer considered to be the goal for all students."

Speech professor George Shapiro tied the decline in skills to a movement away from rationality in the 1960s. "For many years everything was the mind, the cognitive." Students today "touch a lot more," he said, and express their feelings more

(MORE)

freely, but "the cognitive skills have to some degree suffered."

"I think that the high schools have let us down," Carla Phillips, assistant professor of history, said. "They're teaching students how to feel, I suppose, but not how to think and learn and write."

Russ Meyer, assistant director of freshman English, said high school teachers are overburdened and can't do the job they need to do as long as classes are so large.

It is ironic, he said, that teachers are a glut on the market at the same time that they are desperately needed. "The blame lies with the educational economic system. If we had the funds to take advantage of the teacher glut, we could do a tremendous job."

In any case, Meyer suggested, university people should not be too quick to point accusing fingers at the high schools. For one thing, he said, some of the college students of the 1960s became the high school teachers of the 1970s. Colleges may be paying the price for their own laxness in the 1960s, he said.

One reason for falling test scores might be that high school students can fill their English requirement in a variety of ways, several faculty members suggested. Students might take a class in science fiction or interpersonal communication instead of a more traditional English course.

"I'm on the school board out in Robbinsdale," said Gary Joselyn of the University's Student Counseling Bureau. "We have fewer kids enrolled in what you would call straight, tough academic courses. Those tests tend to get at the more traditionally academic kind of stuff."

Whether the variety of offerings is a strength or a weakness is a subject of debate. Gerald Brunetti, associate professor of secondary education, would oppose any move to return to more traditional offerings.

"Many, many of the schools have gone to elective programs without becoming less academic or less intense," Brunetti said. "The tests tend to be conservative. If we are saying our schools ought to do a better job of preparing students for the tests, we are saying that the test-makers should determine the curriculum. The schools would be tied to narrow, prescriptive ideas of what they should be teaching."

(MORE)

Brunetti voiced another frequent criticism of the tests---that they are culturally biased in favor of upper-middle-class white language and experience.

Pazandak said she has wondered if the tests now are failing even to measure the culture of the white middle-class majority. If the audio-visual mode of learning has become the common mode for a lot of people, she said, "maybe we're not testing for the skills we teach."

Curricular diversity may mean that students no longer have common experiences that can be assumed by test-makers, Pazandak said. If students are not tested on "a domain of knowledge that they have," she said, "we're not talking about loss of ability but about the loss of opportunity to be tested on something one is familiar with."

Dallis Perry, assistant director of the Student Counseling Bureau, said the tests are still valid as predictors of success in college. "We don't have any evidence that the tests are less related to the demands of college work," he said.

Another kind of explanation for the falling test scores, along with the prediction of an upturn, was offered by Robert Zajonc of the University of Michigan at the annual meeting of the Midwestern Psychological Association last May.

Zajonc offered evidence that intellectual achievement is tied to birth order: first-born children tend to be more intelligent than second-borns, second-borns are smarter than third-borns, and on down the line.

The proportion of first-born children in college populations is lower than it was a few years ago, Zajonc said, and in a few years it will be higher again. If SAT scores have not risen by 1981, he said, he will withdraw his claim.

Edward Swanson of the University of Minnesota Student Counseling Bureau said in a paper in 1973 that "test scores do appear to go in cycles."

Whether because of demographic patterns, a movement "back to the basics" in the schools, or other reasons, a number of people are predicting that the test scores will rise again. "I would be willing to bet that in another six or seven years the scores will be going up again," Russ Meyer said.

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contact JUDY VICK, 373-7515

'U' AUDIENCE TOLD BICENTENNIAL  
'NO CELEBRATION' FOR INDIANS

(FOR IMMEDIATE RELEASE)

The Bicentennial is "no celebration" for American Indians, Phillip Deere, a Creek medicine man and spiritual leader of the American Indian Movement (AIM), told an audience of about 200 persons at the University of Minnesota this week.

"I cannot go along with that celebration until they give me the same freedom they (the white men) were looking for when they landed here," Deere said. "Until that day comes when we are all equal, there will be no freedom and, perhaps, no peace."

Deere pointed out that the last 200 years' history for Native Americans includes President Jackson's drive to remove Indians from the eastern United States, the Wounded Knee massacre and the Sand Creek massacre.

"That is called civilization," he said. "We were a civilized people in our way before the white men came. We had no jail houses or insane asylums. Can you establish a country or a nation any better than that?"

Deere, who is also the firemaker for the Creek nation in Oklahoma, said Indian people cannot be "first-class citizens" as long as their lives are controlled by the Bureau of Indian Affairs. "There is no bureau for white people, yellow people or black people," he said.

"When I talk about being free, I don't mean the freedom to go in bars or stay in fancy hotels," Deere said. "I mean the freedom to raise my children in the Indian way---the freedom to practice my religion.

"We do not have freedom of speech," he said. "The Sioux people who are now in Washington are not allowed to talk to President Ford---this is not freedom of speech." (He was referring to a delegation of Oglala people who have requested a meeting with the President. At this time their request has not been met.)

(MORE)

"The press has been unfair to us," Deere said. "At Wounded Knee (in 1973), they took a picture of a young Indian boy with a gun and planted seeds in the hearts of American people. Now when you hear about AIM, you think about a boy with a gun or a building being taken over.

"They say AIM is violent. If an animal is wounded and protects himself---is that violence?

"AIM has restored pride to Indian people," he said. "Today voices of Indians are heard throughout the country."

Deere also criticized the United States for the energy crisis, pollution and dependence on other nations.

"We have gotten so far away from the original instructions of life, we are afraid to drink the water," he said. "After 200 years, we are not self-sufficient, we are dependent on others to fill our stomachs---look at the shelves in any grocery store.

"The Indian way of life has been tested over thousands of years---and I see no energy crisis, no pollution," he said. "Only Indian people are concerned about the unborn."

Deere's talk was sponsored by the American Indian Student Association.

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JANUARY 16, 1976

NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

UNIVERSITY GRADE STUDY URGES  
EXAMINATION OF GRADING PURPOSE

(FOR IMMEDIATE RELEASE)

A massive study of grades at the University of Minnesota, Twin Cities campus, has called for an immediate examination of grading standards.

The report which compared winter-quarter grades for undergraduate and graduate courses from 1955 to 1974, was prepared by Gary Engstrand, graduate student and administrative assistant to vice president Walter Bruning.

In his report, Engstrand noted that for 20 years, the "A" has been given for outstanding achievement, "B" for achievement above that necessary to complete course requirements, "C" for work meeting course requirements and "D" for work that earns credit and is satisfactory to instructor.

The report shows that during the past 20 years, the allocation of A's and B's as a percentage of letter grades has increased while the allocation of C's and D's has decreased at the same rate. The percentage of A's and B's awarded in General College increased from 29 per cent in 1955 to 60 per cent in 1974. Other schools registering between 60 to 70 per cent of grades as A's and B's were Business Administration, the Institute of Technology, Biological Sciences and Pharmacy. The highest percentage was in the College of Education with 89 per cent.

The "average" and "below average" grades accounted for 19 per cent of the grades in the College of Education in 1955 and 60 per cent of the grades in General College. By 1974, the percentages were down to seven per cent in the College of Education and 24 per cent in General College.

Engstrand said that if the standards are an accurate measurement, then more students are indeed doing work that qualifies as "outstanding achievement." But, he added, it may mean faculty members are ignoring the standards.

(MORE)

At a time when grade "inflation" at the nation's colleges and universities is coming under increased criticism, the whole issue of grading has become "incredibly tangled," Engstrand said.

Even the meaning of evaluation can be debated, he said. It may be used as a means to separate the competent from the incompetent, or to indicate mastery of a subject.

Based on his study, Engstrand said he does not think grades are now being assigned objectively or equitably. According to the report, the evaluation of student academic performance is currently in a state of conceptual and actual disarray. "Whatever the standards were supposed to be doing in the past is not being done now," Engstrand said.

The grade study found that grade averages increased in all schools and colleges between 1969 and 1972, an example of the national phenomena of "grade inflation." But the report indicates that some grades have declined slightly in the last two years. Grades have also leveled off at a number of other colleges and universities. But Engstrand warns that this trend is not by any means clear and not yet statistically significant.

Lower grade averages were reported in 1974 for the School of Dentistry (the lowest since 1968), General College (lowest since 1969) and the College of Liberal Arts (lowest since 1970).

While a shift in letter grades was expected, the study also revealed an increase in the number of students electing to take incompletes, with no grade given until course work is completed.

In the College of Liberal Arts in 1955, incompletes accounted for six per cent of all grades. In 1974 incompletes accounted for 14 per cent. In the Institute of Technology the percentage increased from five to 12 per cent during the same period. In General College, the percentage went from six to 20 per cent.

"It seems as though students have decided they will get a good grade or no grade at all," Engstrand said.

(MORE)

The opportunity to take courses on a pass/no pass (P/N) basis has been ignored by the majority of students, according to the study. Students within some of the schools and colleges chose P/N more often several years ago when it was first offered, but the number has now declined. It had been as high as 18 per cent of all grades but now averages 10 per cent.

Attacks on grade inflation have cited many reasons for the trend toward higher grades and Engstrand said enrollment pressures have often resulted in faculty members giving high grades so that their courses will not be avoided by students out of fear of low grades.

But Engstrand went on to say that the occurrence of grade inflation is not in itself enough information to make categorical statements about academic standards or faculty behavior.

Whatever the reasons, Engstrand said the allocation of grades should be studied and soon. "The sooner attention is paid to the matter, the better off students and faculty will be," he said.

Engstrand said he would like to see the grade study used as a starting point for a task-force study of grading standards. A resolution calling for such a task force has been submitted to University President C. Peter Magrath by the University Senate committee on educational policy. A similar resolution is under consideration by the Twin City Student Assembly.

The study was commissioned by the Twin City Student Assembly, the Senate committee on educational policy and the Assembly committee on academic standing and relations.

-UNS-

(A1-5;B1,12;C1,3,4,14,19,21,22;D12;E4,31)

MTK  
1/4-7

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
TELEPHONE: 373-5193  
JANUARY 16, 1976

UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
Jan. 18-24

- Sun., Jan. 18---Dance-A-Thon for muscular dystrophy. Coffman Union Great Hall.  
9 a.m.-3 p.m. \$1.50.
- Sun., Jan. 18---Art Exhibition: "Ecuador---From the Andes to the Galapagos" by Paul Chesley. Jaques Gallery, Museum of Natural History. 9 a.m.-5 p.m. Mon.-Sat., 9 a.m.-9 p.m. Wed., 2-5 p.m. Sun. Through Feb. 1. Free.
- Sun., Jan. 18---University Gallery: Water Colors of the Norwegian Battalion by Claus Hoie. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through Feb. 6. Free.
- Sun., Jan. 18---University Gallery: Paintings and Drawings by Sara Hauge. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through Jan. 30. Free.
- Sun., Jan. 18---Film: "Gertrude Stein: When This You See, Remember Me." Coffman Union Great Hall. 7:30 p.m. Free.
- Mon., Jan. 19---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., Jan. 19---St. Paul Student Center: Acrylics by Nell Hillsley; Intaglio Prints by Pat Doolittle; Drawings by design grad students; Handcrafted Jewelry by Mary and Jim Norbloom. 8 a.m.-10 p.m. Mon.-Fri. Through Jan. 30. Free.
- Mon., Jan., 19---West Bank Union Gallery: Nine Photographers from Minnesota College of Art and Design; Paintings and Drawings by Larry Weinberg. West Bank aud. 8 a.m.-7 p.m. Mon.-Fri. Through Jan. 23. Free.
- Mon., Jan. 19---Film: "Wagonmaster" directed by John Ford. Museum of Natural History aud. 3:15 p.m. Free.
- Mon., Jan. 19---Lecture: Yvonne Wanrow. 130 Ford Hall. 3:30 p.m. Free.
- Mon., Jan. 19---U Artists Course: City Center Joffrey Ballet. Northrop Aud. 8 p.m. \$8.50, \$7.50, \$6, \$5, \$3.50. Also Jan. 20 and 21.
- Tues., Jan. 20---Concert: Mark Gaddis. St. Paul Student Center Terrace Lounge. Noon. Free.
- Tues., Jan. 20---Lecture: Pierre Delattre, mystical poet. 307 Coffman Union. Noon. Free.
- Tues., Jan. 20---Lecture: Yvonne Wanrow. 320 Coffman Union. Noon. Free.
- Tues., Jan. 20---Demonstration: Pomander ball making. 207 St. Paul Student Center. 7:30 p.m. Free.

(OVER)

## CALENDAR

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- Tues., Jan. 20---Film: "Modern Times." Museum of Natural History aud. 8 p.m. Free.
- Tues., Jan. 20---Lecture: Norman Borlaug. St. Paul Student Center North Star Ballroom. 8 p.m. Free.
- Wed., Jan. 21---Art Films. The Whole Coffeehouse. Noon. Free.
- Wed., Jan. 21---Film: "America: Firebell in the Night" by Alistair Cooke. St. Paul Student Center North Star Ballroom. 12:10 and 7 p.m. Free.
- Wed., Jan. 21---Ethnic Affairs Films: "The Nationalists" and "Culebra." The Whole Coffeehouse. 7:30 p.m. Free.
- Wed., Jan. 21---U Film Society: "Peter Sichel's Complete Guide to Wine." Museum of Natural History aud. 7:30 p.m. \$1.25 members, \$1.50 public. Wine tasting follows film at Newman Center, admission charge at the door.
- Wed., Jan. 21---Film: "Dancing Mothers." St. Paul Student Center North Star Ballroom. 8 p.m. \$1.
- Thurs., Jan. 22---Dance Films. The Whole Coffeehouse. Noon. Free.
- Thurs., Jan. 22---Film: "King of Hearts." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Thurs., Jan. 22---U Film Society: "Milestones" directed by Robert Kramer. Area premier. Museum of Natural History aud. 7:30 p.m. \$1.75 members, \$2 public. Also Jan. 23 and 24.
- Fri., Jan. 23---University Gallery: Color Fields---Fiber by Lynn Klein. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through Feb. 6. Free.
- Fri., Jan. 23---Concert. The Whole Coffeehouse. Noon. Free.
- Fri., Jan. 23---Lecture: Electronic music with improvisation by Elliott Schwartz. Scott Hall aud. 3 p.m. Free.
- Fri., Jan. 23---Film: "Harry and Tonto." Coffman Union Great Hall. 7:30 and 10 p.m. \$1.50 students, \$2 public. Also Jan. 24.

-UNS-

(A1-6;B1)

(FOR RELEASE ANY TIME)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
Minneapolis, Minnesota 55455  
Telephone: (612) 373-5193  
January 19, 1976

DINOSAUR'S DEMISE NO MYSTERY  
TO MINNESOTA RESEARCHER

by Elizabeth Petrangelo  
University News Service Writer

Tyrannosaurus rex, brontosaurus, stegosaurus, triceratops. All of the dinosaurs have been dead for millions of years, but new theories about the reason for their wholesale extinction continue to crop up.

Theorists with credentials of varying relevance have suggested such reasons as disease, racial old age, poison gases, comets and meteorites, climate changes, cosmic radiation, floods, shifts in the Earth's poles, continental drift, sunspots, psychotic suicidal factors, and what Professor G. L. Jepsen of Princeton University, in enumerating unconventional theories, called "paleoweltschmerz."

Perhaps because of the amazing size of dinosaurs, people have felt the need to find an equally amazing reason for their disappearance. According to Robert E. Sloan, University of Minnesota professor of geology and geophysics, "The extinction of dinosaurs is an interesting paleontological problem and has therefore attracted a wide variety of nuts as well as legitimate scientists. If you can think of any way to do in an animal, someone has come up with that as a theory of dinosaur extinction."

Sloan has been studying the extinction of the dinosaur, among other things, for 16 years, and the first thing he'll say is that the process must be put into perspective. "Dinosaurs were fabulous animals, most of them large," he said. "But theirs was not the most spectacular extinction."

"Extinction is the rule rather than the exception," he wrote in 1966, "and we can, if we choose, calculate a sort of half life of a species. A long continued survival of a group of animals is a rare event. Only some .003 percent of the species of vertebrates that lived at the end of the Paleozoic era, some 230 million years ago, have any living descendants at all."

(MORE)

Approximately 20,000 species of vertebrates were alive 230 million years ago, according to Sloan. "Only about two dozen of those have any living descendants now. Those two dozen, however, have nearly 50,000 species descended from them."

To Sloan and his associates, the way to approach the whole matter of extinction was to select a particular area and a relatively short span of time, and investigate carefully. He chose the northern great plains---from Denver to Edmonton, from the Rocky Mountains to the Missouri River---and the last five million years of the Cretaceous period, which ended about 64 million years ago.

His approach was ecological, "to find out what environmental factors were changing during the time interval dinosaurs were becoming progressively more scarce."

He collected fossils of dinosaurs, other animals, and plants and used the samples to make inferences about the changes the area underwent. "We could then rule out a very large number of hypotheses," he said. "A large part of science progresses by proving that notions or ideas are false."

Sloan found that the community the dinosaurs lived in was highly stable for at least 10 million years, with no extinction and very little evolutionary change. But the last million years of that period brought trouble for the dinosaurs. "The climate changed from roughly that of Tampico (Mexico) to roughly that of Peoria," he said. What was once a humid tropical rain forest slowly changed to a coniferous forest with a climate not quite as severe as that of Minnesota today.

"This brought about major changes in plants and a great reduction in the amount of fodder available for herbivorous dinosaurs," Sloan said. As the number of herbivorous dinosaurs dwindled, so did the number of carnivores.

Globally, the temperature underwent a seven-degree-Centigrade reduction at all latitudes---not a severe change, but enough to destroy the dinosaurs' habitat. Presumably, Sloan said, the change affected dinosaurs all over the world, but North America is the only place where the process has been studied closely.

"We found that very few things in these communities became extinct," he said. At that time, there were nine species of dinosaurs, two dozen mammals, and assorted reptiles and birds. "We found, to our great surprise, that the only things that

(MORE)

became extinct were the nine dinosaurs and six or seven possums and two kinds of multituberculars (gnawing mammals). This meant that well over three fourths of the animals living in that community didn't pay any attention to the death of the dinosaur."

The dinosaurs died with a whimper. But there was still enough vegetation to support small herbivores, and the condylarths---primitive hooved mammals---filled the void.

"During the next seven million years, practically any animal could find a way of life that was open and vacant," Sloan said. And so began a tremendously rapid evolutionary diversification---the Tertiary adaptive radiation of mammals---that so fascinated Sloan that the study of it now occupies most of his time.

"This adaptive radiation is just as exciting as the death of dinosaurs," he said. "As dinosaurs became extinct, a very small percentage of placental mammals, essentially hedgehogs, developed rapidly to fill the role left by the dinosaurs. Over a span of nine million years, this very small group of mammals developed into the ancestors of bats, whales, pigs, sea cows, proto-elephants, rodents, primates, and all other 24 existing orders of placental mammals. It was a truly remarkable thing."

The search for such paleontological evidence is exhausting and the dividends are often small. But Sloan's perseverance paid off in an amazing way in 1963. At a place in the Montana badlands called Purgatory Hill, he discovered remnants of the earliest known primate---the earliest direct ancestor of man.

Without knowing exactly what they would find, Sloan and his fellow searchers spent weeks crawling up and down a hill that had a 50-degree slope. The hill was covered with small, sharp stones. "You'd start up the hill, your feet would slip on the stones, and down you'd come on your hands on the sharp stones. That's why we named it Purgatory Hill. When hand-crawling, we netted about one useful tooth for every three man-days of crawling."

After having determined that the area was worthwhile, they carried 10 tons of soil from the hill to a nearby creek and washed it. The massive water-screening program yielded a mixture that was about 90 percent clamshell chips and about 10 percent rock chips and mammal teeth.

(MORE)

This material was run through a process to dissolve the shells, dry the remainder of the mixture, screen it, and run it through a magnetic separator. Studying the final material through a microscope, researchers were able to find about half a dozen teeth per day.

The teeth signaled the discovery of Purgatorius, named after that troublesome hill.

As exciting as such a discovery must have been, Sloan was more thrilled with his discovery of the earliest known ungulate, or hooved mammal, in the same area in 1962.

"This discovery was really spectacular, in terms of what its descendants became," he said. "It is the first direct ancestor of whales, sea cows, elephants, horses, tapirs, rhinos, pigs, deer, sheep, goats and cattle, hyraxes and armadillos---even more important than primates."

For all its seeming spectacularity, the extinction of the dinosaur was extremely slow, far slower than an extinction that is going on now," Sloan said. "More big animals have become extinct in the past 10,000 years than did during the age of the dinosaur," he said. The mastodon, the woolly mammoth, a giant beaver the size of a black bear, North American horses, ground sloths that sometimes grew as large as elephants, armadillos as big as desks---these were just a few of the great beasts to disappear.

According to Sloan, no two species have become extinct for exactly the same reasons, but most extinctions are linked to the rapid expansion of the human population. Man, the hunter, has had his effect, for example.

"Humans are the most efficient hunters of any species---far more effective than Tyrannosaurus rex ever was," Sloan said. "And how much beef does each of us account for in a single year?"

"Other animals have become extinct as a result of second- and third-order environmental impacts of humans: the increased incidence of forest fires, the competition for food sources," he said. "There has been a tremendous loss of large land herbivores and simultaneously, as a result, the carnivores that fed on them."

The animals that became extinct first were those that were either large or rare. Those that were both died off the fastest. Further population expansion of humans will force more species to the wall, Sloan said.

"But somehow, people always think about dinosaurs," he said. "Maybe the thought is if something this big can become extinct, why not me? And indeed, why not? It eventually will happen."

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
JANUARY 19, 1976

MTR  
N47  
JAP

NEWS PEOPLE: For further information  
contact SHARON EMERY, 373-7517

**WINE-TASTING TO FOLLOW FILM**

A wine-tasting will follow the University of Minnesota Film Society's showing of Peter Sichel's "Complete Guide to Wine" Wednesday (Jan. 21). The film will be shown at 7:30 p.m. in the Bell Museum of Natural History auditorium. The wine-tasting will follow in the Newman Center, across the street from the Bell Museum.

Admission to the film is \$1.50, or \$2 to include the wine-tasting. Admission to the wine-tasting only is \$1.

###

**'MILESTONES' TO BE AT 'U'**

The University of Minnesota Film Society will present Robert Kramer's controversial film "Milestones" at 7:30 p.m. Thursday through Saturday, (Jan. 22 through 24) in the Bell Museum of Natural History auditorium.

The film, which is being shown for the first time in the Twin Cities area, received much critical acclaim at the Cannes and New York Film Festivals in 1975.

It chronicles the hopes and ideals of the radical left of the sixties, and the despair and apathy of the seventies in a sprawling fresco of characters and stories making use of professional and non-professional actors.

Kramer, who also directed "Ice," and John Douglas authored the film. Admission is \$2.

###

**BOOK CONSERVATION TO BE TOPIC OF SEMINAR**

Conservation of books and papers will be discussed at the winter seminar of the Associates of the James Ford Bell Library scheduled for 8 p.m. Wednesday, Feb. 4, in Wilson Library at the University of Minnesota.

The guest speaker will be Merrily Smith, a former member of the James Ford Bell Library staff, who has studied book binding with George Baer and at the Newberry Library. Her topic will be "Conservation of Books and Papers: Problems and Solutions." Smith is now living in Duluth and continuing her work in conservation and restoration of rare materials.

Membership in the Associates is open to the public for a \$5 fee. The James Ford Bell Library is a collection of materials on the history of world commerce from the time of Marco Polo to the end of the 18th century.

-UNS-

(A1,2,4,5,12,21,24,25;B1)

UNIVERSITY OF MINNESOTA  
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JANUARY 20, 1976

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NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-5193

U OF M ALUMNI HEAD  
ANNOUNCES RETIREMENT

(FOR RELEASE AFTER 8 P.M., JAN. 20)

The University of Minnesota Alumni Association's executive director, Edwin Haislet, today (Jan. 20) announced his retirement at a meeting of the association board.

He will continue in the position until his successor is named, probably by Sept. 1.

Haislet, 67, was executive director of the association for 27 years.

After receiving notice of Haislet's intention to retire, University President C. Peter Magrath termed him "a veteran both in terms of service and in his loyalty and dedication to the University of Minnesota and our state."

Alumni Association President Wallace Salovich expressed the group's gratitude "for his leadership and dedication.... Today, as a result of Ed Haislet's intimate and energetic involvement, the Minnesota Alumni Association is recognized as one of the most dynamic and capable organizations of its kind."

Haislet was awarded a bachelor of science degree by the University in 1931, which he supplemented with master's and doctor of education degrees from New York University, all of them with emphasis on physical education and recreation.

He joined the University faculty in 1945 as associate professor and director of recreation training. In the summer of 1947 he took a leave to work as director of the Youth Conservation Commission's division of prevention and in November 1948 he assumed his current position with the Alumni Association.

He has devoted his spare time to a wide variety of professional and civic activities, including acting as athletic chairman of the first Minneapolis Aquatennial, a member of the Minneapolis Planning Commission, the United States Olympic Committee and the American Athletic Union Board of Governors.

(MORE)

Haislet is well known for his boxing activities, including organization and management of Golden Gloves Tournaments and membership on numerous amateur and collegiate boxing committees.

He authored a daily boxing column during 1939 and 1940 for the Minneapolis Star, appeared as a panel member of a local boxing television program and authored several books on boxing, one of which is in its 20th printing.

Haislet will continue to work with the Alumni Association as a consultant after the conclusion of his active participation.

A search committee, composed of eight faculty members, alumni and students, will make recommendations by May 1 to Magrath, who will select Haislet's replacement. Chairman of the committee is William F. Hueg, deputy vice president and dean of the Institute of Agriculture, Forestry, and Home Economics.

-UNS-

(A1-5,10,15;B1,12;C1,4,21,22;E4)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
JANUARY 20, 1976

NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

MTR  
N47  
A4 P

'U' THEATER TO PRESENT  
'HAPPY BIRTHDAY, WANDA JUNE'

(FOR IMMEDIATE RELEASE)

"Happy Birthday, Wanda June," a black comedy by Kurt Vonnegut, Jr., will open at 8 p.m. Friday, Jan. 30, in the Stoll thrust theater of Rarig Center at the University of Minnesota.

Opening night will include a "concert and cake" salute to the Bicentennial, with music by a six-piece brass ensemble from the University of Minnesota Bands.

The play will run through Feb. 15 with performances at 8 p.m. Jan. 31, Feb. 6, 7, 13 and 14; at 7 p.m. Feb. 1, and at 3 p.m. Feb. 8 and 15.

The plot concerns a long-missing and assumed-dead husband who returns to his wife on his birthday and finds that the woman who was a carhop when he left now has a master's degree and two suitors. This was Vonnegut's first produced play.

Leading roles are played by Lynn Kremer, a senior from Columbia Heights, as Penelope Ryan, the wife; Gary Lahti, a graduate student from East Greenbush, N.Y., as Harold Ryan, the husband; 13-year-old Richard Gray from Minneapolis, as their son, Paul Ryan, and Lesley Schreiber, a graduate student from Springfield, Ohio, as the title character, Wanda June. Mark S. Weinberg, a graduate student from Wilkes-Barre, Pa., is directing the production.

Tickets are on sale at Rarig Center and Dayton's.

-UNS-

(A1-5,24,25,26;B1;C1,4)

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UNIVERSITY OF MINNESOTA  
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MINNEAPOLIS, MINNESOTA 55455  
JANUARY 21, 1976

NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-5193

#### CORRECTION AND ADDITIONS

Edwin L. Haislet, executive director of the Minnesota Alumni Association, who announced his retirement Jan. 20, officially joined the University of Minnesota faculty in 1933, not 1945, as stated in the release of Jan. 20.

He began his academic career as assistant director of intramurals and a boxing coach in 1933 after receiving his M.A. from New York University. In 1935, he left the campus and entered private business. He was appointed an instructor in the College of Education in 1937 and given a leave to work on his doctor of education degree, which he received in 1938 from New York University.

In the same year, he was appointed director of the recreation training division and assistant professor in the College of Education, a position he held before and after service in the Navy from 1942 to 1945. In 1948, he was appointed full professor and executive secretary of the Alumni Association.

Haislet's official date of termination is Sept. 30.

-UNS-

(A1-5,10,15;B1,12;C1,4,21,22;E4)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
TELEPHONE: 373-5193  
JANUARY 22, 1976

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W47  
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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
Jan. 25-31

- Sun., Jan. 25---Art Exhibition: "Ecuador---From the Andes to the Galapagos" by Paul Chesley. Jaques Gallery, Museum of Natural History. 9 a.m.-5 p.m. Mon.-Sat., 9 a.m.-9 p.m. Wed., 2-5 p.m. Sun. Through Feb. 1. Free.
- Sun., Jan. 25---University Gallery: Paintings and Drawings by Sara Hauge. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through Jan. 30. Free.
- Sun., Jan. 25---University Gallery: Color Fields---Fiber by Lynn Klein; Water Colors of the Norwegian Battalion by Claus Hoie. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through Feb. 6. Free.
- Sun., Jan. 25---Films: "Shadows" and "Emperor Jones." Great Hall, Coffman Union. 6:30 p.m. Free.
- Sun., Jan. 25---The Whole Coffeehouse: Open stage. Doors open 8:30 p.m. Free.
- Mon., Jan. 26---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., Jan. 26---St. Paul Student Center: Acrylics by Nell Hillsley; Intaglio Prints by Pat Doolittle; Drawings by design grad students; Handcrafted Jewelry by Mary and Jim Norbloom. 8 a.m.-10 p.m. Mon.-Fri. Through Jan. 30. Free.
- Mon., Jan. 26---West Bank Union Gallery: Works by David Copson; Photography by Jila Nikpay. West Bank aud. 8 a.m.-7 p.m. Mon.-Fri. Through Feb. 13. Free.
- Mon., Jan. 26---International Showcase. Gopher Court, Coffman Union. Noon. Free.
- Mon., Jan. 26---Discussion: Angola by Gerald Bender, Tony Thomas and Allen Isaacman. Great Hall, Coffman Union. 12:15 p.m. Free.
- Mon., Jan. 26---Film: "She Wore A Yellow Ribbon" directed by John Ford. Museum of Natural History aud. 3:15 p.m. Free.
- Tues., Jan. 27---Lecture: "Panel of Children Discussing America." 307 Coffman Union. Noon. Free.
- Tues., Jan. 27---Candlelight Concert: "Viennese Violins." St. Paul Student Center North Star Ballroom. Dinner 6:30 p.m., concert 8 p.m. Tickets sold in advance only, \$7.50.
- Tues., Jan. 27---Demonstration: Cornhusk Doll Making. 202 St. Paul Student Center. 7:30 p.m. \$3.50.
- Tues., Jan. 27---Film: "Citizen Kane." Museum of Natural History aud. 8 p.m. \$1.
- Wed., Jan. 28---Art Films: "Marc Chagall" and "Josef Albers: Homage to the Square." The Whole Coffeehouse. Noon. Free.

(OVER)

## CALENDAR

-2-

- Wed., Jan. 28---Film: "America: Domesticating A Wilderness" by Alistair Cooke. St. Paul Student Center North Star Ballroom. 12:10 and 7 p.m. Free.
- Wed., Jan. 28---Lecture: "Robert Moxick and the Philosophy of the Minimal State" by Samuel Krislov. 10 Blegen Hall. 3:15 p.m. Free.
- Wed., Jan. 28---U Film Society. Soviet Cinema Today: "Pirosmani," 7:30 p.m. and "Beware Automobile," 9:15 p.m. Museum of Natural History aud. \$1.75 members, \$2 public.
- Wed., Jan. 28---Film: "Grapes of Wrath." St. Paul Student Center North Star Ballroom. 8 p.m. \$1.
- Thurs., Jan. 29---Dance Films: "Dance: Robert Joffrey Ballet" and "Dancer's World---Graham." The Whole Coffeehouse. Noon. Free.
- Thurs., Jan. 29---Lecture: Wilderness Consciousness by Jim Klobuchar. Mississippi Room, Coffman Union. 12:15 p.m. Free.
- Thurs., Jan. 29---Film: "The Mouse That Roared." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Thurs., Jan. 29---Lecture: "The Influence of Walter Gropius on Architecture and Architectural Education" by G. Holmes Perkins. Architecture Court. 8 p.m. Free.
- Fri., Jan. 30---Concert: Tim Gadban. The Whole Coffeehouse. Noon. Free.
- Fri., Jan. 30---Jazz Concert: Buddy Bastien Jazz Workshop. St. Paul Student Center North Star Ballroom. Noon. Free.
- Fri., Jan. 30---Film: "Brewster McCloud." Great Hall, Coffman Union. 7:30 and 10 p.m. \$1.50 students, \$2 public. Also Jan. 31.
- Fri., Jan. 30---Film: "Butch Cassidy and the Sundance Kid." St. Paul Student Center North Star Ballroom. 7:30 and 9:30 p.m. \$1.25. Also Jan. 31, 8 p.m.
- Fri., Jan. 30---U Film Society. Soviet Cinema Today: "A Bird That Sings," 7:30 p.m. and "Red Snowball Tree," 9:30 p.m. Museum of Natural History aud. \$1.75 members, \$2 public.
- Fri., Jan. 30---University Theater: "Happy Birthday, Wanda June" by Kurt Vonnegut, Jr., directed by Mark S. Weinberg. Stoll theater, Rarig Center. 8 p.m. \$3.50 nonsutdents, \$2.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's. Also Jan. 31.
- Sat., Jan. 31---U Film Society. Soviet Cinema Today: "Tenderness," 7:30 p.m. and "Odd People," 9 p.m. Museum of Natural History aud. \$1.75 members, \$2 public.
- Sat., Jan. 31---U Artists Course: Jose Limon Dance Company. Northrop Aud. 8 p.m. \$6, \$5, \$4, \$3.50, \$2.50.

-UNS-

(A1-6;B1)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
JANUARY 22, 1976

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NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

CHICANO STUDENT ENROLLMENT  
LEADS MINORITY INCREASE AT 'U'

(FOR IMMEDIATE RELEASE)

The Chicano student population made the greatest gain as the number of minority-group students enrolled at the University of Minnesota increased again this year.

In its annual fall-quarter minority-student report, the University's Office of Student Affairs reported 2,783 minority-group students currently enrolled, an increase of 177 students from last year. The percentage of minority students in the total enrollment remained at five per cent with small increases and decreases on different campuses. Total University fall-quarter enrollment was 55,114.

Chicano enrollment increased by 64 students, black student enrollment was up 50, American Indian student enrollment increased by 44, and Asian-American enrollment was up 19. The largest single increase was among male Chicano students, up 43. Black female enrollment increased by the same number.

University Vice President for Student Affairs Frank Wilderson, Jr., attributed the increase among Spanish-surnamed Americans to the University's "vigorous recruiting effort" among prospective Chicano students.

Wilderson noted that last year, when minority enrollment increased by more than 500 from the previous year, there were large increases in black, American Indian and Asian-American student numbers, while Chicano enrollment increased by only 15 students.

The Chicano department of the Martin Luther King program and the Chicano studies department launched a program to recruit more Chicano students and close that gap. "Their efforts are paying off," Wilderson said.

Although there has been no slackening of overall recruiting efforts, Wilderson said, the smaller increase in minority students this fall may be attributed to the problems associated with increases in fees and tuition.

(MORE)

Major increases in the numbers of Chicano students were reported in the health sciences, with 26 now enrolled in Medical School, an increase of 13. Another 12 Chicano students have joined the five Chicanos already in medical technology, mortuary science, nursing, public health, dentistry and pharmacy.

H. Geoffrey Fisher, director of minority programs for the health sciences, attributed the increase in Chicano students to the fact that more Chicanos are now applying to the schools.

"The programs are having better exposure and there is a more coordinated effort among the schools," Fisher said.

Ernest Gray, director of minority programs for the Medical School, reported that the majority of Chicano medical students were from Texas and California.

Chicano enrollment increases were also found in General College, a jump from 47 to 63, and in Graduate School, from 35 to 49.

The largest increase in total minority-student enrollment on the Twin Cities campus was in General College, which gained 95 minority-group students, including 51 American Indian students.

The largest increase in black student enrollment occurred in the College of Liberal Arts, which saw a gain of 26 black students for a total of 287. Other increases in black students' numbers were in Medical School, up 15 for a total of 36, and in General College, up 14 for a total of 320. Smaller gains were reported in the Institute of Technology, home economics, law, education, business administration and the Graduate School.

Most schools and colleges reported a decline in the number of American Indian students enrolled, but there were small gains in the Law School, Medical School, nursing, occupational therapy and the Graduate School.

Asian-American students increased their enrollment in General College, the College of Liberal Arts, agriculture, home economics, nursing, public health, dentistry and the Graduate School.

American Indian enrollment at the University of Minnesota, Duluth, led the increase in Duluth's minority-student enrollment with an additional 17 students. Black enrollment was unchanged, Asian-American enrollment declined by 11 and Chicano enrollment increased by two.

The University of Minnesota, Morris, gained four more black students, two more American Indian students and one more Chicano student.

The University's technical college at Crookston reported an increase of 10 Chicano students and three American Indians, but a decrease of five black students and one Asian-American. American Indian enrollment at the University's technical college at Waseca increased by five and Chicano enrollment increased by two.

Total minority-group enrollment at the Mayo Graduate School of Medicine declined by two.

Most minority-group students continue to be found in the freshman and sophomore classes. Chicano students enrolled in Law School, Medical School, dentistry and veterinary medicine accounted for 15 per cent of Chicano enrollment, the highest percentage of professional-school enrollment of any of the minority groups.

The percentage of blacks enrolled in Graduate School programs remained at 18 per cent. The percentage of black students enrolled as juniors and seniors on the Twin Cities campus increased from 10 per cent to 13 and 11 per cent, the number of Asian-Americans in the junior class increased from 17.5 to 23.9 per cent and the number of Chicano students in the junior class increased from 13 to 15 per cent.

Wilderson said he was pleased to see the increase in the number of minority-group students in the junior and senior classes. "It would disturb me if the increases were just in new admissions," he said.

Information for the minority-enrollment survey was compiled from statistical survey cards included in fall-quarter registration materials and from school records offices.

(MORE)

## FALL-QUARTER MINORITY ENROLLMENT

	Black	American Indian	Asian- American	Spanish- Surnamed	TOTAL
	<u>74/75</u>	<u>74/75</u>	<u>74/75</u>	<u>74/75</u>	<u>74/75</u>
Twin Cities	937/987	383/400	720/757	226/278	2,266/2,422
Duluth	33/33	58/75	119/108	7/9	217/225
Morris	33/37	18/20	6/5	1/2	58/64
Crookston	16/11	14/17	1/0	0/10	31/38
Waseca	0/0	2/7	16/11	0/2	18/20
Mayo	<u>7/8</u>	<u>0/0</u>	<u>2/2</u>	<u>7/4</u>	<u>16/14</u>
TOTAL	1,026/1,076	475/519	864/883	241/305	2,606/2,783

-UNS-

(A1-5,27,28;B1;C1,4;D15;E31)

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MINNEAPOLIS, MINNESOTA 55455  
JANUARY 22, 1976

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NEWS PEOPLE: For further information  
contact JOE KROLL, 373-3685 or  
BILL HUNTZICKER, 373-7512

CONFERENCE TO DISCUSS  
U.S. ROLE IN THE WORLD

(FOR IMMEDIATE RELEASE)

Four University of Minnesota professors will discuss "America's Role in the World" during a one-day conference and discussion program Friday (Jan. 30) at the American Association of University Women (AAUW) Clubhouse in Minneapolis.

The conference will begin with registration at 8:45 a.m. and the first major talk will be "The American Dream Among Nations: What Impact?" at 9:30 a.m. by Norman Jacobs, director of publications for the Foreign Policy Association in New York.

John Kareken, University professor of economics and consultant to the Federal Reserve Bank, will discuss the U.S. in the world economy at 10:45 a.m. and Charles McLaughlin, professor of political science will talk on "Rethinking U.S. Foreign Policy" at 12:45.

Discussion groups will begin at 1:45 p.m. with Gladys Brooks, vice chairman of the board at the University's World Affairs Center; Leonid Hurwicz, Regents' Professor of Economics; and Kinley Brauer, professor of history, as discussion leaders.

Cost of the conference is \$3 or \$3.75 to include lunch if reserved in advance. Participants are invited to bring a bag lunch.

The AAUW Clubhouse is located at 2115 Stevens Ave. in Minneapolis. Advance registration is through Program Coordinator, 131 Nolte Center, University of Minnesota, Minneapolis, Minn. 55455.

-UNS-

(A1-5,15,26;B1,10;C1)

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JANUARY 23, 1976

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NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-5193

U OF M PROFESSOR'S COMMITTEE  
RECOMMENDS LABOR DEPARTMENT CHANGES

(FOR IMMEDIATE RELEASE)

Establishment of a national center for manpower study, greater use of social science methods and improvement of the research and development staff of the U.S. Department of Labor were recommended this week by a National Research Council committee chaired by a University of Minnesota professor.

The proposed center, according to Gordon Swanson, professor of vocational and technical education, would serve the human service-oriented Labor Department and its Office of Manpower Research and Development (OMRD) as an independent intelligence gathering and analysis organization---the way the RAND Corporation currently serves the Defense Department or the National Institute on Mental Health serves the Department of Health, Education and Welfare.

It would have "a mandate for manpower study that extends across departmental boundaries in government, with substantial independence to define and pursue subjects for study, and with a relatively large permanent staff drawn from a wide range of behavioral and social science disciplines," the committee report states.

"Such an institution would add a strong scientific perspective to national policy debate regarding manpower problems in relation to federal responsibilities for economic management, income maintenance, education, health and systems of decentralized social program administration," according to the report.

Among the social science methods which the committee concluded should be used are "experimental techniques in program design;" the "continuous monitoring of demographic, occupational and technological trends" to assess potential future manpower problems; and the strengthening of local labor market analysis, in order to improve local-state-federal research coordination.

(MORE)

Not only does the committee recommend greater reliance on local authorities, but it stresses the increased use of external research and development groups such as advisory committees and other organizations, even less related than the proposed manpower study center, "in order to compensate for existing staff weaknesses and to complement staff strengths as appropriate in the future."

OMRD's staff weakness, a major thrust of the Swanson committee's report, is a result of highly qualified research and development experts leaving government service, Swanson said.

"At a time when a range of new and highly significant demands have arisen for knowledge to strengthen government decisions in manpower," the report states, "the Department of Labor has reduced OMRD's operating budget by nearly 30 per cent.

"OMRD cannot operate at a high level of effectiveness in the future without significant improvement in the overall size and competence of its professional staff."

This recommendation is a cornerstone of any improvement in the performance of OMRD and the Labor Department in this time of unemployment and underemployment, Swanson said.

"Recommendations like ours are kind of pie-in-the-sky unless we have the horses to pull the load," he said.

Perhaps just as significant is the path the report is expected to clear, as the first inquiry of its kind, Swanson explained, "examining another inquiry system (OMRD) within an operating agency (the Labor Department)."

"Since the office's creation in 1961," Swanson said, "there has been \$200 million invested in research and development in about 1200 to 1400 projects and grants, so OMRD decided it would be a good idea to have their program looked at by an outside agency."

The outside agency chosen for the two-year, \$300,000 undertaking, the National Research Council, is affiliated with the National Academy of Sciences. None of the 13 members of the committee, which included corporate executives, other academics, lawyers and labor relations experts, were paid.

(FOR RELEASE ANY TIME)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
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Telephone: (612) 373-5193  
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ANCIENT ANIMAL BONES  
TELL THEIR OWN STORY

by Jeannie Hanson  
University News Service Intern

Professor Robert Sloan digs up and studies pre-historic animal bones. On his desk lie the tip of a deer antler, a dog's skull, an ibex horn, a sheep's jaw and a vial of snail shells---bits and pieces of animals that lived and died near Nichoria, Greece, about 2000 B.C.

"I generally won't look at anything much younger than 50 million years old," said Sloan, a geology professor at the University of Minnesota. But he has made an exception for Nichoria, because the ancient town's history between 2500 B.C. and 900 A.D. is especially interesting.

And because a colleague, William McDonald, University classics professor and director of the Minnesota Messenia Expedition to Nichoria, asked Sloan to help unravel a mystery: Why did the lifestyle of the townspeople of Nichoria seem to change at the end of the Late Helladic period, around 1100 B.C.?

Animal bones can provide an amazing amount of information in the hands of a paleontologist like Sloan.

"We always begin by looking for three things," he said. "First we discover how far the animals have evolved. Then we use the age of the animal bones to date the rock and strata where they are buried. And, last, we assemble information about the ecology in which they lived."

Because Nichoria is a "young" town, which was founded only 4500 years ago, the first two questions were "easy," Sloan said. Animals have not really evolved much since then and the bones of dogs, cows, horses, deer, pigs, donkeys and sheep found in the area show they were very similar to their descendants today. "Dogs were a little smaller then," Sloan said, "but the difference is about like that between two different breeds today."

(MORE)

All of these animal species had been domesticated long before Nichoria was settled in the third millennium B.C., Sloan said. In fact, the dog is the earliest domesticated animal in the world, bred from wolves 10,000 years ago in Northern Europe and Russia and used for help in hunting and as food.

The Nichorians had also benefited from earlier domestication of the cow. "The ancestor of the cow was a wild, hulking animal called the 'aurochs'," Sloan said. "It was as big as the biggest buffalo." Small cows were bred from the aurochs for convenience, thousands of years ago.

In Nichoria, the use of the bones of all these animals for dating rocks was largely unnecessary. There was plenty of pottery, and the age of everything could be better established with pottery than with bone.

So Sloan was able to focus on the main problem at hand---what happened in Nichoria about 1100 B.C.?

Studies of ancient animal bones begin with basic digging, identifying and counting. Sloan discovered pig bones in all historical periods of the town. But large supplies of sheep and goat bones gave way suddenly to cow bones.

The age at which an animal dies can be determined by the teeth and the size of bones. If an animal died to feed Nichorians marks on its bones, caused by butchering and burning, would remain. "Cooking and the use of fire are at least one-half million years old, much earlier than Nichoria," Sloan said.

Another puzzling thing about Nichoria was that wild boars, red deer and roe deer had become quickly extinct locally during this period. Sloan discovered, by examining the bones, that the people of Nichoria had eaten them all.

Sloan's analysis: at the end of the Late Helladic period, Nichorians stopped eating sheep and goats and began to eat much more beef. Before, they had slaughtered only yearlings and old cows, using the others for milk. "Then, instead of dairymen, they became beef ranchers," Sloan said. This all happened at about the same time as the local extinction of deer by the Nichorians.

(MORE)

No written evidence is available on the change in the Nichorians' lifestyle and its implications. But other evidence has been found. Pottery styles changed rapidly at about the same time and fewer houses and graves have been found from this period.

According to Sloan, the Nichoria researchers are now working on these questions: Did a new group of people come to Nichoria? If so, from where? Was there a great reduction in the town's population? Or an increase in territory? If so, why?

What happened to Nichoria in 1100 B.C. is still a puzzle. But with the help of animal bones, pottery and other bits and pieces of evidence they're collecting, the researchers hope to solve it.

-UNS-

(A2,5,7;B1,9;C1,4;E20,24)

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JANUARY 27, 1976

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NEWS PEOPLE: For further information  
contact BOB LEE, 373-5830

U OF M CHEMISTRY PROF.  
GETS CANCER SOCIETY GRANT

(FOR IMMEDIATE RELEASE)

Gary Gray, assistant professor of chemistry at the University of Minnesota, has received a five-year \$127,834 Faculty Research Award from the American Cancer Society to devote his full time to cancer research.

Last year Gray received a three-year \$119,000 grant from the National Cancer Institute to investigate the anti-tumor active components in BCG cell walls.

BCG (bacillus Calmette-Guerin), a non-infectious strain of the tuberculosis bacterium that causes tuberculosis in cattle, is used as a vaccine against TB in man. It somehow stimulates the body's immune system and researchers hope the vaccine will cause cancer patients to fight off cancer as they would a bacterial infection.

Gray's work has already lead to the discovery of a related bacterium (M. phlei) that is just as effective as BCG and more readily obtainable. Non-living vaccines derived from the bacteria are now being used in clinical trials at the M.D. Anderson Hospital and Tumor Institute in Houston, Texas.

"There are advantages to non-living anti-tumor preparations," Gray explained. "For example, the non-living materials are easily preserved without a loss of potency and there is no problem of varying dose effectiveness.

"Living material must be carefully maintained in a laboratory culture, the proliferation rate varies in different organs, and there is a greater hazard of progressive infections in immunosuppressed patients," Gray said.

Gray will continue to work on isolating, characterizing and purifying the anti-tumor-active components in both bacteria.

-UNS-

(A1,2,5,7,8;B1,5;C1;E3,25)

UNIVERSITY OF MINNESOTA  
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JANUARY 27, 1976

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NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

STUDENT-RUN FM RADIO PROPOSAL  
ENDORSED BY UNIVERSITY TASK FORCE

(FOR IMMEDIATE RELEASE)

A plan to have University of Minnesota Twin Cities campus students own and operate a commercial but non-profit FM radio station has been endorsed by a student-faculty task force.

The task-force findings will be submitted to the student concerns committee of the Board of Regents at their February meeting. Also submitted will be the preliminary results of a Student Life Studies survey of student attitudes toward a student-run FM station and willingness to pay a quarterly fee to pay for the station.

The task force report states that if 60 per cent or more of the students surveyed were willing to pay a specified fee, student support should be considered sufficient to justify the fee's imposition.

The task force, chaired by Mike Unger, chairman of the student representatives to the Board of Regents, was appointed by University President C. Peter Magrath last spring. At that time the administration urged further study of the radio plan after opposing a quarterly fee of \$1.81 for the University Telecommunications Corporation to purchase an FM-radio station.

Under the proposal, the University Board of Regents would secure a loan to purchase a station and student fees would then be used to pay back the loan.

In urging the purchase of a station with a Class C license (50,000 to 100,000 watt effective radiated power), the committee report stated that such a station would "go a long way in meeting the unfulfilled needs of the commuter students."

Noting that approximately 85 per cent of the student body lives off campus, the committee report states that it is "extremely desirable that a station supported by all students be capable of reaching all students."

(MORE)

In response to criticism that a student-run FM radio station would duplicate service already available through KUOM, the University's radio station, the task force report stated that it is doubtful that KUOM could modify its programming to successfully attract student listeners while retaining its current audience.

After hearing testimony from broadcasters and advertisers, the committee concluded there would be little concern over the station's relationship to the University and that the impact of the station in the context of the entire radio advertising market would be low.

The study also recommends that WMMR, a carrier-current radio station serving Minneapolis campus dormitories, continue to exist and would still be useful to students. The Telecommunications Corporation is willing to assist WMMR in resolving any serious problems, such as lost advertising revenue, which could result from a student-run FM station.

As a result of an examination of sales revenue and market populations of other student-owned commercial radio stations, the task force felt it was reasonable to project a first-year net income of \$233,366 after commissions. A student station at Duke University reported sales revenue of \$113,812 with a market population of 300,000 and the University of Illinois at Champaign-Urbana reported sales revenue of \$124,254 with a market population of 157,000. The Telecommunications revenue projections are based on a market population of more than one million.

In its report, the committee stated its conviction that the dollar value of an FM station in its projected market is likely to increase, even above the current level. If the station is unsuccessful, it can be sold later to recover the original fee investment.

The task force cited the "extreme value" to students that experience in working on a commercial FM station would have and stated that the economics of competing for advertising dollars would act as a restraint on any potential negative impact that a student radio station might have.

Members of the task force were Leonard Bart, professor, speech-communications; Walter Bruning, vice president for administrative operations; Rick Evans, Twin Cities campus student body president; Robert Jones, director, School of Journalism and Mass Communications; Rich Marsden, former speaker, Twin Cities Student Assembly and Donald Zander, assistant vice president for student affairs.

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JANUARY 27, 1976

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contact RONAELE SAYRE, 373-7516

UNIVERSITY ENROLLMENT  
CONTINUES AT RECORD LEVEL

(FOR IMMEDIATE RELEASE)

Winter-quarter enrollment at the University of Minnesota has reached the record level for winter of 52,321, an increase of 3.8 per cent from one year ago.

Record enrollments were reported for the Twin Cities at 42,626; Waseca, 843; Duluth, 6,059, and Crookston, 862. Morris reported an enrollment of 1,574, up from 1,537 a year ago.

Record college enrollments for winter quarter on the Twin Cities campus were recorded for dental hygiene, medicine, forestry, dentistry, pharmacy, public health, liberal arts and veterinary medicine.

Dave Berg, director of Management Planning and Information Services, said that fall- to winter-quarter attrition rates have returned to the more normal five per cent rate with 2,700 fewer students registered this winter than were registered fall quarter. The attrition rate last year fell to its lowest point ever at 2.3 per cent, with just 1,400 fewer students registered for winter quarter classes.

Attrition rates within individual colleges rose substantially with Graduate School increasing from 2.7 last winter to 10.3 per cent this winter and in General College from 1.1 per cent to 7.4 per cent.

The exact reasons why students stay in school or drop out are difficult to determine, according to Berg, but may be related to the job market.

The total number of women students increased by 1,472 from a year ago and the number of men increased by 423. On the Twin Cities campus, there are about 1,100 more women and a decline of about 50 men students.

(MORE)

WINTER QUARTER ENROLLMENT

	<u>W-76</u>	<u>F-75</u>	<u>W-75</u>
Twin Cities	42,626	45,265	41,575
Crookston	862	930	781
Duluth	6,059	6,210	5,568
Mayo	357	411	374
Morris	1,574	1,593	1,537
Waseca	843	705	591
TOTAL	52,321	55,114	50,426

-UNS-

(A1,2,5;B1;C1,4,21,22;D12)

(FOR RELEASE THROUGH FEBRUARY, 1976)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
Minneapolis, Minnesota 55455  
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January 28, 1976

MTR  
W47  
JAH

COPPER-NICKEL CONTROVERSY IN LULL:  
TIME TO TAKE STOCK

by Jeannie Hanson  
University News Service Intern

As winter temperatures in Minnesota's mining regions and the price of copper worldwide both descend to low levels, the copper-nickel controversy in Minnesota is enjoying a temporary lull.

It is a good time to take stock of Minnesota's copper-nickel resources and consider whether and how they might be mined, according to Steven Chapman, research director for the Minnesota Public Interest Research Group (MPIRG) and Ronald Wiegel, acting director of the University of Minnesota's Mineral Resources Research Center.

Minnesota, it is generally agreed, has vast and valuable copper-nickel resources. The "Duluth Gabbro Complex," running from Duluth north and east through the Superior National Forest and the Boundary Waters Canoe Area, contains both copper and nickel sulphides, more copper than nickel. It covers about 2,500 square miles of surface area and extends up to 3,000 feet deep in places, according to Chapman. The area contains billions of dollars worth of minerals.

Interest in this resource has increased dramatically since the late 1960's when the price of copper began to rise and new mining equipment became available, making the ores more economical to mine. Several mining companies now hold mineral leases and are engaged in various stages of analysis and exploratory drilling in the area.

But several key factors are holding up the mining, some temporary and some not.

Risk of Permanent Damage

The first problem is the location of the resources---in and near the largest national wilderness east of the Rockies. Chapman said, "We ought to investigate the environmental impact of the mining very carefully before we damage the wilderness permanently for a few years worth of the national copper demand and seven years worth of the nickel."

(MORE)

MPIRG has brought to statewide and national attention the pollution and disruption possible from the mining, including water and air pollution from the sulphides in the ore. MPIRG, the state Pollution Control Agency, other agencies, and nearly 30 citizen groups are involved in efforts to halt mining developments until environmental impact statements are completed.

Chapman stresses the copper, nickel and sulphate pollution problems, pointing out that acid and metals can poison fish, animals and people. "Any smelter used in Minnesota should at least meet or better Finland's best smelter---removing 99.7 per cent of the poisonous sulphur dioxide."

Chapman and MPIRG have succeeded in legally forcing the companies to take environmental impact seriously and have alerted the legislature and agencies of state government, but have lost some battles on exploratory mining issues.

And, to Chapman, moving slowly is important. "Mining postponed is mining still possible," he said, "but wilderness, once destroyed, is lost. Our technology for the mining and processing of sulphide ores is not fully developed nor completely safe."

#### Marginal Economics

The second factor delaying the mining is the price of copper. It has fallen dramatically during the last year as part of the current national economic slow-down, Wiegel said. Since copper is used extensively in the construction and appliance industries, its price is closely tied to the national economy.

A December 1975 report issued by the University's Mineral Resources Research Center concludes that at the current price of \$ .65 a pound, mining economics of copper are not that great. Wiegel estimates that if the price should rise to \$ .75 a pound---it was as high as \$ .85 two years ago---mining in the Duluth Gabbro Complex would be profitable with current equipment and regulations.

"These figures apply to open-pit mining," Wiegel said. "If more concentrated ores were found and could be mined by open-pit methods, or if a smelter were located no farther away than Duluth, the mining would be still more viable." Data from this Mineral Resources Research Center report will contribute to the Regional Environmental Impact Statement.

(MORE)

A third factor delaying the mining is the International Nickel Company's (INCO) own economic situation, according to Chapman. "Their assets, sales, and earnings are down, and they are stockpiling nickel," he said. National economic factors as well as new discoveries of nickel in New Caledonia, the East Indies, Russia, Finland, South Africa and Arizona have apparently cut into INCO's hegemony.

The result of these factors is a delay in full exploitation of copper-nickel. But there is no delay in the research necessary for additional information about mining Minnesota's resources.

The Mineral Resources Research Center, whose faculty contract with public agencies and with mining companies, stresses economical mining operations research and research into pollution. Wiegel said, "One of our professors, Iwao Iwasaki, aided by a National Science Foundation grant, has been working on a long-range alternative smelting method to recover sulphur in a cleaner form.

Iwasaki has also been investigating, as an unsponsored project, improved chemical treatment methods for the water used in mining, which can contain heavy metal ions that leach out of the ore tailings, Wiegel said.

-UNS-

(A1-5,7,15,18;B1,7,9;C1,4,19;E2,13,24,26)

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COPPER-NICKEL CONTROVERSY IN LULL:  
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by Jeannie Hanson  
University News Service Intern

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It is a good time to take stock of Minnesota's copper-nickel resources and consider whether and how they might be mined, according to Steven Chapman, research director for the Minnesota Public Interest Research Group (MPIRG) and Ronald Wiegel, acting director of the University of Minnesota's Mineral Resources Research Center.

Minnesota, it is generally agreed, has vast and valuable copper-nickel resources. The "Duluth Gabbro Complex," running from Duluth north and east through the Superior National Forest and the Boundary Waters Canoe Area, contains both copper and nickel sulphides, more copper than nickel. It covers about 2,500 square miles of surface area and extends up to 3,000 feet deep in places, according to Chapman. The area contains billions of dollars worth of minerals.

Interest in this resource has increased dramatically since the late 1960's when the price of copper began to rise and new mining equipment became available, making the ores more economical to mine. Several mining companies now hold mineral leases and are engaged in various stages of analysis and exploratory drilling in the area.

But several key factors are holding up the mining, some temporary and some not.

Risk of Permanent Damage

The first problem is the location of the resources---in and near the largest national wilderness east of the Rockies. Chapman said, "We ought to investigate the environmental impact of the mining very carefully before we damage the wilderness permanently for a few years worth of the national copper demand and seven years worth of the nickel."

(MORE)

MPIRG has brought to statewide and national attention the pollution and disruption possible from the mining, including water and air pollution from the sulphides in the ore. MPIRG, the state Pollution Control Agency, other agencies, and nearly 30 citizen groups are involved in efforts to halt mining developments until environmental impact statements are completed.

Chapman stresses the copper, nickel and sulphate pollution problems, pointing out that acid and metals can poison fish, animals and people. "Any smelter used in Minnesota should at least meet or better Finland's best smelter---removing 99.7 per cent of the poisonous sulphur dioxide."

Chapman and MPIRG have succeeded in legally forcing the companies to take environmental impact seriously and have alerted the legislature and agencies of state government, but have lost some battles on exploratory mining issues.

And, to Chapman, moving slowly is important. "Mining postponed is mining still possible," he said, "but wilderness, once destroyed, is lost. Our technology for the mining and processing of sulphide ores is not fully developed nor completely safe."

#### Marginal Economics

The second factor delaying the mining is the price of copper. It has fallen dramatically during the last year as part of the current national economic slow-down, Wiegel said. Since copper is used extensively in the construction and appliance industries, its price is closely tied to the national economy.

A December 1975 report issued by the University's Mineral Resources Research Center concludes that at the current price of \$ .65 a pound, mining economics of copper are not that great. Wiegel estimates that if the price should rise to \$ .75 a pound---it was as high as \$ .85 two years ago---mining in the Duluth Gabbro Complex would be profitable with current equipment and regulations.

"These figures apply to open-pit mining," Wiegel said. "If more concentrated ores were found and could be mined by open-pit methods, or if a smelter were located no farther away than Duluth, the mining would be still more viable." Data from this Mineral Resources Research Center report will contribute to the Regional Environmental Impact Statement.

(MORE)

A third factor delaying the mining is the International Nickel Company's (INCO) own economic situation, according to Chapman. "Their assets, sales, and earnings are down, and they are stockpiling nickel," he said. National economic factors as well as new discoveries of nickel in New Caledonia, the East Indies, Russia, Finland, South Africa and Arizona have apparently cut into INCO's hegemony.

The result of these factors is a delay in full exploitation of copper-nickel. But there is no delay in the research necessary for additional information about mining Minnesota's resources.

The Mineral Resources Research Center, whose faculty contract with public agencies and with mining companies, stresses economical mining operations research and research into pollution. Wiegel said, "One of our professors, Iwao Iwasaki, aided by a National Science Foundation grant, has been working on a long-range alternative smelting method to recover sulphur in a cleaner form.

Iwasaki has also been investigating, as an unsponsored project, improved chemical treatment methods for the water used in mining, which can contain heavy metal ions that leach out of the ore tailings, Wiegel said.

-UNS-

(A1-5,7,15,18;B1,7,9;C1,4,19;E2,13,24,26)

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NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

SURVEY FINDS U OF M STUDENTS  
STILL APPROVE OF MPIRG FEE

(FOR IMMEDIATE RELEASE)

A survey of University of Minnesota students on the Twin Cities, Duluth and Morris campuses has found that 75 per cent approve of the current fee-collection method for the Minnesota Public Interest Research Group (MPIRG).

The survey, of a random sample of 642 students, was requested last spring by the Board of Regents, and conducted by the University's student life studies department. At that time, the regents agreed that the University would continue to collect the fee for MPIRG until a survey of student opinion on MPIRG and the method of fee collection could be conducted.

The MPIRG fee has been collected from University students under a "negative check-off" system since 1971. Each student pays the \$1 fee along with tuition unless he or she indicates a desire not to pay it.

Once paid, the fee may be refunded. About three-quarters of the full-time students at the University have paid the MPIRG fee each quarter.

Critics of the negative check-off system charged that students were paying the fee without knowing about MPIRG, and that students did not know they could get their money refunded. However, 80 per cent of the 642 students surveyed said they had heard of MPIRG.

After criticism that the fee was not apparent enough on students' fee statements, the regents last spring ordered the MPIRG fee printed in red. In response to a survey question, 88 per cent of students polled said they recalled having seen the MPIRG fee on their fee statements before paying their fees.

The survey found that 90 per cent of the students were aware that the fee was voluntary and that 81 per cent knew the fee could be refunded. Only 64 per cent said they had read or been told where to get a refund and four per cent said they had actually requested and received a refund.

(MORE)

Seventy-five per cent of those polled said they felt the present method of fee collection for MPIRG should be continued and six per cent felt it should be discontinued.

Fifteen per cent felt there should be either a positive check-off system, with students asking to pay the fee, or more information given about MPIRG and the fee.

Chuck Leer, administrative director for MPIRG, said he is pleased with the results of the survey. "I hope the results dispel the notion that students are sheep and are coerced into paying the fee," he said.

Both Leer and staff members who conducted the poll emphasized that the purpose of the survey was to determine student opinion of the MPIRG method of fee collection and not to gauge student support for MPIRG activities.

The report states that the findings are very close to those of a 1971 survey of students, conducted when the fee was first levied. The report concludes that it "seem(s) reasonable to infer that students continue to find the concept of a public interest research group to be an appealing one."

National studies have found a high degree of concern among college students that major American institutions are insensitive to crucial public needs, according to the survey report. This concern does not take the form of personal action or involvement but passive support for such organizations as MPIRG, the report concludes.

The telephone survey of students was done by Koser Surveys Incorporated, a private polling firm. Eighty-six per cent of those contacted were on the Twin Cities campus, 11 per cent were at Duluth and three per cent were at Morris.

Survey items were developed by staff members of the University Poll after a series of consultations with Frank Wilderson, Jr., vice president for student affairs, representatives from MPIRG and the State Agrigrowth Council, selected student leaders and the staff of Koser Surveys.

Results of the survey will be presented to the students concerns committee at the February meeting of the Board of Regents.

(FOR RELEASE THROUGH WINTER, 1976)

Feature story from the  
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MINNESOTA WINTER FOR WILDLIFE:  
HIBERNATE, MIGRATE OR COPE

by Jeannie Hanson  
University News Service Intern

The "Minnesota gopher" escapes winter by hibernating from September to April. Millions of Minnesota robins fly to Texas, Louisiana, Arkansas and Mississippi. The animals and birds who remain are experts at coping with winter.

Harrison Tordoff, director of the Bell Museum of Natural History at the University of Minnesota, is an expert on the winter strategies of Minnesota wildlife, whether they hibernate, migrate or cope.

Hibernation is a winterless life, one chosen by most reptiles, amphibians and insects and some mammals. Across Minnesota millions of animals are asleep now---the jumping mice, frogs, bats, ground squirrels, rattlesnakes, woodchucks, salamanders and mosquito larvae.

The physiology of this "sleep" is startling. According to Tordoff, the animal's pulse slows to a few beats a minute, breathing almost stops, the blood thickens, the internal temperature drops close to freezing, the metabolism slows, and the kidneys and digestive system almost stop functioning. Hibernating animals will "sleep" through almost any disturbance.

"But, if the animal's body temperature drops close to freezing, the hibernator will wake up automatically," Tordoff said. This seldom happens since most animals hibernate below the frost line on land or the ice line under water.

Some animals that do not actually hibernate all winter long do slow down to conserve energy when the outside temperature drops close to 0° F. Tree squirrels, skunks, raccoons and rabbits will slow down for a few days and live off their fat in burrows and nests.

Down The Flyway

At least 80 per cent of Minnesota's regular bird species fly south through the

(MORE)

Mississippi Flyway, according to Tordoff. Sandpipers, warblers, wrens, vireos, thrushes and swallows all make the trip.

"Some ducks and geese can be persuaded to stay when food and open water are provided," Tordoff said, "but they will survive the winter in better health if they are encouraged to migrate by withholding food in fall." Many millions of birds of all kinds improve their health by leaving Minnesota for the winter each year.

There has been more nonsense written about the origin of migration than almost anything else in natural history," he said.

"The reason for the evolution of migration is not hard to understand. Take mobile animals and a seasonally fluctuating food supply and the natural consequence is migration. Long ago, and even today, the birds who moved in the right direction survived," Tordoff said.

Not so easy to understand is how birds know when to migrate and especially how they navigate so accurately.

"Most temperate-zone birds begin migration because of the change in the length of daylight," Tordoff said. Others depend on a shrinking food supply, but this is less reliable and a less common method. Birds in laboratories have been persuaded to migrate after their "days" have been artificially shortened. They hop south at night in their cages, persistently.

#### Which Way To Go?

Bird navigation is a well-developed system, with birds using many methods to get to their destinations, Tordoff said. Individual birds have a tendency to return to the same place because they are familiar with the food supply, shelters and predators there.

A migrating bird's first choice in daytime is to use local and route landmarks, such as the Twin Cities lakes and the Mississippi River. Where landmarks are not available, day migrants get compass directions from the sun and are very responsive to wind directions, Tordoff said.

(MORE)

Night migrants, such as the indigo bunting, are able to navigate by the stars. "The buntings learn the pattern of the stars in a 30° arc around the North Star, as they grow up in the late summer," he said.

"And, as a last resort, some birds can navigate by the earth's magnetic field," he said. They sense the invisible lines of force, a fact so amazing that the experiments documenting it were not accepted until they became very sophisticated. The extent of this method for migration is still not clear.

Although many insects can "see" polarized light and use it in local navigation, there is little evidence yet that birds can. But the birds hardly need another method. They are already experts in escaping the Minnesota Winter.

#### Staying and Coping

Equally expert are the animals and birds who stay---and stay awake. Foxes lie on south slopes in the sun whenever they can, fluff their fur to trap body heat, and hide under evergreens on particularly cold days, Tordoff said. Deer hair is hollow at the base, to trap more air for insulation.

The birds who have chosen Minnesota winter are especially well adapted to take advantage of the available food. Grouse eat tree buds above the snow line, a high cellulose food that cannot be digested by most birds. Woodpeckers, chickadees and nuthatches can find insects in bark even when the ground is covered, and all sleep in holes in trees. Blue jays can eat almost anything, including carrion, and regularly bury acorns and seeds in the snow and in trees, for later retrieval.

But, as honey bees beat their wings furiously to keep warm in their hives, and the golden plover has rejected Minnesota as a wintering ground en route from the Arctic to southern South America, Minnesotans may be asking themselves, "Can several million robins all be wrong?"

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
TELEPHONE: 373-5193  
JANUARY 29, 1976

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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
Feb. 1-7

- Sun., Feb. 1---University Gallery: Color Fields---Fiber by Lynn Klein; Water Colors of the Norwegian Battalion by Claus Høie. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through Feb. 6. Free.
- Sun., Feb. 1---Ascent of Man Film: "Lower Than the Angels," part I. St. Paul Student Center North Star Ballroom. 7 p.m. Free.
- Sun., Feb. 1---University Theater: "Happy Birthday, Wanda June" by Kurt Vonnegut, Jr., directed by Mark S. Weinberg. Stoll theater, Rarig Center. 7 p.m. \$3.50 nonstudents, \$2.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's.
- Sun., Feb. 1---Angles of Vision Films: "Inheritance" and "Migrant." Great Hall, Coffman Union. 7:30 p.m. Free.
- Mon., Feb. 2---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., Feb. 2---St. Paul Student Center: Drawings by Nancy Bagley; Metal Sculpture by Steven LeBert. 8 a.m.-10 p.m. Mon.-Fri. Through Feb. 27. Free.
- Mon., Feb. 2---West Bank Union Gallery: Works by David Copson; Photography by Jila Nikpay. West Bank aud. 8 a.m.-7 p.m. Mon.-Fri. Through Feb. 13. Free.
- Mon., Feb. 2---Ascent of Man Film: "Lower Than the Angels," part I. St. Paul Student Center North Star Ballroom. 12:15 p.m. Free.
- Mon., Feb. 2---Film: "The Rising of the Moon" directed by John Ford. Museum of Natural History aud. 3:15 p.m. Free.
- Mon., Feb. 2---U Film Society. Soviet Cinema Today: "Tenderness," 7 p.m., "The Ferocious One," 8:15 p.m. and "Odd People," 10 p.m. Museum of Natural History aud. \$1.75 members, \$2 public; \$1.50 for one film.
- Tues., Feb. 3---Lecture: "Food Consumption and World Hunger: Developing Priorities" by Robert Touchberry and William Hueg, Jr. St. Paul Student Center North Star Lounge. 12:15 p.m. Free.
- Tues., Feb. 3---Women's History Panel: Minnesota Women's History Project with Gretchen Kreuter, Susan Smith and Neala Yount. 307 Coffman Union. 12:15 p.m. Free.
- Tues., Feb. 3---Candlelight Concert: Minnesota Orchestra String Quartet. St. Paul Student Center North Star Ballroom. Wine and cheese 7:30 p.m., concert 8 p.m. Tickets sold in advance only, \$3.75.
- Tues., Feb. 3---Film: "The Big Sleep." Museum of Natural History aud. 8 p.m. \$1.
- Wed., Feb. 4---Film: "America: Money on the Land" by Alistair Cooke. St. Paul Student Center North Star Ballroom. 12:10 and 7 p.m., Free.

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## CALENDAR

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- Wed., Feb. 4---Art Films: "Cubism" and "Eye of Picasso." Mississippi Room, Coffman Union. 12:15 p.m. Free.
- Wed., Feb. 4---Lecture: "British Music Today" by Sir Lennox Berkeley. Scott Hall aud. 1:30 p.m. Free.
- Wed., Feb. 4---Ethnic Affairs Film: "Reou-Takh." The Whole Coffeehouse. 7:30 p.m. Free.
- Wed., Feb. 4---Film: "Dead End." St. Paul Student Center North Star Ballroom. 8 p.m. \$1.
- Wed., Feb. 4---Recital: David Baldwin, trumpet, and Paul Freed, piano. Scott Hall aud. 8 p.m. Free.
- Thurs., Feb. 5---University Gallery: Star Spangled History, Joseph Boggs Beale. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 7. Free.
- Thurs., Feb. 5---Film: "Images." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Thurs., Feb. 5---U Film Society: "Sweet Movie." Museum of Natural History aud. 7:30 and 9:30 p.m. \$1.75 members, \$2 public.
- Fri., Feb. 6---Concert: Richard Cook. The Whole Coffeehouse. Noon. Free.
- Fri., Feb. 6---Film: "McCabe and Mrs. Miller." Great Hall, Coffman Union. 7:30 and 10 p.m. \$1.50 students, \$2 public.
- Fri., Feb. 6---U Film Society: "Sweet Movie." Museum of Natural History aud. 7:30 and 9:30 p.m. \$1.75 members, \$2 public.
- Fri., Feb. 6---Concert: Concert Band Ensemble. Northrop Aud. 8 p.m. Free.
- Fri., Feb. 6---University Theater: "Happy Birthday, Wanda June" by Kurt Vonnegut, Jr., directed by Mark S. Weinberg. Stoll theater, Rarig Center. 8 p.m. \$3.50 nonstudents, \$2.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's.
- Fri., Feb. 6---The Whole Coffeehouse: Tom Paxton with Tom Lieberman. Doors open 8:30 p.m. \$2.50 in advance at MSA Store, \$3 at the door.
- Sat., Feb. 7---Film: "McCabe and Mrs. Miller." Great Hall, Coffman Union. 7:30 and 10 p.m. \$1.50 students, \$2 public.
- Sat., Feb. 7---U Film Society: "Sweet Movie." Museum of Natural History aud. 7:30 and 9:30 p.m. \$1.75 members, \$2 public.
- Sat., Feb. 7---University Theater: "Happy Birthday, Wanda June" by Kurt Vonnegut, Jr., directed by Mark S. Weinberg. Stoll theater, Rarig Center. 8 p.m. \$3.50 nonstudents, \$2.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's.
- Sat., Feb. 7---The Whole Coffeehouse: Tom Paxton with Tom Lieberman. Doors open 8:30 p.m. \$2.50 in advance at MSA Store, \$3 at the door.

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(FOR RELEASE ANY TIME)

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POLLUTION: THE VOLCANO  
VERSUS THE V8 ENGINE

by Mike Finley  
University of Minnesota Writer

In 1883, the worst single instance of air pollution on record occurred, when 11 square miles of the earth's surface---an area roughly equivalent to downtown St. Paul ---tore free from gravity and went sailing into the air.

Noxious fumes and millions and millions of tons of dust, ash, and white-hot lava entered the atmosphere above the island of Krakatoa in the East Indies.

The air was ruined for a while, as the pollutants lingered. And an interesting phenomenon was noticed by scientists: for several years after the volcano's eruption, the average temperature of the air around the island was several degrees lower than usual. When the air got dirty, the weather got colder.

Volcanic effluents are among the thousands of air pollutants originating not from the smokestack of a refinery or from the tailpipe of a car, but from the worst polluter of them all---nature.

"For instance," said Harold J. Paulus, professor of environmental health at the University of Minnesota, "the greatest source of methane pollution in this country isn't industry at all, but our swamplands. Swamps put out 1.6 billion tons of methane per year, while people create, at best, only 70 million tons."

Paulus, who has been teaching graduate students in the School of Public Health for 18 years, cited other sources of natural air pollution: sulfur springs, pine mists and smoke from spontaneously ignited fires.

"Pine forests exude particulate hydrocarbons that react photochemically with light to produce a haze. The Blue Ridge Mountains in Appalachia are topped by this haze. It looks very beautiful over the trees, but if it were anywhere else, it would look like car exhaust."

(MORE)

Paulus recalled one recent study coming out of Stanford University that claimed that most of the pollution in the earth's atmosphere is naturally caused, and not man-made. But such data, he stressed, shouldn't make us think that our own pollution is therefore insignificant. Quite the contrary, in fact.

"Volcanic eruptions, as rare as they are, usually occur in open, relatively uninhabited places. A village may be wiped out, but no more than that. And most of nature's pollutants are simple, biodegradable, and nonreactive---that is, they don't combine with other chemicals to produce a more dangerous compound.

"Man's pollution, on the other hand, is at its worst where people are the most concentrated, in low-lying areas and valleys. And the pollutants are often far more complex than simple swamp gas. They can be nonbiodegradable, like 2-4D or DDT, and they frequently react in the atmosphere with other chemicals."

The results of man's disregard for the air he breathes are becoming increasingly hard to ignore. In Gary, Ind., where refineries and factories pump tons of effluents into the air every hour of the day, Paulus said, a phenomenon similar to what happened to Krakatoa is occurring: the rainfall in the area is increasing.

Paulus said that from the Krakatoa study one theory emerged. Scientists already knew that a period of worldwide volcanic activity preceded the great glaciation of the Ice Age. Perhaps the relationship was even closer. Perhaps the pollution released by the eruptions actually caused the atmosphere to cool down. In other words, perhaps air pollution caused the Ice Age.

Before you ship goose-down jackets to your relatives in Indiana, remember that industrial air pollution is as worldwide today as volcanic effluents were a million years ago. Los Angeles, the city most often mentioned in discussions of air pollution, is quite typical of what can happen. The car is the villain of the piece, emitting, in concert with other polluters, four gases---carbon monoxide, oxides of nitrogen, ozone, and various olefins (highly reactive and unsaturated hydrocarbons)---that react with the heat of the southern California sun to create a chemical particulate known as PAN, or peroxyacylnitrate.

(MORE)

The problem in Los Angeles is multiplied several times over, according to Paulus, by the fact that the city is locked in by mountains and subject to Pacific winds that sometimes hold the pollution firmly in place. Temperature inversions then occur, and the people of Los Angeles are blanketed by foul-smelling, eye-stinging smog.

Temperature inversions are not unusual. Several occur every month here in Minnesota. They are the result of a slippage in the natural ascent of levels of air in the atmosphere. Normally the air gets cooler, level by level, with increasing altitude. In an inversion, a cold layer slips beneath a warm one and traps the pollutants under it.

Minnesota---a land without a single volcano---is relatively lucky, according to Paulus. For one thing, it is relatively short on heavy industry, has very few steel mills or oil refineries, and isn't in a valley or surrounded by mountains. Besides, it's in one of the windier parts of the country, so whatever pollution is produced whisks right over to Wisconsin.

"But there definitely is a problem in Duluth," Paulus said, "especially since it's located on a bluff, with all the dust and soot in the air from the iron industry. And there have been recent reports in Rochester of high concentrations of carbon monoxide in the downtown area."

The new catalytic converters that are being built onto the mufflers of all new cars, Paulus said, are proving successful in keeping much of the carbon monoxide produced by cars from entering the atmosphere. Unfortunately, a side effect has developed: the converters leak sulfuric acid, which concentrates in the exhaust pipe. The acid has already produced coughing and wheezing on the part of asthmatic car-owners. Thus, people with asthma may be better off with older models, a fact that even Russell Train of the Environmental Protection Agency sadly acknowledges.

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

UNIVERSITY OF MINNESOTA  
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NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

MTR  
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**TRUMPET, PIANO RECITAL AT 'U'**

David Baldwin, trumpet, and Paul Freed, piano, will be presented in a faculty recital at the University of Minnesota Wednesday, Feb. 4.

They will perform at 8 p.m. in Scott Hall auditorium. The free public event is sponsored by the University departments on music and music education.

The program will open with "Legend" by George Enesco and includes "Concerto for Trumpet" by F. Joseph Haydn; "Sonata Prima" and "Sonata Seconda" by Giovanni Buonaventura Viviani; "Intrada (1947)" by Arthur Honegger; "Four Variations on a theme by Domenico Scarlatti (1950)" by Marcel Bitsch, and "Variations on the Carnival of Venice (1922)" by J.B. Arban.

###

**BRITISH COMPOSER TO SPEAK AT 'U'**

Sir Lennox Berkeley, noted British composer, will speak at the University of Minnesota Wednesday, Feb. 4.

"British Music Today" will be the topic of his free public lecture at 1:30 p.m. in Scott Hall auditorium.

Berkeley has composed almost 100 published works and at the age of 70 was named Composer of the Year by the Composers' Guild of Great Britain.

His appearance is sponsored by the University music department.

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ORE COMPANIES APPROACH  
FUTURE WITH LEAD FEET

by Mike Finley  
University of Minnesota Writer

One of the great men in the history of steel, Andrew Carnegie, coined the industry's credo: "Pioneers go broke."

The fact is that mining, far from being an incentive to conduct thorough geological studies of the natural resources of Minnesota, has been an inhibiting factor in the spread of scientific information, according to Matt Walton, director of the Minnesota Geological Survey at the University of Minnesota.

The reason mining company managers have been so reluctant to know the extent of what lay under their feet is closely tied in with the history and politics of Minnesota.

In 1884, Minnesota exported its first ton of raw iron ore. What was special about Minnesota ore was its quality: it was marked by strong concentrations of iron oxide, the residue of prehistoric spells of intense weather that leached the silica from the ore. The oxides thus lay in long, thick pockets forming the great Biwabik iron formation. The northern arm of this formation is called the Mesabi Range, the southern arm the Cuyuna Range.

For years the mining companies exploited these rich deposits. They didn't know if they would run out or not, and frankly, they did not want to know, thanks to the laws regarding taxes on mining assets. Until 1960, mining companies paid tax only on the proven amount of reserves ad valorem, that is, on what they knew was in the ground.

Then came World War II. Thousands of tanks, guns, battleships, and jeeps and billions of bullets later, it became clear that the Mesabi and Cuyuna Ranges did not enjoy an infinite reserve of the rich iron oxides. The major steel companies of the

(MORE)

United States began to look elsewhere---Brazil, Venezuela, Australia and Sierra Leone ---for cheap, plentiful ore.

"If this exodus from Minnesota had continued," Walton said, "Hibbing would be nothing today but a big, red hole in the ground. Industry would have begun to disintegrate. The next hundred years would have been the history of ore scavengers cleaning up where the big companies left off," Walton said.

Instead, he said, something no one then would have believed could happen is happening. "The range is undergoing an incredible period of expansion. It is virtually impossible today to get a motel room for a night anywhere on the range. They are all taken by construction workers."

What happened? A number of things. Perhaps most important was the development of the taconite process. This new process allowed magnetic particles in the hard, lean, unusable iron-bearing quartzite---called taconite---of the Biwabik formation to be extracted and made into pellets, into blast-furnace feed. The process was partly the result of University of Minnesota research, conducted at the Mineral Resources Research Center, and partly the result of mining company research.

"The issue of who should get the credit for developing the process is a thorny one," Walton said. "The University managed to demonstrate experimentally that it could be done years before, but the mining companies were too conservative to consider implementing it."

After all, "pioneers go broke."

A University researcher had a few tons of taconite pellets shipped off to Pittsburgh, where, much to the industry's surprise, the processed ore made a better blast-furnace feed than the original oxides! Iron in Minnesota had a second lease on life.

The other thing that happened, Walton said, involved a political bloodbath of the 1960s that culminated in the passage of the Taconite Amendment by the Minnesota Legislature. The new amendment changed the tax base from the amount of proven reserves in the ground to the tonnage of ore shipped out of the mine. This made investment in new mine development more attractive. It also removed the incentive to

(MORE)

the iron mining companies to restrict exploration to meeting short-term needs. The incentive to encourage geological research was thus bolstered.

In the 1970s, still other factors are acting to make the Minnesota mining industry's future as rosy as rust. With the international monetary recession at its lowest ebb, our rate of exchange in many countries makes foreign investment more expensive than investment at home. Political risks of corporate property being "liberated" also make foreign investment less glamorous.

Historically, Walton charged, mining companies have been reluctant to clean up after themselves. "Our pioneer society placed little value on virgin land, and so one of the habits of the iron industry over the years has been to 'externalize' the costs of cleaning up by simply discharging their wastes into the environment. Air and water were perceived by mining people to be the bottomless sinks for their pollution."

"Now," he said, "as we increasingly perceive the environment as of value to all society, we are beginning to ask harder questions about who is to pay the cost of environmental degradation. But old habits die hard, and in a cost-sensitive industry like large-scale mining, there is resistance to taking on external costs the industry never had to pay before."

Luckily, when companies have been forced to clean up after themselves, they have occasionally been surprised to learn they could make money on the deal. The Japanese get 93 per cent of their sulfur emissions back from copper-nickel smelting and are selling the by-product.

If Minnesota mining companies would try a similar approach here, Walton said, they might be as happily surprised. Sulfuric acid, which would be a major by-product of copper-nickel refining, is an important component in making super-phosphate fertilizer. If the invitation isn't sweet enough already, there happens to be an acute shortage of such fertilizer right now.

-UNS-

(A2,5,15,18;B1,9;C1,4,5,19;D1,2;E24,26)

(FOR IMMEDIATE RELEASE)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
Minneapolis, Minnesota 55455  
Telephone: (612) 373-5193  
February 2, 1976

MTR  
W47  
JAF

PROFS SEE UNCERTAIN FUTURE  
FOR AMERICAN FOREIGN POLICY

by Bill Huntzicker  
University News Service Writer

The future of U.S. foreign policy is uncertain as the nation moves into its Bicentennial year, if we are to believe several University of Minnesota professors from diverse fields.

According to Charles McLaughlin, a political scientist, Americans face many dilemmas in determining the future of their relationships with other nations in the world.

The problem of hunger provides one example. McLaughlin said the United States has the technological capacity to raise enough food to feed the four billion people in the world.

"If the rich Mississippi Valley were subjected to the same intensive cultivation that the Dutch give to their river delta, the produce would feed the present population of the world," he said.

"But there are serious prices to be paid, for such cultivation requires the extensive use of chemical fertilizers and pesticides which, by polluting the streams and the oceans, are likely to destroy our marine food resources and perhaps even to destroy life on the planet," McLaughlin said.

Fishing rights provide another example of a complex issue in which there is no clear-cut U.S. interest, McLaughlin said.

The New England fishing industry has been virtually wiped out by factory ships, he said. If the U.S. suggested a strong multilateral treaty to prevent this abuse of fishing rights, California fishermen might find Latin American controls a severe economic blow, McLaughlin said.

John H. Kareken, an economist who is a consultant to the Federal Reserve Bank, said there is more political than economic justification for foreign aid. But, he added, future aid may be through economic means which would threaten the world

(MORE)

market place and the political process.

The complex use of treaties to change economic relationships may take foreign policy further from the control of the American Congress and people, Kareken said. "Taxpayers will have a harder time than they have had figuring out what is going on if third-world countries are aided not by congressionally approved grants and loans but by tariff preferences and commodity agreements," he said.

The comments by Kareken and McLaughlin were made recently at a one-day conference in Minneapolis sponsored by the University's World Affairs Center and the American Association of University Women (AAUW).

Although the speakers and discussants raised questions about foreign policy, most believed there were specific roles the U.S. could play. Aid to less developed countries must be separated from the issue of possible communist threats, McLaughlin said, if development policies are to be successful.

"Our official attitudes with respect to foreign aid and development have been shown to be closely correlated with perceptions of communist threat. They have not been independently conceived and administered as a positive economic policy intended to reduce the gap between haves and have-nots," he said.

A successful policy requires a long-term commitment to intensified agriculture, development of health services, an analysis of raw materials and the development of entrepreneurial capacity, he said.

McLaughlin said the U.S. could improve its image among the third-world nations by taking the initiative in developing a world food bank, signing the universal declaration of human rights and working with the third world in the United Nations.

Discussion leaders were more skeptical than the speakers about the course of American policy. David W. Noble, professor of intellectual history, said he represented the people who are confused about American foreign policy. There can be no sensible foreign policy until there is a realization that the U.S. and the earth have finite resources and energy, he said. Foreign policy should be made from an ecological perspective.

"Accept nothing without thinking about it," suggested Kinley J. Brauer, professor of diplomatic history. Brauer suggested that people begin by thinking about whether the U.S. should exist as a sovereign nation and, if so, then decide what should be the basis for its policies. Discussion should start with the basic questions.

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 3, 1976

MTR  
1047  
JAP

NEWS PEOPLE: For further information  
contact TOM PATTERSON, 373-8023

'U' MED SCHOOL GRAD  
RECEIVES RESEARCH AWARD

(FOR IMMEDIATE RELEASE)

Dr. Douglas Koehntop, a former University of Minnesota medical resident now serving with the Army Medical Corps in Frankfurt, West Germany, has received the 11th Watson Award for outstanding research accomplishment by a physician in graduate clinical training at the University of Minnesota.

Koehntop is a 1971 graduate of the University of Minnesota Medical School. He completed his post-M.D. training in anesthesiology at the University in 1975.

Koehntop's research has shown that certain drugs which a patient might be taking will interact with Epinephrine in anesthesia and cause abnormal heart rhythms. Epinephrine is given to slow the rate of absorption of the anesthesia. Koehntop recently received the 1975 Residents' Research Award of the American Society of Anesthesiologists for the same project.

The \$500 Watson prize, given 11 times since its inception 14 years ago, is named for Cecil J. Watson, emeritus Regents' Professor of Medicine at the University and senior consultant to the Abbott-Northwestern Hospital teaching unit in internal medicine.

The award announcement was made by Richard C. Woellner, president of the Minneapolis Society of Internal Medicine, and Eivind O. Hoff, executive director and chief executive officer of the Minnesota Medical Foundation, joint sponsors of the award.

-UNS-

(A1,2,5,8;B1,4,5;C1)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 3, 1976

MTR  
W47  
JAH

NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

LIBERAL ARTS ADMISSIONS STANDARDS  
ARE REVISED UPWARDS AT U OF M

(FOR IMMEDIATE RELEASE)

Admission standards for freshmen applying for fall entrance to the College of Liberal Arts (CLA) at the University of Minnesota, Twin Cities, have been changed, effective this month, in an effort to slow enrollment increases which have stretched the college's resources this year.

Carol Pazandak, assistant dean for CLA, said the decision was one the college "simply had to make."

Prior to last fall, admission to CLA was based on the College Aptitude Rating, an average of Minnesota Scholastic Aptitude Test scores and high-school rank. A change in testing procedures forced the University to use a new set of test standards which combined the Preliminary Scholastic Aptitude Test score with high-school rank or the American College Testing Composite score with high-school rank.

CLA admissions officials found that the PSAT scores made more students eligible and CLA was admitting students who were not in the top half of their classes, the traditional CLA standard.

Test scores required for admission last year were a PAR (PSAT score plus school rank) of 125 or an AAR (twice the ACT score plus school rank) of 85. The new requirements call for a PAR of 140 or higher and an AAR of 100 or more.

Pazandak said the new standards are more nearly equivalent to the previous CLA standards. She noted that when the new tests were adopted as substitutes, comparative data were not available and admission thresholds were based on estimates.

"The college is correcting an error. It affirms a long-standing commitment to serve freshmen in the top half of the high-school population, who can succeed in the college and most effectively utilize its resources," Pazandak said.

(MORE)

Letters explaining the new admissions standards will be sent to high school counselors throughout the state and to students who applied before the new standards took effect and would not qualify under the new standards.

Pazandak said about 150 such students have applied to the University. Their applications will be considered for admission, she said, but they will be advised that they face stiff competition and may encounter difficulty in completing a degree from CLA.

Pazandak said students also will be advised to consider application to General College or the Institute of Agriculture, Forestry and Home Economics in the Twin Cities or to the coordinate campuses at Duluth, Morris, Crookston or Waseca.

(The Morris campus has adopted CLA admissions standards in the past but is not changing its standards at this time. The issue is under consideration and any changes would apply beginning fall, 1977.)

Pazandak said CLA also will enforce deadlines for applications, review student academic performance more strictly and conduct serious reviews of applications from marginal transfer students.

Enrollment in CLA went from 16,558 in the fall of 1974 to 17,232 in the fall of 1975. Another 1,100 students were anticipated next fall under the old admission standards. Officials hope the admission policy change will keep enrollment in CLA at around 17,900.

-UNS-

(A1-5,27;B1,12;C1,4,19,21,22;D12 ;E4)

UNIVERSITY OF MINNESOTA  
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FEBRUARY 3, 1976

MTR  
N47  
GA4P

NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

'U' RADIO PROGRAM TO FEATURE  
NATIVE AMERICAN WALK

(FOR IMMEDIATE RELEASE)

The Native American Walk for Survival will be discussed on the Native American Program on KQRS radio at 8 p.m. Sunday, Feb. 15.

The walk will take place in St. Paul Feb. 28, sponsored by the Red School House, a Native American survival school.

Participating in the radio program will be Eddie Benton Banai, director of the school, and members of the student council. Laura Wittstock, associate director of the American Indian Press Association and a consultant for the Red School House, will be the moderator.

The program will also include a performance by the "Three Fires" drum.

The Red School House, at 643 Virginia St. in St. Paul, with an enrollment of 115 students, has a curriculum based on American Indian cultural and spiritual values.

Feb. 28 has been declared Native American Walk for Survival Day in St. Paul by Mayor Lawrence D. Cohen. The walk will begin at 9 a.m. at Midway Stadium, following an inter-faith service. A pow-wow is scheduled for the St. Paul National Guard Armory that evening. Proceeds from the walk will go to the Red School House and American Indian survival education throughout the country.

KQRS is at 1440 on the AM dial and 92.5 on the FM dial. The weekly half-hour program is sponsored by the University of Minnesota American Indian studies department.

-UNS-

(A1,2,3,5,9,28;B1;C20)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 3, 1976

MTR  
N47  
JHP

NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

'U' THEATRE TO PRESENT 'LITTLE FOXES'

(FOR IMMEDIATE RELEASE)

Lillian Hellman's dramatic chronicle of a ruthless and predatory Southern family, "The Little Foxes," will open Thursday, Feb. 12, in Rarig Center at the University of Minnesota.

Charles Nolte, University professor of theater, is directing the production in the arena theater.

Performances will be at 8 p.m. Feb. 12, 13, 14, 19, 20 and 21; at 7 p.m. Feb. 15, and at 3 p.m. Feb. 22. Tickets are on sale at the Rarig Center ticket office and at Dayton's. Admission is \$3.50 for the general public and \$2.50 for students and senior citizens.

The cast includes Tracy James Anderson, a sophomore from Red Wing, Minn. as Marshall; Daniel Buchen, a senior from Viroqua, Wis., as Horace; Becka Dalton, a senior from Jefferson City, Mo., as Regina; Andrea Herschler, a senior from White Bear Lake, as Birdie; Matthew Kwiat, a graduate student from Plainview, N.Y., as Ben; Sally Logan, a senior from Clark, S.D., as Alexandra; David Ring, a senior from New Hope, as Cal; Peter Thoenke, a graduate student from St. Paul, as Oscar; Sharon Walton, a graduate student from Chicago, Ill., as Addie, and Philip Middleton Williams, a graduate student from Perrysburg, Ohio, as Leo.

-UNS-

(A1-5,24,25;B1;C1,4)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 4, 1976

MTR  
W47  
3A4p

NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-7517

SOCIAL WORK SEMINAR:  
HUMAN SEXUALITY BEGINS AT HOME

(FOR IMMEDIATE RELEASE)

Sex: It's on our minds more than any of us would admit, yet it's one topic we seldom share openly with those closest to us---a failure that can cause personal and family problems.

This was the view conveyed by Gerhard Neubeck, University of Minnesota professor of family social science, and Sally Kraska, a graduate teaching assistant, to social workers, faculty and students at the monthly seminar of the University's Center for Youth Development and Research Feb. 3.

The most common victims of the American attitude toward sex are children, Neubeck and Kraska said.

"If parents are not comfortable with the subject," Neubeck observed, "they can't very well discuss it with their children."

But the failure of parents to discuss sex with their children does not mean children aren't learning about sex. From the child's earliest days, the parents convey their feelings about sex through facial expressions and subtle actions as well as through verbal statements.

Children's inquiries about newly discovered functions, body parts and, later, words, are often not answered honestly or at all by parents who themselves are not comfortable with the explanations, Newbeck and Kraska said.

Toilet training in particular teaches children contradictory lessons---that they are "good" to control their bodily functions, but that the bodily functions under control are "bad" enough to be kept behind closed bathroom doors.

While adults don't necessarily connect these body functions with sex, for young children they are all wrapped up in the same mystery. That mystery should be unraveled as early as possible by parents, Neubeck and Kraska said.

(MORE)

SEXUALITY

-2-

Parental attitudes toward nudity are easily recognized by children, who sometimes conceive fantasies about the terrible or wonderful things their parents always keep hidden under their clothes, Kraska pointed out.

Early familiarity with their parents' and their own bodies allows children to become more comfortable and less preoccupied with their sexuality, Neubeck suggested.

But few families practice sexual frankness, Neubeck and Kraska agreed, which is producing a generation "really no better educated about sex than their grandparents were."

-UNS-

(A2,5,13,21;B1;C1)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
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FEBRUARY 4, 1976

MTR  
N47  
JAP

NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-7517

ROSE TOTINO TELLS BUSINESS STUDENTS  
HOW TO TURN A PIZZA INTO A MILLION

(FOR IMMEDIATE RELEASE)

Rose Totino looks like an Italian mother, which she is, but not like chief executive of a multimillion-dollar business, which she also is.

The fact that she does not fit the mold of the successful executive might have proved particularly instructive to the University of Minnesota College of Business Administration students who gathered to hear Mrs. Totino's success story Feb. 3.

Thirteen years ago, she and her husband incorporated the Minnesota frozen pizza firm that now ranks second in the American pizza derby (number one is Jenos's, also a Minnesota company), with 1975 sales of \$39 million.

She was assisted in telling her story by Dwayne Dahl of the Minnesota office of the U.S. Small Business Administration (SBA), which helped the Totinos progress from a small take-out pizza parlor on the edge of Northeast Minneapolis to a business producing 16,000 of the products every day.

The students, many of them members of Phi Delta, the sponsoring business sorority, listened raptly as Mrs. Totino described the early failures of her organization, which the students understood in terms of cash flow and profit-and-loss statements.

"We didn't have the benefit of this kind of formal education," she explained, "so we learned first the need to trust our people, and the rest of the stuff we learned on the job, although sometimes the SBA made us learn it."

The first obstacle the Totinos overcame was the unfamiliarity of the Upper Midwest with pizzas.

"When we first opened our take-out place," Mrs. Totino recalled, "we had a big sign out front that said 'Pizza,' so some guy came in one day and asked for 'Mr. Pizza.'" That was in 1952.

(MORE)

By 1975, Dahl pointed out, "Totino's" was nearly synonymous with pizza, and Totino's had become the keystone of Pillsbury's frozen food division.

While more dramatic than most, Dahl said, the Totino story provides business students an excellent example of the ability of well-run small business to become profitable big business.

The SBA, little known outside business circles, is a major element in laying firm foundations for new or expanding businesses, to the extent of a \$32 million appropriation for Minnesota alone last year, Dahl said.

Unlike many lending institutions, he said, the SBA considers the business managers' experience as well as their financial situation and offers complete management counseling to small firms---a policy that helps make successes like Totino's possible.

-UNS-

(A1,5,15,21;B1,7;C1,4;E13)

(FOR RELEASE ANY TIME)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
Minneapolis, Minnesota 55455  
Telephone: (612) 373-5193  
February 5, 1976

MTR  
N47  
JHP

'U' PRESS PUBLISHES SISTER KENNY STORY

by Judy Vick  
University News Service Writer

Thirty years ago this summer the Minnesota State Fair was cancelled. Parents and children throughout the state lived in fear, avoiding crowds and swimming beaches guarding against "chills," panicking at the slightest indication of a stiff neck--- one of the first symptoms of the dread disease.

Jonas Salk's vaccine was only a dream---to be fulfilled a decade later.

There was one ray of hope that penetrated that horror that hung over Minnesotans in particular, for half a century and reached a peak that hot, post-war summer. Her name was Sister Elizabeth Kenny. The rugged, temperamental, innovative nurse from the Australian bush first found acceptance in Minneapolis for her methods of treating the disabling, disfiguring and often fatal disease of poliomyelitis.

Sister Kenny fought the medical establishment to revolutionize polio treatment and became a pioneer in modern medical rehabilitation of all the disabled.

The University of Minnesota Press has now published her first complete biography ---"Sister Kenny: The Woman Who Challenged the Doctors" (\$16.50)---written by award-winning science writer Victor Cohn of the Washington Post.

The book traces the life of this early feminist from her beginnings in the Australian outback, where she learned nursing without formal schooling, to her war service, in which she earned the title "Sister" (a nursing title in British countries) and received shrapnel wounds in her leg that she carried the rest of her life, to America, where she was honored on Broadway and clamored after only as celebrities such as Elvis Presley and the Beatles have been.

Much of the book is concerned with her innovative treatment methods and her conflicts with doctors.

(MORE)

The book has been hailed by Publishers' Weekly as "absorbing" and a "remarkably well-written biography of a great woman."

Dr. Jonas Salk calls the book "a fascinating story of indomitable courage." Barbara Seaman, a leader in the new feminist health movement, said, "Sister Kenny was a pioneer in woman's battle for independence" and "a model for today's health feminists, who still confront an overwhelmingly male medical establishment."

When Sister Kenny first began working, doctors were treating polio by immobilization: trying to keep stricken limbs straight by locking them into plaster casts or still frames. Kenny used soothing heat and guided motion instead. After losing the battle to change doctors' methods in her own country, she came to America at the age of 59 and found success---establishing her first American institute in Minneapolis.

As a popular idol, she became the subject of the film "Sister Kenny," starring Rosalind Russell, and for 10 years was annually named one of the "Most Admired Women in America." The children and adults she restored to functional lives are legion, although controversy plagued her entire life.

Kenny became one of the rare unlettered persons who is right when scientists are wrong. "In an age of science and technology we must keep listening to such people to keep science honest," Cohn said.

Cohn covered her story during 20 years as a science reporter for the Minneapolis Tribune. Since 1968, he has been at the Washington Post, first as science editor, then as an investigative reporter in health and science. His honors include the Albert Lasker medical journalism award, two Westinghouse prizes of the American Association for the Advancement of Science and, most recently, the first consumer reporting prize of the National Press Club and the first Science-in-Society writing award of the National Association of Science Writers.

-UNS-

(A1,2,3,5,7,8,12,21;B1;C1,4,18)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
TELEPHONE: 373-5193  
FEBRUARY 5, 1976

MTR  
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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
Feb. 8-14

- Sun., Feb. 8---Glass Exhibit: "Earl Previews Art at Automatic." Ground floor, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through Feb. 12. Free.
- Sun., Feb. 8---University Gallery: Star Spangled History by Joseph Boggs Beale. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 7. Free.
- Sun., Feb. 8---Natural History Films: "Angotee" and "Quetico." Museum of Natural History aud. 2:30 p.m. Free.
- Sun., Feb. 8---University Theater: "Happy Birthday, Wanda June" by Kurt Vonnegut, Jr., directed by Mark S. Weinberg. Stoll theater, Rarig Center. 3 p.m. \$3.50 nonstudents, \$2.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's. Also Feb. 13 and 14, 8 p.m.
- Sun., Feb. 8---Angles of Vision Films: "The Next Voice You Hear" and "This Island Earth." Great Hall, Coffman Union. 6:30 p.m. Free.
- Sun., Feb. 8---Ascent of Man Film: "The Harvest of the Season." North Star Ballroom, St. Paul Student Center. 7 p.m. Free. Also Feb. 9, 12:15 p.m.
- Sun., Feb. 8---The Whole Coffeehouse: Open stage. Doors open 8 p.m. Free.
- Mon., Feb. 9---Black Artists Exhibit. Third floor gallery, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through Feb. 28. Free.
- Mon., Feb. 9---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., Feb. 9---St. Paul Student Center: Drawings by Nancy Bagley; Metal Sculpture by Steven LeBert. 8 a.m.-10 p.m. Mon.-Fri. Through Feb. 27. Free.
- Mon., Feb. 9---West Bank Union Gallery: Works by David Copson; Photography by Jila Nikpay. West Bank aud. 8 a.m.-7 p.m. Mon.-Fri. Through Feb. 13. Free.
- Mon., Feb. 9---Film: "Two Rode Together" directed by John Ford. Museum of Natural History aud. 3:15 p.m. Free.
- Tues., Feb. 10---Concert: Carrie Jensen. Terrace Lounge, St. Paul Student Center. Noon. Free.
- Tues., Feb. 10---Lecture-Discussion: "There's No Such Thing as Away," multi-media presentation. Great Hall, Coffman Union. Noon. Free.
- Tues., Feb. 10---Candlelight Concert: Concentus Musicus. North Star Ballroom, St. Paul Student Center. Wine and cheese 7:30 p.m., concert 8 p.m. Tickets sold in advance only, \$3.75.
- Tues., Feb. 10---Film: "Stagecoach." Museum of Natural History aud. 8 p.m. Free.

(OVER)

- Wed., Feb. 11---International Study-Travel Expo. Great Hall, Coffman Union. 10 a.m.-4 p.m. Free.
- Wed., Feb. 11---Film: "America: The Huddled Masses" by Alistair Cooke. North Star Ballroom, St. Paul Student Center. 12:10 and 7 p.m. Free.
- Wed., Feb. 11---Art Films: "Bernie Casey: Black Artist" and "Black Has Always Been Beautiful." The Whole Coffeehouse. 12:15 p.m. Free.
- Wed., Feb. 11---Lecture: "Meaning and Form: Literature and the Other Arts" by Martin Steinmann, Jr. 10 Blegen Hall. 3:15 p.m. Free.
- Wed., Feb. 11---Third World Films: "A Luta Continua" and "You Hide Me." The Whole Coffeehouse. 7:30 p.m. Free.
- Wed., Feb. 11---U Film Society: "WR: Mysteries of the Organism." Museum of Natural History aud. 7:30 and 9:15 p.m. \$1.25 members, \$1.50 public.
- Wed., Feb. 11---Concert: Brass Choir. Scott Hall aud. 8 p.m. Free.
- Wed., Feb. 11---Film: "Guadalcanal Diary." North Star Ballroom, St. Paul Student Center. 8 p.m. \$1.
- Thurs., Feb. 12---Literary Films: "In a Dark Time" and "The Days of Dylan Thomas." The Whole Coffeehouse. Noon. Free.
- Thurs., Feb. 12---Film: "Murder Most Foul." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Thurs., Feb. 12---U Artists Course: Royal Winnipeg Ballet. Northrop Aud. 8 p.m. \$7, \$6, \$5, \$4, \$3. Also Feb. 13.
- Thurs., Feb. 12---University Theater: "The Little Foxes" by Lillian Hellman, directed by Charles Nolte. Arena theater, Rarig Center. 8 p.m. \$3.50 nonstudents, \$2.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's. Also Feb. 13 and 14.
- Fri., Feb. 13---Concert: Steve Alm. The Whole Coffeehouse. Noon. Free.
- Fri., Feb. 13---Jazz Concert: Ray Komischke Sextet. North Star Ballroom, St. Paul Student Center. Noon. Free.
- Fri., Feb. 13---Film: "California Split." Great Hall, Coffman Union. 7:30 and 10 p.m. \$1.50 with U of M ID, \$2 public. Also Feb. 14.
- Fri., Feb. 13---U Film Society: "Aguirre, Wrath of God," 7:30 p.m., and Thomas Mann Yr.," 9:30 p.m. Museum of Natural History aud. \$1.75 members, \$2 public. Also Feb. 14.
- Fri., Feb. 13---The Whole Coffeehouse: Lonnie Knight and Jerry Rau. Doors open 8:30 p.m. \$1.50 in advance at MSA Store, \$2 at the door. Also Feb. 14.
- Sat., Feb. 14---Recital: Martin Long, trumpet. Scott Hall aud. 3 p.m. Free.
- Sat., Feb. 14---Concert: "Waltz 'n Schmaltz." Scott Hall aud. 8 p.m. Free.
- Sat., Feb. 14---U Artists Course: Parade of Quartets. Northrop Aud. 8 p.m. \$6.50, \$5.50, \$4, \$3.50, \$2.50.

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 9, 1976

NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

MTR  
N47  
JAH P

'WALTZ 'N SCHMALTZ'  
FOR VALENTINE'S DAY

(FOR IMMEDIATE RELEASE)

A program of "Waltz 'n Schmaltz," in commemoration of Valentine's Day, will be presented this weekend (Feb. 14 and Feb. 15) at the University of Minnesota and at Walker Art Center.

Sarita Roche, soprano; Clifton Ware, tenor; Bettye Ware, piano, and the 17 vocalists of the Livingston Consort, will perform at 8 p.m. Saturday in Scott Hall auditorium and at 8 p.m. Sunday at Walker Art Center. Both events are open to the public with no admission charge.

The program will open with "If I Could Tell You" by Isabelle Firestone and close with "Indian Love Call" from "Rose Marie" by Rudolf Friml. Included will be songs from "The Student Prince," "Naughty Marietta," "Oklahoma," "South Pacific," "The Firefly," "Maytime," "Annie, Get Your Gun," "Fledermaus," and "The Merry Widow," by such composers as Victor Herbert, Richard Rodgers, Sigmund Romberg, Irving Berlin, Johann Strauss, Franz Lehar and many others. Liebeslieder waltzes by Johannes Brahms will be presented by the Livingston Consort.

Roche has appeared and continues to perform regularly with the Minnesota Orchestra, St. Paul Chamber Orchestra and the Minneapolis and St. Paul Civic Orchestras. Ware, an associate professor of vocal music and coordinator of the applied vocal program in the University's music department, also performs frequently as a soloist with major Twin Cities musical organizations.

-UNS-

(A1-5,21,24,25;B1;C1,4)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 9, 1976

MTK  
WHT  
JHP

NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

'GUYS AND DOLLS'  
TO OPEN AT 'U' THEATRE

(FOR IMMEDIATE RELEASE)

Damon Runyon's musical fable of Broadway, "Guys and Dolls," will open Friday, Feb. 20, at the University of Minnesota.

Robert Moulton, professor of theater, is directing the production which will be presented in the Whiting proscenium theater of Rarig Center through March 7.

Performances are at 8 p.m. Feb. 20, 21, 27 and 28 and March 5 and 6; at 7 p.m. Feb. 22, and at 3 p.m. Feb. 29 and March 7.

Leading roles will be played by Lisa Barck, a graduate student from Kailua, Hawaii, as General Matilda B. Cartwright; Barbara Barnett, a graduate student from Edina, as Miss Adelaide; David A. Ceasarini, a senior from Brookfield, Wis., as Nathan Detroit; Michael Damon, a junior from Mankato, Minn., as Lt. Brannigan; and Norman B. Engstrom, a graduate student from Fremont, Neb., as Arvide Abernathy; Tod Fortner, a graduate student from Fresno, Calif., as Nicely-Nicely Johnson; Terre Grilli, a junior from St. Paul, as Agatha; Robert Hansen, a graduate student from North St. Paul, as Big Jule; Jamie Heck, a graduate student from Middletown, Ohio, as Benny Southstreet; Tom Hegg, a graduate student from Minneapolis, as Sky Masterson; Judy Hungelmann, a senior from Bloomington, as Sarah Brown, and John C. Tsafoyannis, a graduate student from Athens, Greece, as Harry the Horse.

The music and lyrics were written by Frank Loesser and the book by Jo Swerling and Abe Burrows.

The cast also includes 11 dancers, and a 17-member chorus. The 26-piece orchestra is conducted by Stephen Schultz, associate professor of music education at the University of Minnesota.

Tickets, priced at \$4.50 for the general public and \$3.50 for students and senior citizens, are on sale at Rarig Center and Dayton's.

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 9, 1976

NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

MAGRATH TO RETURN  
TO HIS 'U' OFFICE

(FOR IMMEDIATE RELEASE)

University of Minnesota President C. Peter Magrath is expected to return to his office for two to three hours Wednesday (Feb. 11) following a two-month absence because of illness.

Magrath, 42, who is suffering from a mild case of Guillain-Barre syndrome, has been conducting his University administrative duties from his St. Paul home. A special telephone hook-up enables him to join meetings on campus.

On Wednesday, he will return to his Morrill Hall office for a couple of hours and will return again on Friday morning to attend the monthly meeting of the University Board of Regents.

The University president has been "fairly active" at home, where he gets up for about four hours a day, according to his physician, Joseph A. Resch, University neurologist. "He is not going to exceed at the office what he is able to do at home," Resch said.

Resch said Magrath will be checked carefully after several hours a day at the office. "We will be looking for such things as pain, fatigue or weakness," he said.

Magrath has been confined to bed-rest at his home and University Hospitals since Dec. 12. Guillain-Barre syndrome is a toxic/allergic reaction to a virus by the insulation around the nerves.

-UNS-

(A1-5,8;B1,12;C1,4,21,22;E4)

UNIVERSITY OF MINNESOTA  
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FEBRUARY 9, 1976

*MIR*  
*1/11*  
*2/11*

NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

MEMO TO NEWS PEOPLE

The University of Minnesota Board of Regents Thursday (Feb. 12) will discuss the health sciences complex under construction on the Twin Cities campus.

Unit A, the first building of the complex, was opened in 1974. Unit B/C is under construction and the next major building, Unit F, is included in the University's 1976 legislative request.

The presentation to the Regents will be made by Lyle French, vice president for the health sciences, at 9:30 a.m. in the Regents' room, 238 Morrill Hall.

Following the discussion at about 10 a.m., the Regents will tour current pharmacy and nursing facilities which would be replaced by Unit F. They will also visit facilities for which remodeling money has been requested from the legislature.

The Regents' discussion will be in a meeting of the committee of the whole. The other Regents' committees will meet Thursday afternoon.

The legislative building request will be discussed again at the physical plant and investments committee meeting at 1:15 p.m. in 300 Morrill Hall. The faculty and staff affairs committee will meet at 1:15 p.m. in the Regents' room.

The student concerns committee will hear several reports from Frank Wilderson, vice president for student affairs, at 3 p.m. in 300 Morrill Hall. These reports will cover a proposed student-run FM radio station, student access to the University, and the status of a number of student corporations.

Walt Bruning, vice president for administrative operations, will discuss the governor's task force on educational and public radio at 3 p.m. in the Regents' room with the committee on educational policy and long-range planning.

The Regents' committee of the whole will meet again at 8:30 a.m. Friday to discuss a study of admissions procedures for the University's professional schools.

The regular monthly board meeting will follow at 10 a.m. in the Regents' room.

-UNS-

(A1-5;B1;C1)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

UNIVERSITY OF MINNESOTA  
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FEBRUARY 10, 1976

MTR  
RV47  
JAP

(For more details, contact News Service writer whose name is given by each item.)

PIONEER PHOTOS IN 'U' SHOW

(Judy Vick)

Rare specimens by pioneer photographers are included in an exhibition opening Tuesday, Feb. 17, in the University Gallery at the University of Minnesota.

Works from the 1800's by David Octavius Hill, Comte F. Flacheron and Julia Margaret Cameron are included among the 30 original photographs by noted 19th- and 20th-century photographers. Also shown will be turn-of-the-century photos by architectural photographers Frederick H. Evans and Alvin Langdon Coburn and more recent works by Brassai, Cecil Beaton, Tony Ray Jones and Robert Disneau.

"Besides being documents of the early history of photography, many of the photographs are also important early works in this fine art medium," said curator Charles Helsell.

The exhibition is on loan from the University of Kansas Museum of Art in Lawrence. A catalog will be available. The exhibition will continue through March 19. The gallery, on the third floor of Northrop Auditorium, is open free to the public Monday through Friday from 11 a.m. to 4 p.m. and Sunday from 2 to 5 p.m.

###

BELL MUSEUM TO SHOW NATURE FILMS

(Sharon Emery)

A free series of natural history films is being shown Sundays at the Bell Museum of Natural History. All films will be at 2:30 p.m. in the Museum auditorium on the University of Minnesota campus.

The films being shown are: Feb. 15, "Dead Birds"; Feb. 22, "Winged World: Instinct and Intelligence in Birds," and "Grouse Country"; Feb. 29, "African Elephant"; March 7, "The Nuer"; March 14, "Baboon Ecology," "In Search of a Mate," and "The Mayfly: Ecology of an Aquatic Insect"; March 21, "The Social Cat"; March 28, "Secret in the Hive."

-UNS-

(A1,2,4,5,24,25;B1)

Joseph Mestenhauser, associate director of the University's International Student Advisor's Office, said that too many people think foreign students are in the United States only to get an education, and do not realize what foreign students can offer as people with firsthand knowledge of other countries.

So far, the foreign students who have participated feel positive about their experiences in American classrooms. According to Sinan Neftci, a graduate student in computer and control sciences from Turkey, the program is "a good opportunity to express ourselves and refresh our feelings toward home."

Kolade Mosuor, a graduate student and president of the Nigerian Student Association, said he thinks American students gained a lot from the class discussion he participated in and that the discussion increased their consciousness about his country.

Before the program got off the ground, there was concern about whether or not American students would be interested in talking with foreign students in the classroom. The interest was there, according to Diane Beitz and Marian Marshall, both graduate students from England and program coordinators.

Last year, a winter quarter survey on the Twin Cities campus found 7,000 students who indicated a desire for this kind of an international program. The foreign students were also excited about the possibilities. Last spring, 400 of 1,500 foreign students on campus responded positively to the program proposal.

Reactions of faculty members to the program have been mixed. "Some faculty said they want to learn more about how the program works (before they use it)," Marshall said. "Also, course schedules are set up far in advance and it is difficult to re-adjust for such a special presentation."

Some of the criticism has centered on the philosophy that foreign students are here to learn, not to teach, and that many students may not speak English well enough to be understood.

However, Beitz and Marshall screen foreign students wishing to participate and do not feel that those students who are accepted will be that hard to understand.

(MORE)

"Never underestimate the value of listening hard to someone," Beitz said, adding that concentrating on a foreign student's unfamiliar speech patterns can be a valuable lesson on how to listen.

In addition to classroom discussions, foreign students are available through the program to provide information to individual students on various countries for class projects or papers.

A handbook called "Learning Informally With Foreign Students" has been completed by Mestenhauser and, when published, will be available at schools throughout the country.

"While improving the educational experiences of American undergraduates, we also hope to enrich the lives of foreign students," Mestenhauser said.

And there may be some long-range benefits of such a program.

"We hope," Marshall said, "that the exchange of information and interaction will promote better international understanding."

-UNS-

(A1,2,3,5,27;B1,12;C1,4,21;E1,4,6)

(FOR RELEASE SPRING 1976)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
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Telephone: (612) 373-5193  
February 11, 1976

LABORATORY MONKEYS CAN TEACH  
ABOUT HUMAN DRUG USE, ABUSE

by Jeannie Hanson  
University News Service Intern

A monkey presses a button and receives an injection of a narcotic drug. Another monkey presses the same button ten times and his food supply is reduced. As a result, he learns to limit his drug intake.

Monkeys like these are providing valuable information that can be used to help people with drug problems according to Professor Travis Thompson, research psychologist at the University of Minnesota.

The rhesus monkeys in the laboratory use and abuse drugs very much like people do, Thompson said. Monkeys will inject cocaine for up to 10 days around the clock, without eating or sleeping, then abstain for two to five days, then start injecting again.

"This 'run' corresponds to people with a cocaine problem. They often go 10 to 14 days without sleep or food while injecting the drug, then take a few days off, and start again," he said.

Both monkeys and people will go to a lot of trouble to get a drug. The lab monkeys will press a button up to 100 times or for 10 minutes at a time to get one injection.

Symptoms of drug abuse are also similar for the two species. The monkeys on "speed" (amphetamines) become hyperactive, rock back and forth, chew their fingers, hair, and skin, and become aggressive. "Like people on speed, you can't fool around with a monkey speed freak---he'll bite you," Thompson said.

The main drugs investigated so far at Minnesota have been morphine, cocaine, amphetamines, barbiturates, cannabis and hallucinogens. "Monkeys react very much like people to all of these except the hallucinogens. They don't like to hallucinate," Thompson said.

(MORE)

The lab has never found a monkey who refused morphine, cocaine or amphetamines when offered and some will continue to inject for up to two years. Yet the same monkeys turn down injections of sugar or salt water, indicating that they like the drugs themselves and not just the injecting.

New drugs, just now reaching the street, are being tested on the monkeys too. Phencyclidine ("pcp's") and ketamine, very powerful anesthetics that can cause hallucinations, are becoming popular now, according to Thompson. The monkeys like them too and use them to stay anesthetized for days.

"We are using the monkeys to screen these drugs, to see if they have abuse potential. That way, human drug treatment centers can be ready," Thompson said.

Eventually, researchers would like to pretest medical drugs from drug companies to see if they would have abuse potential if discovered by human drug-users. "After all," Thompson said, "these new street drugs we're testing now were originally developed only for use in small doses in pediatric surgery."

Another purpose of the monkey experiments is to learn why people continue to take drugs once they begin. The drugs act as a reward, according to Thompson. "It should be possible to counteract this in some way."

One method of reducing drug use is to make the monkey or person lose something else if the drug is taken. Monkeys will reduce the number of self-injections of cocaine if food is reduced as drug use increases, for example. Alcoholic people will drink less if employers and spouses withhold some of their paychecks. "The point is not the magnitude of what is lost, but the fact that it is a regular, consistent, and predictable loss tied to the level of drug intake," Thompson said.

Other recommendations from Thompson's monkey studies:

---Add substances to the drug which block the "high" from the drug and drug use will decline.

---Don't return the drug-user to the same environment after he or she is "cured." The same circumstances will probably cause the user to begin again.

(MORE)

---Use small amounts of "punishment" to reduce drug use. Even 10 minutes in an "isolation booth" after each drink will make an alcoholic voluntarily drink less.

---Strengthen alternatives to drugs. Pleasurable social contact, work, exercise, food and recreation are potential substitutes, though drug "highs" are so rewarding to users that they are hard to equal. And monkeys and people who are bored or want to escape may be special candidates for the drug experience.

These methods are helpful in reducing drug use, but, because they do not touch all causes, cannot eliminate it entirely in all people, Thompson said.

-UNS-

(A2,5,7,8,14,16;B1,5,9,10;C1,4,19;D10;E3,10,11,12,27)

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FEBRUARY 11, 1976

NEWS PEOPLE: For further information  
contact BOB LEE, 373-5830

FOUR 'U' MED RESEARCHERS  
GET MARCH OF DIMES GRANTS

(FOR IMMEDIATE RELEASE)

Four University of Minnesota medical researchers have received two-year grants totalling \$161,548 from the National Foundation, March of Dimes.

They are Leo Furcht, assistant professor of laboratory medicine/pathology, \$45,000; Alvin Malkinson, assistant professor of psychiatry, \$42,348; John Repine, assistant professor of internal medicine, \$33,500; and John Sheppard, assistant professor of genetics, \$40,700.

Using an electron microscope and chemicals, Furcht will examine the factors that contribute to the embryonic growth of primitive cells as they mature into specialized tissue. It is thought that disrupting these factors may be responsible for a wide range of birth defects.

Malkinson will explore why certain hormones affect target cells, and why those cells fail to respond in some birth defects. Specifically, he will be studying the receptors on cell membrane surfaces which respond to hormones' chemical messages to determine their involvement in birth defects.

Repine will use a test he and colleagues developed to measure the ability of a type of white blood cell (neutrophil) to destroy bacteria. Many people with birth defects have an increased susceptibility to infection because their neutrophils are unable to kill bacteria effectively.

Sheppard will examine the role of hormone-like substances in the formation of myelin sheath, the "insulation" of nerve fibers. The sheath's faulty formation is known or thought to be a major factor in various birth defects of the nervous system.

-UNS-

(A1,2,5,8;B1,5;C1,4;E3,25)

(FOR RELEASE ANY TIME)

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University of Minnesota  
News Service, S-68 Morrill Hall  
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Telephone: (612) 373-5193  
February 10, 1976

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FOREIGN STUDENTS: AN  
UNTAPPED CLASSROOM RESOURCE

by Ronaele Sayre  
University News Service Writer

"Americans don't have any idea what is happening in other parts of the world."

And Ladejobi Bode, Nigerian graduate student in pharmacy at the University of Minnesota, thinks Americans know the least about Africa. Detailed explanations of social and political changes, especially in third-world areas like Africa, do not reach many Americans.

Other foreign students at the University feel the same way about the limited knowledge their American counterparts have of foreign cultures. And most American students never stray far enough from their home educational institutions to gain any firsthand exposure to foreign peoples and their cultures.

An effort that Bode calls "very unique" is underway now at the University to remedy that situation.

With the help of a \$7,500 grant from the National Association of Foreign Student Advisors, foreign students at the University of Minnesota are now classroom resources. Students from a variety of countries are now "visiting participants" for classes on political science, women's studies, cross-cultural perspectives, world hunger and others.

Under the program, foreign students have been used in a political science course on international bargaining and negotiations to represent their home countries at a mock arms limitation conference. They have also taken part in education courses for teachers of foreign languages.

"The bibliography that the foreign students come up with is like no other bibliography," said Marian Marshall, one of the program's coordinators. According to Marshall, foreign students write to their friends and relatives at home and get the latest available information on subjects they'll be using for classes.

(MORE)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

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FEBRUARY 11, 1976

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(For more details, contact News Service writer whose name is given by each item.)

'U' CHORUS, ORCHESTRA TO PERFORM

(Judy Vick)

Roger Wagner will conduct the University Symphonic Chorus and the University Symphony Orchestra in a concert performance of Beethoven's "Missa Solemnis" Friday, Feb. 20, at 8 p.m. in Northrop Auditorium.

The event is open to the public with no admission charge.

Wagner is director of the Roger Wagner Chorale and a professor at the University of California, Los Angeles. Soloists for the performance are Oksana Bryn, soprano; Janis Hardy, mezzo-soprano; Clifton Ware, tenor, and LeRoy Lehr, bass.

The Symphonic Chorus has 300 voices and there are 79 members in the Symphony Orchestra.

###

REGISTRATION OPEN FOR CHILDREN'S ART CLASSES

(Sharon Emery)

Registration is now open for children's spring-quarter art classes sponsored by the Institute of Child Development and the department of art education at the University of Minnesota.

The classes, for children five through eight years of age, will meet from 10 a.m. to 12:30 p.m. Saturdays beginning March 27 and running through June 5.

Taught by teachers certified in art education, the classes emphasize an exploration of art in many media rather than formal training in art techniques. Children are encouraged to develop a feeling of their own worth as artists.

An exhibit of work done in winter-quarter classes will be shown in the first floor hall of the Institute from 9 a.m. to 4:30 p.m. Monday through Friday, March 8 through 12.

Fee for the 10-week spring course is \$15. For information and registration materials, contact Virginia Eaton, Institute of Child Development, 373-9851.

-UNS-

(A1,2,4,5,21,24,25;B1)

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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
Feb. 15-21

- Sun., Feb. 15---Black Artists Exhibit. Third floor gallery, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through Feb. 28. Free.
- Sun., Feb. 15---University Gallery: Star Spangled History by Joseph Boggs Beale. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 7. Free.
- Sun., Feb. 15---Natural History Film: "Dead Birds." Museum of Natural History aud. 2:30 p.m. Free.
- Sun., Feb. 15---University Theatre: "Happy Birthday, Wanda June" by Kurt Vonnegut, Jr., directed by Mark S. Weinberg. Stoll theater, Rarig Center. 3 p.m. \$3.50 nonstudents, \$2.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's.
- Sun., Feb. 15---University Theatre: "The Little Foxes" by Lillian Hellman, directed by Charles Nolte. Arena theater, Rarig Center. 7 p.m. \$3.50 nonstudents, \$2.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's. Also Feb. 19, 20 and 21, 8 p.m.
- Sun., Feb. 15---Ascent of Man Film: "The Grain in the Stone." North Star Ballroom, St. Paul Student Center. 7 p.m. Free. Also Feb. 17, 12:15 p.m.
- Sun., Feb. 15---Angles of Vision Film: "Bad Day at Black Rock." Great Hall, Coffman Union. 7:30 p.m. Free.
- Tues., Feb. 17---Exhibit: "Furniture Appliance" by Kurt Buetow. Boutique, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through Feb. 28. Free.
- Tues., Feb. 17---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Tues., Feb. 17---St. Paul Student Center: Drawings by Nancy Bagley; Metal Sculpture by Steven LeBert. 8 a.m.-10 p.m. Mon.-Fri. Through Feb. 27. Free.
- Tues., Feb. 17---West Bank Union Gallery: Sculpture and Ceramic show by Studio Arts grad students. West Bank aud. 8 a.m.-7 p.m. Mon.-Fri. Through Feb. 27. Free.
- Tues., Feb. 17---University Gallery: European Master Photographs. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 12. Free.
- Tues., Feb. 17---University Gallery: Pioneer photographers. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 19. Free.
- Tues., Feb. 17---Poetry Symposium: Gwendolyn Brooks. Mississippi Room, Coffman Union. 12:30 p.m. Free.
- Tues., Feb. 17---Debate-Panel Discussion: "Socialism and How it Affects the U.S." by Erwin Marquit and Mulford Q. Sibley. 320 Coffman Union. 3:15 p.m. Free.
- Tues., Feb. 17---Film: "Bonnie and Clyde." Museum of Natural History aud. 8 p.m. Free.

(OVER)

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FEBRUARY 12, 1976

NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

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GA4 P

'U' TO FEATURE DICKINSON  
POETRY, RUSSIAN MUSIC

(FOR IMMEDIATE RELEASE)

"Emily Dickinson in Celebration," a program of dramatic and musical presentations of Dickinson poems, will be presented Monday, Feb. 23, and Monday, March 1, at 8 p.m. in the West Bank Auditorium at the University of Minnesota.

Susan Galbraith and Susan Osborne, both graduate students in fine arts, will perform in a dramatic presentation of her poems.

Dickinson poems, set to music by Aaron Copeland, will be danced by Peter Ludwig and Marilyn Scher and sung by Emily Schmit.

Tickets are \$1 for students and \$2 for non-students. Tickets will be sold at the door and are available in advance at the Minnesota Student Association bookstore.

Senior and graduate students in music at the University will present "An Evening of Mostly Russian Music" on Tuesday, Feb. 24 and Wednesday, Feb. 25, at the Scott Hall Auditorium on the Minneapolis campus.

The program is presented by the Minnesota Performance Consortium. The organization of music students was established to provide students with additional performance opportunities.

The event is free and open to the public.

-UNS-

(A2,4,5,24,25;B1)

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NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

GROUND BREAKING SCHEDULED  
FOR U OF M LAW SCHOOL BUILDING

(FOR IMMEDIATE RELEASE)

Gov. Wendell Anderson and Minnesota State Supreme Court Justice Robert Sheran will be among the participants at the ground-breaking ceremony for the new University of Minnesota Law School building Thursday, Feb. 19.

Participants and guests will gather at 11 a.m. in the gallery of the Auditorium Classroom Building on the West Bank of the Twin Cities campus. The ceremony will be at 11:15 a.m. in the parking lot just west of the Auditorium Classroom Building.

The \$13.8 million Law School was designed by Parker Klein Associates, an architecture and engineering firm in Minneapolis, and the general contractor is Bor-Son Construction Company of Minneapolis. Completion of the building is set for fall, 1977.

Among the university officials who will participate in the ceremony are Carl Auerbach, dean of the Law School and Henry Koffler, vice president for academic affairs. A reception will follow in the gallery.

-UNS-

(A1-5,16;B1;C1)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

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FEBRUARY 17, 1976

NEWS PEOPLE: For further information  
contact SHARON EMERY, 373-5193

MTR  
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'U' FILM SOCIETY TO PREMIERE INDIAN FILM

"Distant Thunder," a 1973 Indian film by Satyajit Ray, will be shown for the first time in this area Thursday (Feb. 19) through Saturday (Feb. 21) in the Bell Museum of Natural History auditorium at the University of Minnesota.

The film, which is just being distributed in the United States, will be shown at 7:30 and 9:30 p.m. each night. It is the story of the effect of World War II and the fall of Singapore on a schoolteacher and his wife living in a remote Bengali village.

Admission is \$2.

###

SPAIN SUBJECT OF 'U' FILM OFFERING

Two films about Spain will be shown by the University Film Society this Wednesday (Feb. 18) and Wednesday, Feb. 25, in the Bell Museum of Natural History auditorium at the University of Minnesota.

"To Die in Madrid," a documentary on the Spanish Civil War, will be shown at 7:30 and 9:30 p.m. Wednesday (Feb. 18).

The second film, "Dreams and Nightmares," is about the return of a Spanish Civil War veteran to contemporary Spain. It will be shown at 7:30 p.m. Wednesday, Feb. 25, and will be followed by a new film from the National Film Board of Canada called "Waiting for Fidel."

At 9:30 p.m. three members of the University's department of Spanish and Portuguese, Professor Antonio Ramos, and instructors Bridget Aldaraca and Edward Baker, will discuss the problems of post-Franco Spain.

Admission will be \$1.50.

-UNS-

(A2,4,24,25;B1)

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FEBRUARY 17, 1976

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NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-7517

EXTENSION CLASSES CANCELLED  
FOR PRECINCT CAUCUS NIGHT

(FOR IMMEDIATE RELEASE)

University of Minnesota extension classes will not be held Tuesday, Feb. 24,  
so that students may attend their political party precinct caucuses.

This cancellation applies to all extension classes on- and off-campus for  
that evening, University officials announced.

-UNS-

(A1-5)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

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NEWS PEOPLE: For further information  
contact SHARON EMERY, 373-5193

**VIOLS RECITAL/WORKSHOP TO BE AT 'U'**

The New England Consort of Viols will perform at 7:30 p.m. Thursday, Feb. 26, in Scott Hall auditorium on the University of Minnesota campus. A workshop will be held immediately following the recital from 8:30 to 10:30 p.m.

Grace Feldman is director of the four-member group. Other members are Elizabeth Aldrich, Adrienne Hartzell and Margaret Panofsky.

The program entitled "Strike the Viol" will open with "Pavane Ferrareze," by Phalese and will include selections by Florentio Maschera, Giovanni Grillo, Michael East, Thomas Morley, William Byrd and Henry Purcell. Michael Praetorius' "Dance Suite" will close the program.

The free public event is sponsored by the University's departments of music and music education.

###

**SAMAROTTO CLARINET RECITAL SET FOR 'U'**

Robert Samarotto will be presented in a recital of "Contemporary Music for Clarinet, Tape and Visuals" at 8:00 p.m. Monday, Feb. 23, in Scott Hall auditorium on the University of Minnesota campus.

Samarotto has performed with the St. Paul Chamber Orchestra and was music director at the Guthrie Theatre in 1971. His performance will include unaccompanied works for clarinet, as well as works which include electronics, tapes and slide projection.

The program will open with "Animus III" by Jacob Druckman. Other selections are by Ingolf Dahl, Mary Magdeline Mageau, Elliott Schwartz and Joel Chadabe. He will be assisted by Ronald Dennis on Dahl's "Duos for Clarinets."

The program is co-sponsored by the University's departments of music and music education and concerts and lectures.

-UNS-

(A2,4,5,24,25;B1)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 17, 1976

MTR  
N47  
JAP

NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

BLACK GOSPEL MUSIC  
CONCERT SET FOR 'U'

(FOR IMMEDIATE RELEASE)

A black gospel-music concert will be presented at the University of Minnesota at 8 p.m. Friday, Feb. 27, as a celebration of Black History Month.

"300 Years of Black Religious Music: The Oral Tradition" will feature 150 singers from the Gospel Workshop of America, Inc., Minnesota chapter, members of the Afro-American studies majors organization at the University, and participants from the Twin Cities community.

The event in the Great Hall of Coffman Union is sponsored by the Coffman Union Program Council and is open to the public. Admission is \$2.50 for the general public and \$2 for students.

The performance will trace the history of black religious music from 1676 to the present and is based on the research of Reginald Buckner, assistant professor of music education and Afro-American studies. Sam Davis, a University student from Minneapolis, is coordinating the program.

African music will open the program and the first half of the evening will be devoted to protest songs, hymns and spirituals which originated before 1900, including such works as "I Love the Lord," "There Is a Balm in Gilead" and "Nobody Knows the Trouble I've Seen."

Twentieth-century gospel music will be highlighted in the second half of the program, which will feature a production of the song, "Precious Lord," with Thelma Buckner, a member of the House of Refuge, as soloist, and dancers Gloria Taylor and Ronnie Holbrook. Other numbers in this portion of the program will include "Just a Closer Walk With Thee," "God Is a Right Now God" and "Oh Happy Day." Coordinators include Davis, Vera Jenkins, Carl Walker and Roberta Davis.

The program will close with a special arrangement of "The Lord's Prayer."

Narrator for the evening will be Kathy Gagnon, a social worker for the St. Paul public schools. Lou Bellamy, a University faculty member, is the stage director.

This event is one of the projects of the Afro-American studies department's Community Outreach Committee.

-UNS-

(A1-5,19,20,24,25,27;B1;C1)

UNIVERSITY OF MINNESOTA  
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FEBRUARY 17, 1976

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NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

J-SCHOOL SETS RESTRICTIONS  
ON UNDERGRADUATE ADMISSIONS

(FOR IMMEDIATE RELEASE)

Restrictions have been set on the number of undergraduates to be admitted to the University of Minnesota School of Journalism and Mass Communication next fall.

The new plan is intended to improve the quality and reduce the quantity of undergraduate journalism majors at the University of Minnesota, according to Professor Walter H. Brovald, central advisor for the school.

Students already enrolled in the program will not be affected.

The expected effect of the plan is to reduce the number of majors by about 18 per cent. There are now about 800 journalism majors enrolled in the school at sophomore, junior and senior levels.

Students will be accepted under quotas established for each sequence. For example, up to 80 students will be accepted annually for the news-editorial sequence; 75 for advertising, and 30 each for broadcast and photocommunication.

Applications from students will be taken after they have completed pre-journalism course and test requirements. They will be evaluated on the basis of course grades, test scores and a statement by the student of his or her academic program plans and professional objectives. Emphasis will be placed on the statement of professional intentions.

"The plan has been designed to keep enrollment in line with resources and faculty strength of the school," Brovald said, explaining that the number of majors has been steadily increasing, while physical facilities, supply and equipment budgets and faculty strength have remained relatively constant in the last few years.

(MORE)

Robert Jones, director of the school and a member of the American Council on Education for Journalism, pointed out that the action to limit enrollment at Minnesota is in line with national trends. "A number of leading schools throughout the country have taken steps to control enrollment and others are considering it," he said.

"The new plan will be reviewed periodically in light of developments in the school and in the College of Liberal Arts as a whole," said Nils Hasselmo, associate dean for CLA.

The University's School of Journalism and Mass Communication was ranked first in the country, with Columbia University, in a recent survey by "Change" magazine.

-UNS-

(A1,2,5;B1;C19,21;E4,6,18)

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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
Feb. 22-28

- Sun., Feb. 22---Black Artists Exhibit. Third floor gallery, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through Feb. 27. Free.
- Sun., Feb. 22---Exhibit: "Furniture Appliance" by Kurt Buetow. Boutique, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through Feb. 27. Free.
- Sun., Feb. 22---University Gallery: Star Spangled History by Joseph Boggs Beale. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 7. Free.
- Sun., Feb. 22---University Gallery: European Master Photographs. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 12. Free.
- Sun., Feb. 22---University Gallery: Pioneer photographers. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 19. Free.
- Sun., Feb. 22---Natural History Films: "Winged World: Instinct and Intelligence in Birds" and "Grouse Country." Museum of Natural History aud. 2:30 p.m. Free.
- Sun., Feb. 22---Concert: Jazz Ensemble and University Symphonic Band. Northrop Aud. 3 p.m. Free.
- Sun., Feb. 22---University Theatre: "The Little Foxes" by Lillian Hellman, directed by Charles Nolte. Arena theater, Rarig Center. 3 p.m. \$3.50 nonstudents, \$2.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's.
- Sun., Feb. 22---Film: "The Best Years of Our Lives." Great Hall, Coffman Union. 6:30 p.m. Free.
- Sun., Feb. 22---Ascent of Man Film: "The Hidden Structure." North Star Ballroom, St. Paul Student Center. 7 p.m. Free. Also Feb. 23, 12:15 p.m.
- Sun., Feb. 22---University Theatre: "Guys and Dolls" by Damon Runyon, directed by Robert Moulton. Whiting theater, Rarig Center. 7 p.m. \$4.50 nonstudents, \$3.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's. Also Feb. 27 and 28, 8 p.m.
- Mon., Feb. 23---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., Feb. 23---St. Paul Student Center: Drawings by Nancy Bagley; Metal Sculpture by Steven LeBert. 8 a.m.-10 p.m. Mon.-Fri. Through Feb. 27. Free.
- Mon., Feb. 23---West Bank Union Gallery: Sculpture and Ceramic show by Studio Arts grad students. West Bank aud. 8 a.m.-7 p.m. Mon.-Fri. Through Feb. 27. Free.
- Mon., Feb. 23---Film: "The Whole Town's Talking" directed by John Ford. Museum of Natural History aud. 3:15 p.m. Free.

(OVER)

- Mon., Feb. 23---Applehead Doll Making. 202 St. Paul Student Center. 7:30 p.m. \$3.
- Mon., Feb. 23---Recital: Robert Samarotto, clarinet. Scott Hall aud. 8 p.m. Free.
- Tues., Feb. 24---Concert: Russian Music by Minnesota Performers Consortium. Scott Hall aud. 8 p.m. Free.
- Wed., Feb. 25---Art Films: "Claes Oldenburg" and "Jackson Pollack." Mississippi Room, Coffman Union. 12:15 p.m. Free.
- Wed., Feb. 25---Lecture: "Food First" by Mrs. Frances Moore Lappe. Great Hall, Coffman Union. 12:15 p.m. Free.
- Wed., Feb. 25---Lecture: "The Problem of Adoption: An Anthropological View" by Robert F. Spencer. 10 Blegen Hall. 3:15 p.m. Free.
- Wed., Feb. 25---Lecture: "Rhetorical Devices in Conversation" by Bruce Fraser. 45 Architecture. 3:30 p.m. Free.
- Wed., Feb. 25---Film: "Soylent Green." 175 West Bank aud. 7:30 p.m. \$1.
- Wed., Feb. 25---Concert: Russian Music by Minnesota Performers Consortium. Scott Hall aud. 8 p.m. Free.
- Wed., Feb. 25---Film: "All The Kings Men." North Star Ballroom, St. Paul Student Center. 8 p.m. \$1.
- Wed., Feb. 25---Lecture: "Minnesota Women" by Gretchen Kreuter. 370 Anderson Hall. 8 p.m. Free.
- Wed., Feb. 25---U Film Society: "Dreams and Nightmares," 7:30 p.m., and "Waiting for Fidel," 8:30 p.m. Museum of Natural History aud. \$1.50 members, \$1.75 public.
- Thurs., Feb. 26---Music Clinic: New York Brass Quintet. Scott Hall aud. 11:15 a.m. Free.
- Thurs., Feb. 26---Film: "Milligan and Melly." The Whole Coffeehouse. Noon. Free.
- Thurs., Feb. 26---Lecture: "Lifeboat Ethics" by Roger Revelle. North Star Ballroom, St. Paul Student Center. 12:15 p.m. Free.
- Thurs., Feb. 26---Lecture: "What is an Illocutionary Act?" by Bruce Fraser. 110 Lind Hall. 12:15 p.m. Free.
- Thurs., Feb. 26---Film: "The Sea Hawk." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Thurs., Feb. 26---Concert: New England Consort of Viols. Scott Hall aud. 7:30 p.m. Free. Workshop from 8:30 to 10:30 p.m.
- Fri., Feb. 27---Concert: Greenwood. The Whole Coffeehouse. Noon. Free.
- Fri., Feb. 27---Jazz Concert: Bob Crea Sextet. North Star Ballroom, St. Paul Student Center. Noon. Free.
- Fri., Feb. 27---Film: "Day for Night." Nicholson aud. 7:30 and 10 p.m. \$1.50 with U of M ID, \$2 public. Also Feb. 28.
- Fri., Feb. 27---U Film Society: "Ludwig, Requiem for a Virgin King." Museum of Natural History aud. 7:30 and 10 p.m. \$1.75 members, \$2 public. Also Feb. 28, 7:30 p.m. only, discussion with director Hans-Jurgen Syberberg follows.
- Fri., Feb. 27---Concert: Black Gospel Music. Great Hall, Coffman Union. 8 p.m. \$2 students, \$2.50 public.
- Fri., Feb. 27---Recital: Lynn Foster, piano. Scott Hall aud. 8 p.m. Free.
- Sat., Feb. 28---Concert: French Music by Minnesota Performers Consortium. Scott Hall aud. 3 p.m. Free.
- Sat., Feb. 28---U Artists Course: Paul Taylor Dance Company. Northrop Aud. 8 p.m. \$6, \$5, \$4, \$3.50, \$2.50.

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

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(For more details, contact News Service writer whose name is given by each item.)

'U' TO SPONSOR WORLD-ENVIRONMENT CONFERENCE (Luther Pickrel, 373-3758 or  
Bill Huntzicker, 373-7512)

Land use, energy and housing will be discussed by authorities on human settlement Wednesday (Feb. 25) at a conference sponsored by the University of Minnesota and the U.S. State Department. The meeting will begin at 9 a.m. at the Radisson South Hotel in suburban Minneapolis.

Speakers will include Harlan Cleveland, former Assistant Secretary of State for U.N. Affairs and former president of the University of Hawaii, and Lloyd Axworthy, member of the Canadian Commission on Habitat. Panels and discussion groups will focus on the issues of land use, housing and energy.

The program is one of five pre-habitat conferences in the U.S. in preparation for "Habitat, the United Nations Conference on Human Settlements," scheduled for May 31 through June 11 in Vancouver, B.C.

The conference is free. A \$7.50 charge will be required for lunch and coffee. Reservations should be made in advance to Habitat, 306 Westbrook Hall, University of Minnesota 55455.

###

WORLD FOOD SUPPLY TOPIC OF 'U' SEMINAR (Ronaele Sayre)

Frances Moore Lappe, author of "Diet for a Small Planet," will be the keynote speaker at a one-day seminar on the world food situation Wednesday (Feb. 25) in Coffman Union at the University of Minnesota.

Lappe will speak at 12:15 p.m. in the Great Hall.

Sessions during the day will cover health foods, overseas land-grant universities and simulation exercises.

There will be a reaction panel to Lappe's speech at 1 p.m. and students from China, Iran, England, Chile and Nigeria will discuss the world view of the food problem at 2:15.

"Soylent Green," a science-fiction movie about the problems of pollution in New York in 72 years, will be shown at 7:30 p.m. in 175 West Bank Auditorium.

The seminar is sponsored by the Minnesota International Student Association in cooperation with other campus organizations.

-UNS-

(A1-5,18;B1)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

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FEBRUARY 19, 1976

BTR  
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JAP

NEWS PEOPLE: For further information  
contact SHARON EMERY, 373-5193

CHILDREN'S AUTHOR TO BE AT 'U'

Author Mary O'Neill will visit the University of Minnesota Friday, Feb. 27 and will be present at a public open house from 2 to 4 p.m. at the Kerlan Collection, a research center for children's books, 109 Walter Library.

An exhibit of her books and manuscripts will be on display.

O'Neill has spent several years in Ghana teaching writing for the Peace Corps and is now serving in Costa Rica. She is best known for her book "Hailstones and Halibut Bones: Adventures in Color." Other works include "Fingers Are Always Bringing Me News," "Big Red Hen" and "The White Palace."

###

GERMAN FILM DIRECTOR TO BE AT 'U' FILM SOCIETY

Film director Hans-Jurgen Syberberg will be at the University of Minnesota Saturday and Sunday, Feb. 28 and 29, to discuss two of his films showing at the University Film Society in the Museum of Natural History auditorium.

"Ludwig, Requiem for a Virgin King," will be shown at 7:30 and 10 p.m. Friday, Feb. 27, and at 7:30 p.m. Saturday, Feb. 28.

"Karl May," a film about a widely read, travel- and adventure-story writer of the late 19th century, will be shown at 7 p.m. Sunday, Feb. 29.

Syberberg will be on hand to discuss the making of the films following the Saturday and Sunday night showings.

Admission will be \$2.

-UNS-

(A2,4,5,21,24,25;B1)

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FEBRUARY 19, 1976

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NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

PROPERTY LOSSES INCREASE  
ON UNIVERSITY CAMPUS

(FOR IMMEDIATE RELEASE)

Many University of Minnesota students on the Twin Cities campus during 1975 learned about another expense of going to college: theft.

In the annual report of the University of Minnesota Police Department, Chief Eugene Wilson reported a 30 per cent increase during 1975 of property crimes with personal property losses on the Twin Cities campus totaling \$138,084. University property losses totaled \$71,315. A total of 1,823 larcenies were investigated. "To a student on a limited budget, the loss of \$5 or a \$20 book means a lot," Wilson said.

In an effort to combat the larcenies, Wilson said, a number of programs are under consideration, including the possibility of assigning officers to a "power shift" from 6 p.m. to 2 a.m. when many people are on campus for night classes and concerts.

Plainclothes officers may also be assigned to areas with high numbers of thefts, and may participate in team policing of special areas.

Wilson said there will also be a greater effort toward educating people on campus to hide their valuables and lock desk drawers.

Bicycle thefts increased by 76 per cent on the Twin Cities campus during 1975 but the 384 bikes reported stolen were only a small percentage of the estimated 13,000 bicycles on campus. Less than a third of the bikes stolen were licensed, according to University police. Arrests for bicycle-related thefts increased by 52 per cent during 1975.

Crimes against individuals declined by 22 per cent, according to the report. Nearly half of the 69 offenses investigated by University police were sex offenses such as indecent conduct, exposure, and indecent liberties. There were 27 assaults and seven robberies.

(MORE)

Disorderly conduct offenses increased from 19 in 1974 to 31 in 1975 and there were 12 narcotics arrests during the year, an increase of five.

University police made 214 arrests during 1975, an increase of 26 per cent.

Chief Wilson reported that the University police received 122 requests to conduct polygraph examinations for 28 public agencies. Agencies included the Minneapolis police, various suburban police departments, city and county attorney offices, Hennepin County Courts, Hennepin County Welfare and Minnesota Department of Public Welfare.

-UNS-

(A1,2,3,4;B1,11;C1,4;E4)

(FOR RELEASE THROUGH SPRING 1976)

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SPECIAL EXERCISE CAN HELP  
HANDICAPPED LOSE WEIGHT

by Annette Laabs  
University News Service Intern

Anyone who has tried to lose weight knows how difficult it is, even with the help of jogging or saunas at the local health spa. Imagine, then, how much more trouble physically handicapped people have losing weight.

The importance of exercise in weight control plans has long been established. "If the calorie intake stays the same and the activity level increases, at some later point, weight will go down," according to Vickie Meade.

Meade is a physical therapist for the Children's Rehabilitation Center at University of Minnesota Hospitals and knows a lot about exercises and how to adapt them to the special needs of a particular person.

She is putting this knowledge to good use now in a University program for disabled people who are overweight and haven't benefited from other diet plans. The idea for the program, which began last summer, was conceived by Joseph Capell, a physician in the University's physical medicine and rehabilitation department.

Conventional ways of dealing with obesity don't work for people with disabilities, Capell said. "If a patient can move only his arms, he can't follow the usual suggestions for weight loss."

This is where Meade comes in. She evaluates each patient and sets up a special exercise program to fit his or her tolerance and needs. Depending on the cause and severity of the problem, handicapped people can have different capabilities. A patient who has weakness on only one side of the body might be able to do more than someone who has a problem like kidney disease or some sort of birth defect.

Meade uses several things to help her in this task. One is a questionnaire that the patient fills out before acceptance to the program in which he or she keeps track of eating habits and activities engaged in over a three-day period.

(MORE)

The questionnaire is useful in finding out what might be used to reward good behavior, Meade said, and indicates the kinds of recreation that could motivate the patient to be more active. "You would be amazed at how much time these people spend just sitting and watching TV," she said.

When the patient first comes in, Meade does testing to measure the patient's physical abilities. To help her more accurately determine how much energy is used during exercise, she uses a machine called a bicycle ergometer.

The ergometer measures how much oxygen the patient's body uses when exercising, Meade said. She can then use this figure to help determine the number of calories that particular person burns during various activities, such as pushing a wheelchair for one block or walking up a flight of stairs.

"These figures are pretty subjective," Meade said, "and then it depends on how much effort the person puts into each exercise. But it does give us some idea of the number of calories used in a day."

Besides using the ergometer to figure out calorie consumption, Meade can use it to check if a patient is following the exercise program. If he is, she said, approximately the same amount of oxygen will be consumed each time the patient is tested.

An attempt is made to get the patient to increase his or her activity level during a six-week inpatient program and to continue being more active after going home.

Meade works with recreational and occupational therapists in encouraging patients to go shopping and swimming. "We want to show them that exercise can be pleasurable and social," she said.

Meade usually has each patient do three exercises in the morning and three in the afternoon. A typical session might include sit-ups or toe-touching while sitting. Patients begin with 15-minute sessions and work up to 30 minutes as their tolerance increases.

Also, one night activity, such as going for a walk for those who are able is encouraged. "We want to establish a pattern of walking," Meade said. Taking the stairs instead of riding elevators can make a big difference in terms of weight loss over a year's time.

(MORE)

Another tool that Meade uses is charts. The patients are responsible for charting the number of exercises done each day, she said, and they must also keep track of what they eat and the kinds of activities in which they participate. On another chart, Meade graphs the number of calories eaten and the number used up in a day. "The charts are used to teach concepts," she said. "We want them to realize that all these factors are interrelated."

After discharge from the hospital, the patient is encouraged to be more independent, Meade said, and is allowed to pick exercises from among certain alternatives.

Participants are followed for two years as outpatients. So far, two adolescents have gone through the program. One had a paralyzed arm and weakness in one leg; the other had a congenital disease in which one of the symptoms is chronic overeating. Both lost weight while inpatients, Meade said, but one of them hasn't followed through at home and has since gained weight.

A teamwork approach is used in the program. Besides Capell and Meade, other people working with the patient include a psychologist, occupational therapist, recreation therapist, dietician, social worker and nurse. Team members work closely with the patient's family, Capell said, because the family is important in the long-term maintenance of the program.

Capell hopes to be able to expand the program soon to include disabled adults as well as young children down to age four or five. Obviously, in the latter case, involvement of the family would be crucial. "The trick always is to get participants to generalize and get the program to happen at home and not just at the hospital," Capell said.

UNIVERSITY OF MINNESOTA NEWS EVENTS

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(For more details, contact News Service writer whose name is given by each item.)

MAJOR ANTIPHONAL EVENT TO BE IN ST. PAUL CHURCH

(Judy Vick)

A major antiphonal event is planned for 8 p.m. Sunday, Feb. 29, at Hamline Methodist Church in St. Paul.

Various groups of brass players will be placed throughout the sanctuary to create a special sonic experience, in the tradition of St. Mark's Cathedral in Venice.

Performing will be the University of Minnesota Brass Choir, conducted by David Baldwin, assistant professor of music.

The featured works will be Giovanni Gabrieli's Canzona XVIII for three choirs, Canzona XIX for three choirs, and Canzona XX for five choirs. The program also will include works by Orlandus Lassus, Adriano Banchieri, Paul Turok, Richard Strauss and J. S. Bach.

The 20-piece Brass Choir, which will be assisted by other instrumentalists, includes trumpets, trombones, French horns, tubas and percussion.

The concert is open free to the public and sponsored by the University departments of music and music education.

###

DICKINSON POETRY PROGRAM RESCHEDULED

(Ronaele Sayre)

The scheduled performance of "Emily Dickinson in Celebration," a dramatic and musical presentation of Dickinson poems originally scheduled for Monday (Feb. 23) in the West Bank Auditorium at the University of Minnesota has been postponed until Monday, March 1.

A second performance will be presented Monday, March 8.

Tickets are \$1 for students and \$2 for non-students.

-UNS-

(A2,3,4,5,24,25;B1)

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MTE  
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JAP

NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

CHAMBER MUSIC BENEFIT PLANNED

(FOR IMMEDIATE RELEASE)

Six members of the Minnesota Orchestra will join University of Minnesota professor Paul Freed for a benefit chamber music concert at 8 p.m. Thursday, March 4, in Scott Hall auditorium at the University.

Proceeds from the concert will be used to aid in the establishment of a chamber-music prize at the University.

The program will open with Piano Quartet in g minor, K. 478, by Mozart and will include Quartet No.1 for Guitar and Strings by Paganini and Sextet for Piano and Strings, Op. 110 by Mendelssohn.

Performing will be Joseph Roche, violin; Allison Antoun, viola; Francis Thevenin, viola; Stanley Atkins; violoncello; Alfred Kishkis, contrabass; Paul Freed, piano, and Thomas York, guitar.

The event is sponsored by the University departments of music and music education. Admission is \$3 for adults and \$1 for students. Tickets may be purchased in Scott Hall.

-UNS-

(A2,4,24,25;B1)

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TANZANIA: AVOIDING THE  
PROBLEMS OF DEVELOPMENT  
by Jeannie Hanson  
University News Service Writer

Hungry bush pigs, weighing 170 pounds, trample grain fields. Monkeys filch fruit and corn. Caterpillars swarm over coffee trees and elephants pillage farm fields. All is not an agricultural paradise in the shadow of Mt. Kilimanjaro and the land of the Serengeti Game Reserve.

Yet Tanzania, in East Africa, is rich in potential, according to Philip Porter, a University of Minnesota geographer. Porter, who has worked for three years on the country's first Agricultural Census, reported his results today (Feb. 23) at a nationwide meeting of scientists, the American Association for the Advancement of Science, in Boston.

Tanzania is trying to move from its colonial past of coffee, tea and cotton plantations, through small-scale agriculture interrupted by an alarming range of predators, to its future: independent economic development based upon an improved type of Green Revolution.

The African country wants to avoid, in the process, the typical problems of a developing country, according to Porter.

The ironies of development can be quite bitter. Money and modernization are not always unmixed blessings, Porter said. Some countries shake off a colonial past only to indenture themselves to large foreign companies. In this "neo-colonialism" the entire economy of a country, from its banks to its shipping lines, can become geared to exports for multi-national corporations.

Other countries educate their people, only to discover that not enough of them are then willing to do the necessary farming. The rest crowd into the capital city looking for jobs that are not yet there.

Some countries abandon sensible, traditional agricultural practices such as crop-mixing, only to find out that vermin infestations and worn-out soil result. These "dust-bowl problems" are especially serious for areas with thin tropical soil.

(MORE)

Still other developing countries embrace the Green Revolution with its "super-grains," fertilizers and pesticides, only to discover that serious social problems result. Often only the richer farmers can afford to invest in this "revolution." The poorer farmers are worse off than before.

"Tanzania is trying very hard to avoid this agenda," Porter said. "President Nyerere has placed a high priority on gradually increasing the basic standard of living for everyone. He has decided that, with over 90 per cent of the people now involved in farming, sound agricultural and rural area development are the keys to the country's future."

Along with Tanzania's Ministry of Agriculture, Bureau of Statistics, and University of Dar es Salaam, Porter contributed to the country's first Agricultural Census. The nation sent 330 local field investigators to live with a random sample of farm families for over a year. These investigators mapped the land and asked the 16,000 families how they now operated and what they needed to improve their livelihood.

As a result, Tanzania is considering the following development steps:

---Instead of growing coffee, tea, cotton and sisal for export at fluctuating world market prices---and importing food---the country will emphasize the security of growing more food at home for the fast-growing population.

---They plan to initiate basic agricultural planning, with careful limited monocropping. "Tanzania now is a mosaic of villages, cultivated fields, fallow land, bush land, and forest," Porter said. "The people are well-dispersed across the land and employ sound, though small-scale, agricultural practices. They keep insect predators down by planting two or more crops in each field. And they rebuild soil fertility by letting the fields rest for several years between plantings.

Monocropping, planting one crop over large areas year after year, may look efficient, Porter said, but must be adapted to Tanzania. "Tanzania plans to continue fallow periods for the land, allowing it to clear of insects periodically, without the increasingly large doses of expensive insecticides required to kill the 'monocrop-eating' insects," Porter said.

---Water, health care and education will be brought to the many villages, rather

than centralizing these functions. The dignity and importance of farming will be continually emphasized.

---The country will experiment with the proper breeding of native and imported grains. Tanzania will, however, use less fertilizer and insecticide and more animal and "green manures" (decaying vegetable matter). There will be more manual labor on small-scale farms than machine-tended giant operations. The best match of crop to location and the best operational scale for each crop will be studied, Porter said.

---Porter's own data focused on the problem of the individual farm family with "agricultural vermin"---anything that eats crops. "It's possible that nearly half of the potential food production of tropical Africa is lost in the fields and in storage, because of weeds and pests," Porter said.

Tanzanian farmers, asked about their agricultural problems, reported that their biggest difficulty was animal, bird and insect vermin---more damaging than rainfall variations, land shortages, price fluctuations, poor soil or any other factor.

Farmers reported bush pigs, travelling in "sounders" of five to twenty animals, trampling and eating grain; Quelea Quelea birds, nesting 5,000 to an acre, swarming over grain fields by the millions, and even eating coffee beans; monkeys as great food thieves, grabbing fruit and maize; insects from caterpillars to ticks. In Tanzania, some 45 species of insects feed on coffee trees alone. Also, rats and mice, baboons, porcupines, elephants and even hippopotami consume a large share of human food.

These "vermin" are a danger around the clock, require different methods of control, and can increase as a result of "modern" agricultural practices, according to Porter.

So Tanzania has its work cut out. But the country is off to a good start, Porter said. Tanzania has surveyed its people, who have a strong tradition of cooperation which they call "ujamaa." And there is political structure for the future rural transformation---every 10 families elect a village leader, who elect a ward leader, a division leader, a district leader and a regional leader. All regional leaders report to the Tanzania African National Union. Together, they can help Tanzania avoid the "ironies of development," according to Porter.

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FEBRUARY 23, 1976

NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

HINTON TO DISCUSS  
FRIENDSHIP WITH  
PREMIER CHOU EN-LAI

(FOR IMMEDIATE RELEASE)

William C. Hinton, who has written four books on the Chinese revolution and cultural revolution, will discuss his personal reminiscences of Chinese Premier Chou En-Lai at 7:30 p.m. Friday (Feb. 27) in Mayo auditorium at the University of Minnesota.

Chou, who died Jan. 8, was a comrade of Chairman Mao Tse-tung during the Chinese revolution and was influential in the relaxing of tensions between the U.S. and the People's Republic of China in the 1970s.

Hinton, who lived in China during the revolutionary years between 1945 and 1954, knew Chou and interviewed him on his several return visits to China. He is a farmer in Pennsylvania and is national chairman of the U.S.-China People's Friendship Association.

A reception with Hinton will follow his talk in Mayo hall, which is adjacent to University Hospitals. The talk is free and open to the public.

-UNS-

(A1,2,3,4,15;B1)

UNIVERSITY OF MINNESOTA  
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FEBRUARY 24, 1976

MTR  
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NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

UNIVERSITY OF MINNESOTA STUDENTS  
TO HOST ORGANIZING CONVENTION

(FOR IMMEDIATE RELEASE)

A convention to organize a new national association of college and university students is scheduled for March 25 through 27 in Minneapolis.

Gary Engstrand, University of Minnesota graduate student and convention chairman for the Twin Cities Student Assembly, the University's student governing body, said the convention will seek to set up an alternative to the National Student Association (NSA).

Dissatisfaction with NSA, according to Engstrand, grew following the group's national convention last summer.

"It was clear that NSA could not deal with the issues that confront large state universities. The political, racial, social and other controversial questions so dear to NSA are divisive and far from educational concerns," Engstrand said.

He said such issues prevent NSA from giving serious consideration to the crucial problems facing higher education.

Engstrand said that while students may not be able to agree on solutions to social problems in this country, they do agree on issues they face as students. "By limiting ourselves to educational issues we are much more likely to have an impact on the policy-making process," he said.

The new organization would have two primary purposes: to serve as a lobbying group for students of large state schools and to keep the member campuses in touch with each other.

Invitations have been sent to student-government leaders at 149 member schools of the National Association of State Universities and Land-Grant Colleges (NASULGC). Each school may send two delegates.

(MORE)

Engstrand said that the membership of NASULGC, with a total enrollment of three million students in 1973, is composed of schools similar in size and nature to the University of Minnesota. "They are all institutions of higher education with the same kinds of problems and issues that confront student bodies and student government," Engstrand said.

A criticism of NSA has been that its membership represents almost every type of institution of higher education in the United States and as a result, student bodies which are too diverse.

The proposal for this student version of NASULGC has been endorsed by Ralph K. Huitt, executive director, according to Engstrand. Huitt has pledged to present the plan to the national board and seek support for and liaison with the student association.

The convention has also been endorsed by the University of Minnesota administration. TCSA and the president's office will underwrite the cost of lodging and meals for the convention delegates.

Convention sessions will be held at the Dyckman Hotel. Meetings will alternate between small group and general sessions.

University President C. Peter Magrath is the scheduled speaker at the Friday noon luncheon, March 26. The dinner speaker will be George F. Hamm, vice president for Student Affairs, Arizona State University and chairman, Council for Student Affairs, NASULGC.

Minnesota Senator Hubert Humphrey will speak at the noon luncheon, Saturday, March 27. Speaker at the closing convention dinner will be Kathy Kelly, immediate past president of NSA and currently a student at the University of Minnesota.

-UNS-

(A1-5;B1;C1,19,21;D12;E4,31)

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FEBRUARY 24, 1976

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contact BILL HUNTZICKER, 373-7512

'U' REGENTS SEEK  
OPINIONS ON MPIRG

(FOR IMMEDIATE RELEASE)

Your opinion on the Minnesota Public Interest Research Group and its manner of fee collection is invited by the University of Minnesota Board of Regents, which will decide next month whether to renew its contract with MPIRG.

At issue with the board is the manner in which the \$1 per student per quarter fee is collected.

Currently, the University collects the quarterly fee unless the student requests that he or she be exempt from paying it. Students who pay the fee, may obtain a refund during the first five weeks of the quarter.

MPIRG is a student-funded and controlled organization begun in 1971 at the inspiration of consumer advocate Ralph Nader as a constructive means of expressing student protest and feeling.

Since that time, MPIRG has engaged in lobbying and in legal and research activity on a number of issues ranging from toy safety to environmental protection.

A year ago, the Board of Regents temporarily renewed MPIRG's two-year contract for one year while a survey on student opinion was conducted. The temporary renewal followed heavy pressure on the board from a number of agricultural groups protesting MPIRG's view that agricultural chemicals should be monitored by the Pollution Control Agency.

MPIRG has taken a number of other positions which have resulted in interest-group pressure on the Board of Regents. MPIRG has opposed timber-cutting in the Boundary Waters Canoe Area and fought the sale of hearing aids by the people who give hearing tests.

(MORE)

MPIRG's opponents criticized the "negative check-off" fee collection method. Students, in the opinion conducted by the University, strongly favor MPIRG and the fee-collection method.

Eighty per cent of the students questioned had heard of MPIRG and, of those, 75 per cent approved of the fee-collection method. A sample of 642 students was polled late last year.

The survey found that 90 per cent of the students were aware that the fee was voluntary and about three-fourths of the full-time students at the University pay the MPIRG fee each quarter.

MPIRG's supporters, including Nader, contend that opposition to MPIRG has resulted from its effectiveness as a student organization.

Comments on MPIRG should be submitted in writing to Duane A. Wilson, secretary to the Board of Regents, 220 Morrill Hall, University of Minnesota, Minneapolis, Minn. 55455. Comments received before March 5 will be duplicated and sent to members of the Board of Regents, Wilson said.

MPIRG will be discussed by the Regents' student concerns committee at 3 p.m. Thursday, March 11, in the Regents' room, 238 Morrill Hall. Public testimony will be heard at that time, according to committee chairperson Loanne Thrane.

The Regents will take action on the MPIRG contract in a committee of the whole at 8:30 a.m. March 12 in the Regents' room. No public statements will be heard at that time, Thrane said. A close vote is expected on the issue.

(FOR RELEASE BEFORE SUMMER)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
Minneapolis, Minnesota 55455  
Telephone (612) 373-5193  
February 25, 1976

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NEW ICE AGE COMING,  
BUT NOT VERY SOON

by Jeannie Hanson  
University News Service Writer

For the same reasons that there have been ice ages in the past, there will be ice ages again. But don't worry about improving your winter wardrobe for at least another 5,000 or 10,000 years.

According to Herbert Wright, University of Minnesota geologist, that's when glaciers will begin to cover Canada and the northern United States.

But the massive ice sheets move very slowly, and changes in climate are gradual. "It could take the glacier 60,000 years to cover Minnesota with ice, and even longer to reach the Ohio-Mississippi River Valley, where glaciers have stopped in earlier ice ages," Wright said.

At that point, northern North America would not be hospitable to human life. Ice could easily be as much as 10,000 feet thick---as it was in the Duluth area during the last ice age. Summers would be mild, between 50° and 70° F., but winters would be formidable, below zero most of the time. Agriculture would be a thing of the past and most people would probably have to leave the area for thousands of years, according to Wright.

The population moving south would find temperatures cooler there too. But, at least, food could be grown in the south and in present deserts. "During earlier ice ages, rainfall increased in the desert areas," Wright said. "The Great Salt Lake, for example, was fresh water and covered much of Utah and Nevada."

Wright is not at all worried about Americans surviving the next ice age. "Cultural change has been so rapid in the past 100 years that a future, several thousand years away, is impossible to predict, much less fear," he said.

The full glaciation is 2,000 generations away, ten times further into the future than the beginning of written language on earth is into the past. And there will be thousands of years to adjust, even as the glacier approaches, according to Wright.

(MORE)

seasons, allowing snow to persist into the summer. Extreme climate changes result from a strong combination of orbit, tilt and wobble.

Another, but less popular, theory suggests that the sun's output of energy may change over long periods, as it does in the 11-year sunspot cycle. But it is not clear, according to Wright, why this might happen.

Patterns of change, though, are already perceptible. "Since 1945, the average temperature in much of North America and Europe has become slightly colder," Wright said. This might just be a minor fluctuation---or it might be the beginning of the next ice age. But sooner or later, the next ice age will come.

-UNS-

(A2,5,7,18;B1,9,10;C1,4,19;E1,2,24,26)

The last ice age, at its most severe between 20,000 and 11,000 years ago, was definitely dramatic, Wright said. Few forms of life existed in the northern United States. Mastodons and mammoths, heavy with fur, lived around the edge of the ice. The vegetation was mainly tundra, now found in northern Canada. Cold spruce forests grew at least as far south as Kansas. There were no people at all.

The shape of the landscape as we know it now was formed by the glacier. The Mississippi and St. Croix River Valleys were cut by the outlet water of great glacial lakes. The Lake Superior basin was gouged out deeply by an ice lobe. "Minnesota's lakes look now pretty much as they did 10,000 years ago," Wright said. "Their shorelines have been changed somewhat by waves, and they have been partially filled with sediment and become a bit smaller and shallower."

As the glaciers finally thinned and receded, life zones began to change. "By 12,000 years ago, the first people came to Minnesota," Wright said. These early hunters had crossed the Bering Straits from eastern Siberia to western Alaska on the land "bridge" that spanned the two continents then. When the ice receded they came south and hunted the mastodons and mammoths. Either their hunting or the generally warmer climate and changes in vegetation caused these animals to become extinct as the ice age drew to a close.

Ice ages have alternated with warm periods for the past two million years, according to Wright. The pattern has been roughly cyclical. Each cycle of change takes about 100,000 years---80,000 to reach the coldest point and 20,000 to warm up again.

So North America has been cold about 80 per cent of the time. Warm periods, like the one we are in now and have been in for the last 10,000 years, have happened only 20 per cent of the time.

The cause of these cycles is partly understood, according to Wright. The earth's axis of rotation is tilted, and the shape of our orbit around the sun is not a perfect circle. As the orbit shifts slightly, and as the axis of tilt changes, the earth wobbles slightly. Just a small difference in tilt can change the length of the

(MORE)

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FEBRUARY 25, 1976

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NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

SMALL FARMS REMAIN IN JAPAN  
DESPITE TECHNICAL AGRICULTURE

(FOR IMMEDIATE RELEASE)

The elimination of small farms is not a necessary result of the adoption of advanced agricultural techniques.

In Japan, a technologically intensive agriculture was adopted over the past century with minimal disruption of small-scale and family farms, according to Yujiro Hayami, author of "A Century of Agricultural Growth in Japan," a book recently published jointly by the University of Tokyo Press and the University of Minnesota Press.

Hayami, who began his research with Vernon Ruttan at the University of Minnesota, contends that Japan was able to maintain social stability during a period of agricultural change because it did not break up family farms in the way many agricultural development experts advocate today.

A major factor in the development of a productive agriculture despite limitations on the amount of land available was agricultural education and research, Hayami wrote. About 70 per cent of Japan's agricultural growth during the past century can be attributed to an increase in output per unit of land, he said.

One factor, he said, which was unique to Japan, was a backlog of agricultural knowledge and innovation inherited from the feudal Tokugawa period. "A necessary condition for exploitation of the backlog of potential was identified as public investments in agricultural research and land infrastructure," he wrote.

The public expense was a necessary part of the payoff, he contends. "An efficient supply of the agricultural-research product can hardly be expected if it is left to the private market mechanism, especially in agriculture characterized by a mass of small-scale farms, as is the case in Japan."

Group actions by farmers helped bring about the development of land infrastructure, such as irrigation, drainage facilities and other requirements of specific

(MORE)

areas, he said. One payoff was the development of the seed and fertilizer used in cereal grains as part of the so-called Green Revolution.

Japanese development, however, may not be applicable to other countries, he said. "The agrarian structure and the tenure institutions may be such that the introduction of new technology is difficult without causing serious instabilities or disruptions in the rural society."

Japanese agricultural change did not create such instability, he wrote. "Given the well-developed irrigation system inherited from the feudal Tokugawa period, the introduction of the seed-fertilizer technology at the farm level did not require large lump-sum investments.

"As a result, technical progress was neutral with respect to the scale of operation, or, rather, promoted the relative efficiency of the small-scale family farm, contributing, in turn, to the unimodal distribution of farm sizes," he concluded.

"The core of the land-saving innovations was the development of biological technology in the form of high-yielding varieties of major cereal crops, especially rice, complemented by improvement in land infrastructure, which facilitated the substitution of fertilizers for land in response to a rapid decline in fertilizer prices relative to land prices," Hayami wrote.

The book, which is technical and relies heavily on statistical evidence, has 248 pages and sells for \$17.50.

-UNS-

(A2,5,15,19;B1;C1,4;D1,2,3,4,5;E15)

UNIVERSITY OF MINNESOTA  
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FEBRUARY 26, 1976

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NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512 or  
378-1364

U.S. WILL NOT HAVE SOLUTIONS  
AT U.N. HABITAT CONFERENCE

(FOR IMMEDIATE RELEASE)

The United States will not propose as many wide-sweeping solutions for Third World problems at the United Nations Conference on Human Settlement this spring as it did at the World Food Conference in Rome nearly two years ago.

Lance Marston, a U.S. delegate to the so-called "habitat conference," was interviewed in Minneapolis this week where he attended the first of six pre-habitat conferences in cities around the United States. The Twin Cities meeting was sponsored by the State Department and the University of Minnesota World Affairs Center.

"You don't have to be a very sophisticated observer to look at New York City and see that the United States doesn't have all the answers to human settlement problems, such as housing, transportation, air and water pollution, and land use," Marston said.

In agriculture, on the other hand, technologically intensive U.S. farming has succeeded in producing more food but Agriculture Secretary Earl Butz was hasty in proposing U.S. solutions for the poorer nations, Marston said.

"His proposal completely fails to recognize that the less developed nations have more tradition-bound cultures and you don't just suddenly deploy thousands of tractors," he said.

Marston, director of land use and water planning for the U.S. Interior Department, said the New York City case illustrates the need for a national debate on the issues related to human settlement and the quality of life.

"We haven't had effective national discussions of these issues," he said.

"There are those who would sweep New York City under the rug and charge it off as government inefficiency or as another example of the bureaucracy's inability to deal with problems. That's a cop-out that doesn't deal with the issues."

(MORE)

Fragmentation among federal agencies and among various levels of government is a major cause of the lack of land-use and environmental planning, Marston said. "The middle class has been moving out of the cities to escape the problems," he said. The trend can only be reversed through the improvement of local-level input to existing governmental planning agencies.

"I think our instincts in this country tell us that the only way to solve problems is to create new institutions to deal with them," he said. "Over the past 30 years, everybody looks to the federal government to bail them out and we can see from the model-cities program and others that this doesn't work."

No federal master plan, Marston said, can be imposed on the whole nation. "Ideas in the minds of a few are no good if they're not carried in the hearts of the many," he said.

Local governments should have their staffs improved so that the lay representatives have the tools with which to make decisions and to understand the long-term ramifications of them, he said.

"We've got to build the power base at local governments led by laymen with technical advisors by beefing up the staffs to understand the implications of certain kinds of growth and no growth and getting an understanding of the alternatives and the consequences of them," he said.

Marston pointed to the Twin Cities Metropolitan Council as a good example of planning coordination and the Coastal Zone Management Act which facilitates community involvement in determining the future of the coastal areas of the oceans and the Great Lakes.

He said that the U.S. will not provide solutions but can illustrate models of successful planning efforts and raise the kinds of questions which should be discussed at the habitat conference in Vancouver, B.C., in June.

-UNS-

(FOR IMMEDIATE RELEASE)

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February 26, 1976

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U.S. FACES HARD ENVIRONMENTAL CHOICES

by Bill Huntzicker  
University News Service Writer

The United States is a long way from solving problems related to urban sprawl, economic growth and most of the dearly held values which have created havoc in both man-made cities and the natural, rural environment.

That seemed to be the consensus of experts and laymen alike at a "pre-habitat conference" this week, sponsored jointly by the U.S. State Department and the University of Minnesota. The one-day meeting was the first of six planned around the country in preparation for the United Nations Conference on Human Settlement set for this June in Vancouver, B.C.

Harlan Cleveland, director of the Aspen Institute's program in international affairs, sounded the keynote of the conference.

"With just a little leadership," Cleveland said, "we the people should be able to revise those still durable mythologies---that air and water are free goods, that energy is cheap, that the oceans are limitless, that more is better, that growth is forever---which inhibit the betterment of human settlements even in the more affluent parts of the world."

Unplanned growth and urban sprawl were criticized by most of the about 150 participants in the conference, which was held at the Radisson South Hotel in a Minneapolis suburb.

Said Cleveland: "There isn't anything we don't know about the modern city---its demography, its water table, its architecture, its engineering, its art, its slums, its economics, its politics. We just don't seem to know how to make our cities beautiful, accessible, solvent, safe and clean."

"In world affairs," he said, "the picture is equally and embarrassingly clear." He said that giant cooperative enterprises and enormous changes in attitudes and life styles would take a generation to solve major problems even if begun today.

(MORE)

"We are quite literally the first generation in the history of mankind which knows that it is technologically possible for our grandchildren not to be here at all," Cleveland said.

The need to consider human settlement, the "habitat," as an integral part of economic development was proposed by Stanley D. Schiff, coordinator of U.S. participation in the U.N. habitat conference.

"The World Bank has estimated that in the next 25 years, the urban areas of the less developed world will have to absorb 1.1 billion more people, almost all of them poor, in addition to the current population of 700 million.

"How to respond to the need for shelter, food, transportation, sanitation, education and jobs that the onrush of human beings will require---that is the question which confronts the policy makers in the less developed countries," Schiff said.

Minnesota residents who participated in the conference workshops on land use, energy and housing planning, found the same issues much closer to home. In a discussion of land use, Lance Marston, director of land use and water planning for the Interior Department, said many problems result from fragmented planning by different agencies for different areas.

Minnesota illustrates the situation, according to Richard Dethmers, regional coordinator for the State Planning Agency, with 87 counties, more than 100 state agencies and bureaus, 3,500 townships and 850 municipalities.

"There is enormous fragmentation in planning," he said. "By a conservative estimate, there are 250 plans for the Great Lakes region and very few of them have been implemented."

A major problem is the separation of the planners from the people who have to live with the decisions made, according to Carmen Borgerding, regional coordinator for the Minnesota Environmental Education Board. "If the people aren't involved, they just won't play," Borgerding said. "It's impossible for people to deal with the jargon of planners."

Local opposition to the Cedar-Riverside high-rise housing development in Minneapolis and Interstate 394 in the Twin Cities provide examples of how people will not

(MORE)

go along with planning decisions they don't like, she said. "The citizens are recognizing their power and gaining sophistication in the use of that power."

Alan S. Cleveland, environmental clearing officer in Minnesota for the Department of Housing and Urban Development, said "Citizen input is available through zoning on the improvisation side of urban development, but there is no citizen input in the long-range planning side of the equation."

Robert Kerr, a St. Paul architect, said urban planning is relatively new and should not be judged on the basis of the little planning that has been done to date. "The need for planning is illustrated by the fact that in the next ten years, not more than five per cent of the people will be able to afford a single-family dwelling," Kerr said.

Gloria Segal, senior vice president of Cedar-Riverside Associates, said more would be done if the Department of Housing and Urban Development would spend the funds made available to it through congressional appropriation.

Marston, who is a U.S. representative to the habitat conference, admitted in an interview that the people he meets at such conferences probably are not representative of the people affected by the work of settlement planners. A greater separation between the people and the leaders will be seen at the U.N. conference, he said.

"The vast majority of people who represent countries at these conferences have never felt hunger, never lived in squalor, never been threatened by lawlessness and never have had to come to grips with just plain surviving," Marston said.

He said he finds hope, however, in the number of people he meets who desire more local participation in major problems and agree with his view that leaders have to stimulate a national discussion of basic environmental issues.

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
TELEPHONE: 373-5193  
FEBRUARY 26, 1976

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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
Feb. 29-March 6

- Sun., Feb. 29---University Gallery: Star Spangled History by Joseph Boggs Beale. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 7. Free.
- Sun., Feb. 29---University Gallery: European Master Photographs. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 12. Free.
- Sun., Feb. 29---University Gallery: Pioneer photographers. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 19. Free.
- Sun., Feb. 29---Natural History Film: "African Elephant." Museum of Natural History aud. 2:30 p.m. Free.
- Sun., Feb. 29---Concert: Symphony Band Ensemble and Jazz Ensemble. Northrop Aud. 3 p.m. Free.
- Sun., Feb. 29---University Theatre: "Guys and Dolls" by Damon Runyon, directed by Robert Moulton. Whiting theater, Rarig Center. 3 p.m. \$4.50 nonstudents, \$3.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's. Also March 5 and 6, 8 p.m.
- Sun., Feb. 29---Ascent of Man Film: "Music of the Spheres." North Star Ballroom, St. Paul Student Center. 7 p.m. Free. Also March 1, 12:15 p.m.
- Sun., Feb. 29---U Film Society: "Karl May." Director Hans-Jurgen Syberberg will be present. Museum of Natural History aud. 7 p.m. \$2.
- Sun., Feb. 29---Recital: Joe Dickinson, guitar. Scott Hall aud. 8 p.m. Free.
- Sun., Feb. 29---The Whole Coffeehouse: Open stage. Doors open 8 p.m. Free.
- Mon., March 1---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., March 1---St. Paul Student Center: Wildlife Batiks by Marnie Dahl. 8 a.m.-10 p.m. Mon.-Fri. Through March 25. Free.
- Mon., March 1---West Bank Union Gallery: Work by George Schmidt; Neon Sculpture by Michael Filburn. West Bank aud. 8 a.m.-7 p.m. Mon.-Fri. Through March 12. Free.
- Mon., March 1---Recital: Pat Argue, voice. Scott Hall aud. 3:30 p.m. Free.
- Mon., March 1---Emily Dickinson in Celebration. West Bank aud. 8 p.m. \$1 with U of M ID, \$2 public.
- Mon., March 1---Concert: University Jazz Ensemble. The Whole Coffeehouse. 8 p.m. Free.
- Tues., March 2---St. Paul Student Center: Photographs by J. Lavigne; Ceramics by C. Daryl Gangroth. 8 a.m.-10 p.m. Mon.-Fri. Through March 30. Free.

(OVER)

- Tues., March 2---Teach In: Angola. Great Hall, Coffman Union. Noon. Free.
- Tues., March 2---Workshop: Carol Summers, printmaker. Print studio, Studio Arts Bldg. 1:30 p.m. Free.
- Tues., March 2---Concert: An Evening With the Harp. North Star Ballroom, St. Paul Student Center. Wine and Cheese, 7:30 p.m., concert, 8 p.m. \$3.50, tickets sold in advance only.
- Wed., March 3---Photojournalism Group Show. Third floor gallery, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through March 13. Free.
- Wed., March 3---Lecture: "Sir Henry Maine and the Idea of Universal Citizenship" by E. Adamson Hoebel. 10 Blegen Hall. 3:15 p.m. Free.
- Wed., March 3---Third World Film: "Yo Soy Chicano." The Whole Coffeehouse. 7:30 p.m. Free.
- Wed., March 3---U Film Society. New French Directors series: "A Man In a Dream" directed by Bernard Queyssen, 7:30 p.m., and "Singing Goodbye" directed by Pascal Aubier, 9:30 p.m. Director Queyssen will be at the showing. Museum of Natural History aud. \$2 both films, \$1.50 per film.
- Wed., March 3---Film: "Rebel Without A Cause." B-45 Classroom Office Bldg. 8 p.m. \$1.
- Wed., March 3---Lecture: "Singelust---Minnesota's Musical Gift" by Johannes Riedel. 370 Anderson Hall. 8 p.m. Free.
- Wed., March 3---Recital: Charles Salmon, piano. Scott Hall aud. 8 p.m. Free.
- Thurs., March 4---Film: "Lost Horizon." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Thurs., March 4---U Film Society. New French Directors series: "1789" directed by Ariane Mnouchkine. Museum of Natural History aud. 7:30 p.m. \$1.50.
- Thurs., March 4---Concert: Paul Freed and Joseph Roche. Scott Hall aud. 8 p.m. \$1 students, \$3 others.
- Fri., March 5---Concert: Dave Wilson. The Whole Coffeehouse. Noon. Free.
- Fri., March 5---Jazz Concert: Bryan Clark and Rick Schilling. North Star Ballroom, St. Paul Student Center. Noon. Free.
- Fri., March 5---Recital: Annette Mulholland and Lynn Slifer, vocal ensemble. Scott Hall aud. 4 p.m. Free.
- Fri., March 5---Film: "Gone With The Wind." North Star Ballroom, St. Paul Student Center. 7:30 p.m. \$1.25. Also March 6.
- Fri., March 5---Film: "Sunday Bloody Sunday." Great Hall, Coffman Union. 7:30 and 10 p.m. \$1.50 with U of M ID, \$2 public. Also March 6.
- Fri., March 5---U Film Society. New French Directors series: "Lily, Love Me" directed by Maurice Dugowson, 7:30 p.m., and "The See-Saw Garden" directed by Guy Gilles, 9:30 p.m. Museum of Natural History aud. \$2 both films, \$1.50 per film.
- Fri., March 5---Concert: Concert Band Ensemble. Northrop Aud. 8 p.m. Free.
- Sat., March 6---U Film Society. New French Directors series: "Cousin With Cousin" directed by Jean-Pierre Tacchella, 7:30 p.m., and "Women in Blue" directed by Michel Deville, 9:15 p.m. Museum of Natural History aud. \$2 both films, \$1.50 per film.
- Sat., March 6---Recital: Tim Dahl, voice. Scott Hall aud. 8 p.m. Free.

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 27, 1976

MTR  
N47  
SA40

NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-7517

STEWART UDALL TO ADDRESS  
'U' CONFERENCE ON LAKE SUPERIOR

(FOR IMMEDIATE RELEASE)

Former Secretary of the Interior Stewart Udall will deliver the keynote address for a conference on the pollution of Lake Superior at 8 p.m. Tuesday, March 9, in Duluth (Minnesota).

Udall, interior secretary under Presidents Kennedy and Johnson, is expected to emphasize the need for interstate and international cooperation in the major address of the three-day gathering. Udall is scheduled to speak at 8 p.m.

The three-day conference, entitled "Lake Superior: A Resource Imperiled," will draw together experts in government, industry and acadame from all the Great Lakes states and the province of Ontario to present and discuss papers on the management of the largest Great Lake.

A primary issue under discussion will be the potential danger of shipping hazardous materials on the lake, although the means for co-existence of industry, commercial fishing and recreation, generally, also will be discussed.

Sponsors of the conference are the Minnesota Pollution Control Agency, the Upper Great Lakes Regional Commission and the University of Minnesota All-University Council on Environmental Quality.

All sessions at the Radisson Duluth Hotel are open to the public. The conference fee is \$25.

To register, contact the Department of Conferences, 223 Nolte Center, University of Minnesota, Minneapolis, Minn. 55455.

-UNS-

(A1-4,7,18;B1,9;C1,4,5;D3,8,9;E2,26)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
FEBRUARY 27, 1976

MTR  
N47  
GAP

NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

'U' SYMPHONY TO PERFORM

The University of Minnesota Symphony Orchestra will perform in a free public concert at 3 p.m. Sunday, March 7, in Northrop Auditorium.

Richard Massmann, professor of music, conducts the 89-piece orchestra.

The program will include Oberon Overture by C.M. von Weber, Enigma Variations by Edward Elgar and Schelomo by Ernest Bloch.

The event is sponsored by the University's departments of music and music education.

###

BACH, MOZART WORKS TO BE PERFORMED AT 'U'

Works by Bach and Mozart will be featured in a free public concert at the University of Minnesota Tuesday, March 9.

Thomas Lancaster, associate professor of music, will conduct the University Chamber Singers (24 voices), Concert Choir (60 voices), and members of the Minnesota Orchestra in the 8 p.m. event in Northrop Auditorium.

Helga Bullock, soprano; Kathryn Asman, mezzo-soprano; Clifton Ware, tenor, and Michael Riley, bass-baritone, will be the soloists for the performance of Bach's Cantata 130 and Mozart's Mass in C Minor. Bach's Cantata 50 will also be performed.

The concert is sponsored by the University departments of music and music education.

-UNS-

(A2,4,5,24,25;B1)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
TELEPHONE: 373-5193  
FEBRUARY 27, 1976

MTR  
N47  
SAGP

(For more details, contact News Service writer whose name is given by each item.)

FRENCH FILMS TO BE SHOWN AT 'U'

(Sharon Emery)

The University Film Society's Third Annual French Film week will begin Wednesday, March 3. All films will be shown in the Bell Museum of Natural History Auditorium at the University of Minnesota.

The nine films, offered in cooperation with French Cultural Services in Washington and New York, are by new directors of the post-Truffaut, Godard generation and include a range of moods and styles.

The series will open with "A Man in a Dream," winner of the 1974 Jean Vigot prize. Director Bernard Queysenne will attend the 7:30 p.m. showing. "Singing Good-bye," by Pascal Aubier will follow at 9:30 p.m.

Other films scheduled are: Thursday, March 4, 7:30 p.m., "The See-Saw Garden," by Guy Gilles; Saturday, March 6, 7:30 p.m., "Cousin With Cousin," by Jean-Pierre Tachella, winner of the Delluc prize, and 9:15 p.m., "Woman in Blue," by Michel Deville; and Monday, March 9, 7:30 p.m., "Veronique, or the Summer of My 13th Year," by Claudine Guilmain, and 9 p.m., "The Empty Chair," by Pierre Jallaud.

Admission for double-feature nights will be \$2. Single film admission will be \$1.50.

###

PRINTMAKER GUEST AT 'U'

(Judy Vick)

Printmaker Carol Summers will be a guest artist at the University of Minnesota Monday and Tuesday, March 1 and 2.

He will present a free, public workshop at 1:30 p.m. Tuesday in the print studio of the Studio Arts Building on the University's West Bank.

Summers, who lives in Santa Cruz, Calif., has his works included in many private and public collections, including those of the Museum of Modern Art and the Metropolitan Museum of Art in New York City.

-UNS-

(A2,4,5,24,25;B1)

(FOR RELEASE ANY TIME)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
Minneapolis, Minnesota 55455  
Telephone: (612) 373-5193  
March 1, 1976

WTP  
104

WALK-IN FOR HELP  
AT TWIN CITIES CENTER

by Jeannie Hanson  
University News Service Writer

At the Walk-In Counseling Center, all you have to do is walk in.

More than 1,000 people each year, from throughout Minnesota, do exactly that and receive immediate, free, anonymous counseling for a variety of problems from marital relationships to identity to drug use.

A secret, exploratory visit by this reporter uncovered straightforward, professional and sympathetic counseling with no red tape.

The old house at 2421 Chicago Ave. S. in Minneapolis is open between 7 and 9 p.m. Monday through Thursday and between 1 and 3:30 p.m. Mondays and Wednesdays. No appointment is necessary and the wait is under two minutes on this visit.

A living room cluttered with pamphlets and information on health, educational and psychological services, a television and free coffee are there for the visitor. Soon a counselor invites the visitor upstairs to a friendly room with green plants and a few chairs, not at all intimidating.

"I'm very nervous," the visitor begins, detailing a somewhat "typical woman's problem" of managing a part-time job, school, a baby and a home.

The counselor, Marge Sullivan, seems expert at putting the visitor at ease and at allowing her to define the problem first herself. "Everybody has times when they feel that way," she says, urging the visitor to continue.

The counseling approach at the Walk-In Center is practical, sympathetic and goal-directed. No one tells you to lie on a couch and recall your dreams and childhood traumas---or to try tranquilizers.

Sullivan asks a few key questions, such as "Are things OK with your husband?" and "How much help do you get in taking care of your baby, from anyone?" And she offers a few suggestions: "Let the house get a little dirty sometimes" and "Go out

(MORE)

with a friend in the evening now and then." She also suggests some personal schedule changes and deep-breathing exercises for relaxation.

At the end of the hour session, she takes the initiative: "Well, it doesn't seem to me as though you need to come back, but, if you need to, please do."

Of course, the Walk-In Counseling Center counselors sometimes treat more exotic problems. Gary Schoener, Executive Director (and licensed psychologist and University of Minnesota graduate student) remembers a father who brought in his four-year-old boy. "'He wants to run around nude in the bushes,' he told us. He asked if this was normal," Schoener said. "Another time, a 75-year-old woman came in to discuss her sex problems."

But, according to Schoener, most of the people who come in are looking for help in their personal relationships. A couple, living together married or unmarried, may need help in figuring out how to stop fighting so much. An alcoholic may come in with a family member. Two businessmen may need help with the personal problems of their partnership. A teen-ager may need guidance in what to do next. "Problems of identity and relationship are the most common ones," Schoener said. "Drugs, abortion and draft problems have dropped off here."

The Walk-In Center does not specialize in any single type of problem. Schoener thinks of it as a "non-traditional counseling service," able to help or refer anyone who walks in the door. "Our purpose is to offer professional, high-quality help, free, immediate and with no red tape," he said. "We provide short-term individual counseling, crisis-intervention, family and marriage counseling and referral."

Hennepin County has funded the Center since 1973 and the University of Minnesota has, informally and sometimes formally, provided many of the 30 volunteer professionals and the four paid staff members.

Staff members must have at least a master's degree in a mental-health area and a minimum of one year of experience in supervised counseling. Many have other advanced degrees, are employed full-time somewhere else and volunteer at the Center after a full day's work. Others are advanced graduate students. Teams of these

professionals, with a supervisor, are on duty on rotating shifts, but returning visitors arrange to continue talking with the same counselor.

Clients range in age from 6 to 75 and vary widely in income level and area of residence. The largest group is between 13 and 30, is middle income and white. About three-fourths of the clients need less than three or four counseling sessions. More serious or more specialized problems, such as acute psychosis or alcoholism are referred to other agencies and programs.

The Walk-In Center works with these other agencies and generally helps area mental-health programs and professionals. The center works with 250 groups a year, from the Minneapolis Police to Gay Community Services to the Girl Scouts, helping them set up counseling services. "We've also organized professional workshops in areas like rape, incest and the 'battered woman,'" Schoener said.

Recently, the center was chosen as one of two counseling centers to be used as a national model by the American Psychiatric Association and the National Association of Mental Health. CBS Morning News found the Walk-In's work on "battered women," along with the Women's Advocacy Center, to be the most complete and advanced in the country.

The most rewarding thing about the center though, Schoener said, is the number of people who walk in off the street and get help. Everyone is welcome.

-UNS-

(A2,3,5,8,13,16,27,28;B1,5,6,9,10;C1,4,19;E12,27)

(FOR RELEASE ANY TIME)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
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Telephone: (612) 373-5193  
March 3, 1976

MTR  
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JAC P

WOMEN IN EARLY AMERICA:  
A LOST HISTORY

by Ronaele Sayre  
University News Service Writer

Women have traditionally been involved in the private side of history---the home and family. And that, according to Andrea Hinding, curator of the Social Welfare History Archives at the University of Minnesota and assistant professor, is why women have been ignored in much of written history.

"History is what people are interested in---presidents, treaties and wars. Women have not been considered significant," Hinding said, during a Bicentennial lecture at the University of Minnesota.

The historical events of such periods as the American Revolutionary era have overshadowed other activities that took place at the same time. And women, Hinding said, did not leave many records of what they were doing.

During the 1700's the family was the focus of society and women had important roles. "Simple survival was a struggle and women did what they had to do just to survive on the frontier. They were valued for their ability to produce, achieve and survive," she said.

Women were considered strong, necessary and a scarce commodity, Hinding said. But at the same time, there were barriers to the involvement of women in education, politics and religion.

Hinding noted that by the 1800's society had become more urban and the change from a subsistence economy of a rural society to the market economy of the cities changed the status of women to one of isolation.

"They were elevated to the cult of womanhood: genteel, decorative and the protectors of morals," she said. The pioneer woman suddenly became a Victorian lady with inhibitions set by herself and society.

(MORE)

Hinding described a collection of letters by a young woman, who lived from 1783 to 1809, that reveal a sometimes giddy but always honest individual who wrote of the conflict between what was expected of her and what she wanted to do.

In a letter to her cousin, Eliza Southgate Bound wrote that she felt she had talents of her own and "would have been quite another person if properly cultivated."

Hinding, co-director of a national women's sources survey, a project of the National Endowment for the Humanities and the University to search out manuscripts about women, said women's history is a dimension of history that has been lost.

Hinding said that with the exception of women like Eliza Southgate Bound, who was a prolific letter writer, few women recorded their activities and feelings. She compared the lack of written history about women to the absence of information about the lives of plantation slaves, who, unless they were part of the slave owner's household, were not mentioned in family records or diaries.

-UNS-

(A2,5,21;B1;C1,4,18,19;E4,29)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
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MARCH 3, 1976

MTR  
N47  
9A4P

NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-7517

'U' SURVEY: BUSINESS  
RECOVERY CONTINUES 'WITH CARE'

(FOR IMMEDIATE RELEASE)

"Expansion with care" is the motto guiding Minnesota business managers, according to a University of Minnesota College of Business Administration survey.

Majorities of the 103 manufacturers and retailers surveyed report higher sales and inventory prices than three months and a year ago. But most also indicate stable employment, production and number of new orders, compared to three months ago.

Sixty-one per cent of the retailers responding cited higher sales and inventory prices, compared to three months ago---the date of the last survey---although 73 and 80 per cent, respectively, found sales and prices higher compared to February 1975.

Thirty-four per cent of the retailers reported employment declines during the last three months, although 15 per cent said employment in their sector of the economy was increasing and 51 per cent reported employment to be about the same.

"At the manufacturing level," the report states, "although increased new orders are being experienced by 43 per cent of manufacturers, production, employment and inventories are not being increased by as many manufacturers. Capital equipment and goods in general are more available than in the previous expansion. Consequently, a smaller proportion of manufacturers report price increases than in 1974." (Sixty per cent of the manufacturers reported higher prices compared to the previous three months while 65 per cent reported higher prices for the last three months of 1974.)

Employment in the manufacturing sector was also stable, with 55 per cent of the respondents indicating roughly the same level of employment as three months ago, 28 per cent reporting rises in numbers of jobs and 15 per cent observing declines.

(MORE)

While the survey does not measure the magnitude of economic changes, it can spot trends, the researchers point out, such as the prospect for continued growth which "is likely to continue," according to the report.

"On balance, new orders for manufacturers have increased for three consecutive quarters, with more manufacturers experiencing increasing new orders each quarter," the report states.

College of Business Administration graduate assistant F. Robert Dwyer prepares the quarterly survey report under the supervision of Associate Dean Roger B. Upson.

-UNS-

(A2,4,5,15;B1,7;C1,4)

UNIVERSITY OF MINNESOTA  
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MINNEAPOLIS, MINNESOTA 55455  
MARCH 4, 1976

MTR  
1047  
JAP

NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-7517

REGISTRATION FOR SPRING  
EXTENSION CLASSES TO OPEN

(FOR IMMEDIATE RELEASE)

In-person registration for spring-quarter University of Minnesota evening extension classes begins Monday, March 15.

Classes begin the week of March 20 and end the week of June 6.

Students may register at Wesbrook Hall on the Minneapolis campus, the MacPhail Center, 1128 La Salle Ave., Minneapolis, or the St. Paul Registration-Information Booth on the Skyway level of the American National Bank Building, Fifth and Minnesota Streets, St. Paul.

There are no entrance requirements for University extension classes; not even a high school diploma is necessary. About 2,000 courses are being offered this year on campus and in about 20 metropolitan locations for University graduate and undergraduate credit and even no credit.

Expert free counseling and program advising are available and persons 60 and older may enroll free for no credit on a space-available basis. Those 62 or older may take credit courses for \$2 a credit.

Mail registration is also accepted for Extension classes. Materials and information may be obtained by telephoning 373-3195 or writing to Extension Classes.

-UNS-

(A1,2,4,5,27;B1,8)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
TELEPHONE: 373-5193  
MARCH 4, 1976

MTR  
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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
March 7-13

- Sun., March 7---Photojournalism Group Show: "Seekers of Vision." Third floor gallery, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through March 31. Free.
- Sun., March 7---University Gallery: European Master Photographs. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 12. Free.
- Sun., March 7---University Gallery: Pioneer photographers. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 19. Free.
- Sun., March 7---Natural History Film: "The Nuer." Museum of Natural History aud. 2:30 p.m. Free.
- Sun., March 7---Concert: University Symphony Orchestra. Northrop Aud. 3 p.m. Free.
- Sun., March 7---University Theatre: "Guys and Dolls" by Damon Runyon, directed by Robert Moulton. Whiting theater, Rarig Center. 3 p.m. \$4.50 nonstudents, \$3.50 students and senior citizens. Tickets on sale at Rarig Center and Dayton's.
- Sun., March 7---Film: "Gone With The Wind." North Star Ballroom, St. Paul Student Center. 7:30 p.m. \$1.25.
- Sun., March 7---Concert: Minnesota Jazz Dance Company. West Bank aud. 8 p.m. \$1.50 students, \$2 public.
- Mon., March 8---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., March 8---St. Paul Student Center: Wildlife Batiks by Marnie Dahl. 8 a.m.-10 p.m. Mon.-Fri. Through March 25. Free.
- Mon., March 8---St. Paul Student Center: Photographs by J. Lavigne; Color Design: A Student Show; "Dance: Ceramics" by C. Daryl Gangroth. 8 a.m.-10 p.m. Mon.-Fri. Through March 30. Free.
- Mon., March 8---West Bank Union Gallery: Work by George Schmidt; Neon Sculpture by Michael Filburn. West Bank aud. 8 a.m.-7 p.m. Mon.-Fri. Through March 12. Free.
- Mon., March 8---University Gallery: Studio Arts Group Photography Show. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 21. Free.
- Mon., March 8---Discussion: "Higher Education" by Manuel Guerrero, Russell Thornton and Geneva Southall. 307 Coffman Union. 12:15 p.m. Free.

(OVER)

- Mon., March 8---U Film Society. New French Directors series: "Veronique, Or the Summer of My 13th Year" directed by Claudine Guilman, 7:30 p.m., and "The Empty Chair" directed by Pierre Jallaud, 9:30 p.m. Museum of Natural History aud. \$2 both films, \$1.50 per film.
- Mon., March 8---Emily Dickinson in Celebration. West Bank aud. 8 p.m. \$1 with U of M ID, \$2 public.
- Mon., March 8---Recital: Lance Strickland. Scott Hall aud. 8 p.m. Free.
- Tues., March 9---Lecture: "Science and Technology in the Fight Against Hunger: Is It Enough?" by Elvin Charles Stakman. North Star Ballroom, St. Paul Student Center. 12:15 p.m. Free.
- Tues., March 9---Concert: Chamber Singers and Concert Choir with members of the Minnesota Orchestra. Northrop Aud. 8 p.m. Free.
- Wed., March 10---Feminist Theatre: "Pimp." Mississippi Room, Coffman Union, 3:30 p.m., and Murphy Hall aud., 7:30 p.m. Donations requested.
- Wed., March 10---U Film Society: "The Day The Earth Stood Still." Museum of Natural History aud. 7:30 and 9:15 p.m. \$1.50.
- Wed., March 10---Film: "To Kill A Mockingbird." B-45 Classroom Office Bldg. 8 p.m. \$1.
- Wed., March 10---Recital: Rena Sorkin, flute and harp. Scott Hall aud. 8 p.m. Free.
- Thurs., March 11---Film: "The Ipress File." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Thurs., March 11---Recital: Vocal students. Scott Hall aud. 7 p.m. Free.
- Thurs., March 11---U Film Society: "Solaris," 7:30 p.m., and "Dark Star," 10 p.m. Museum of Natural History aud. \$2 both films, \$1.50 per film. Also March 12 and 13.
- Fri., March 12---Concert: Plow and Stars Ceili Band, Irish folk music. The Whole Coffeehouse. Noon. Free.
- Fri., March 12---Film: "Midnight Cowboy." Great Hall, Coffman Union. 7:30 and 10 p.m. \$1.50 with U of M ID, \$2 public. Also March 13.
- Fri., March 12---Recital: John Huntington, trombone. Scott Hall aud. 8 p.m. Free.
- Fri., March 12---Silent Films: "Don't Shoot Me, I'm Only the Piano Player." Rouser Room, St. Paul Student Center. 8 p.m. Free.
- Fri., March 12---The Whole Coffeehouse: Ronnie Laws and Bobby Lyle. 8:30 p.m. \$2.50 in advance at MSA Store, \$3 at the door. Also March 13.

(FOR IMMEDIATE RELEASE)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
Minneapolis, Minnesota 55455  
Telephone: (612) 373-5193  
March 5, 1976

MTR  
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gA4p

PLANET EARTH HAD UNIQUE BIRTH  
by Jeannie Hanson  
University News Service Writer

A nebula swirls around a primitive sun near the edge of an ordinary spiral galaxy. It is a mass of hydrogen and helium gas, with only one per cent solid elements. As the nebula begins to condense and to cool, these solid particles are thrown together. The earth is being born--four and one-half billion years ago.

"Of course we don't know exactly what the early earth was like, geologists aren't God," according to University of Minnesota geology professor V. Rama Murthy. But geologists have learned quite a bit about the early earth by "reading" its rocks, Murthy said.

The story the rocks tell is of a planet that began as a lump of iron and rocks and evolved to become an island for life in the solar system. The other planets of our sun, forming at about the same time but at different places in the nebula, did not receive the same key original materials or develop in the same way, Murthy said.

The early earth was small, but grew quickly. Through gravity, it "attracted" solid particles from nearby areas of the nebula. "In its final stages of growth, the earth was bombarded by large early meteorite-type bodies, perhaps about 20 times as many as ever hit the moon," Murthy said.

The composition of the earth was thus determined: roughly 15 per cent iron meteorites, 40 per cent carbon-rich meteorites, and 45 per cent rocky meteorites. These elements still compose the earth we know today, according to Murthy.

"As the earth grew, it became hotter, particularly in the outer regions," he said. "Iron and iron sulphide blobs in the outer regions melted and sunk to the center to create the core." This happened quickly enough to be called a catastrophe, Murthy said.

(MORE)

In "only" a hundred million years, the earth had become the three-layer planet it is today: a core of iron and sulphide 3,500 kilometers in radius, a 2,900 kilometer-thick mantle of iron and magnesium silicate rocks around the core, and a shallow crust that supports life. This crust is about 35 kilometers deep on the continents and only five kilometers thick under the oceans.

"The continents stand like cheesecakes on the mantle of the earth," Murthy said. Geologists know that the earth's core is liquid iron, possibly with some radioactive elements like potassium--because the motions of this fire-hot soup create the earth's observable magnetic field and because only heavy molten metal behaves that way under such extreme pressure.

Quite soon after its birth, the earth had also already developed a primitive ocean. "We've found evidence of oceanic sediments 'frozen' in the earth's oldest rocks--3.8 billion year old rocks in Greenland and in the Minnesota River Valley," Murthy said.

A primitive atmosphere also developed early. Violent volcanoes released gases which were held close to the earth by gravity. "Nitrogen, methane, ammonia, hydrogen and sulphur were common. But there was no oxygen in the early atmosphere," Murthy said.

This primitive ocean and atmosphere were keys to the later development of life. Water and an oxygen-free environment are excellent places for life to begin, according to Murthy. Scientists have demonstrated that amino acids, the building blocks of life on earth, can actually be synthesized in laboratories in a chemical atmosphere like that of the early earth.

So it all began with a swirling planetary nebula, composed of elements thrown off from older, distant, dying stars. When will it all end?

"Good news," Murthy said. "The earth's core and mantle, its heat engines, are good for at least another five billion years."

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UNIVERSITY OF MINNESOTA  
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MARCH 5, 1976

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NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

LIBERAL ARTS AT U OF M TO  
LIMIT ADMISSIONS, NEW PROGRAMS

(FOR IMMEDIATE RELEASE)

Limits on admissions and new programs are in store for the University of Minnesota College of Liberal Arts, Dean Frank Sorauf said this week.

The restrictions will be necessary because "our enrollments are once again rising faster than our resources," Sorauf said in his first formal "state of the college" address since assuming the position of dean two and a half years ago.

"Money...certainly appears to be at the bottom of most of our problems," he said, noting that reports of outside reviewers estimate that additional funds "well in excess of four or five million dollars" would be needed to meet the minimum needs of the entire college.

Constraints on freshmen admission to the college for next fall have already been introduced by restoring the minimum College Aptitude ratings to the traditional top 50 per cent and additional constraints for the fall of 1977 are being explored, the dean said.

New programs will not be readily added to the college curriculum in the future, he said.

"The truth is that we have already taken on too many obligations for our resources," he said. "It can no longer be enough for proponents of a new program to argue that other universities have one. We must reconcile ourselves to the fact that we cannot do everything. Nor can it be enough, sadly, that a sizeable group of students or faculty want the program."

(MORE)

The decision to limit admissions has been difficult, the dean said. "This college has long been philosophically committed to providing a liberal-arts education for all qualified students who wished to come. We have come to the decision to limit enrollments reluctantly and regretfully and only after being convinced that our obligations to students already here outweighed those to potential students," he said.

The College of Liberal Arts is the largest college in the University of Minnesota with a fall enrollment this year of 17,232 students and a projected increase of 600 or 700 students by next fall, even with enrollment restrictions. In the fall of 1974 the student enrollment was 16,558 students,

The largest group increase has been in the category of "adult specials," the dean said. Usually this means students over age 21 who are not enrolled in a regular degree program.

The college has been seeking additional funds to meet its commitments to the students, the dean said. In addition to increased requests to the Minnesota Legislature, an effort is being made to find private funds for grant support for faculty and programs.

"I am optimistic that we can make continued strides toward a level of outside funding that similar colleges in similar universities enjoy," he said. "All of American higher education faces a troubling future," he added. "Its prestige has dipped, its financial position is precarious and its students face an uncertain reception in the economy. The glory days of the 1960's are gone, perhaps forever. We have so far escaped the worst of these troubles and a prosperous and enlightened state may continue to shield us from them. Yet, at best we will be forced to use resources very carefully and to plan prudently at every step of the way."

-UNS-

(A1-5,27;B1;C1,4,19,21;D12;E4,6)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-63 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
MARCH 8, 1976

NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-7517

MTR  
1047  
2 APR

'U' PROF: UNEMPLOYMENT STATISTICS  
DON'T TELL THE WHOLE STORY

(FOR IMMEDIATE RELEASE)

Unemployment figures for January and February generated much excitement with their indication that the recession seemed to be ending. But some critics wonder whether the statistics are reliable.

One of these is Prof. Mahmood Zaidi, director of graduate studies in industrial relations at the University of Minnesota.

"We see these headlines saying that the decline in unemployment is the greatest in 16 years," Zaidi said, "but what we're left with on its face is just not good."

Labor Department statistics put the proportion of the work force unemployed at 7.6 per cent in February, compared to 7.8 per cent in January and 8.3 per cent in December. The most recent figure represents about 7.5 million Americans out of work, but Zaidi pointed out that millions of other citizens are just as unemployed, but never get onto the charts.

About one million, Zaidi estimated, are "discouraged workers."

"These are poor folks who have tried to find jobs but have almost given up," he explained. "They've been convinced that there just aren't jobs for them."

These people are for the most part not included in the often-cited statistics because they have not worked recently. "But these folks do not necessarily not want to work," Zaidi emphasized.

Another three million are employed less than full time, again because adequate job opportunities are not available, not because the workers want part-time jobs.

"Of course, there's no doubt that the drop in unemployment is encouraging," Zaidi allowed, "but it just isn't all that it seems."

(MORE)

He pointed out that unemployment remains high for minority group members, women and teenagers and that the drop was experienced mostly among white males.

In January, for example, statistics showed 5.8 per cent of adult men unemployed, down from 6.6 per cent in December; 7.5 per cent of all women, down from 8; 13.2 per cent of all blacks, down from 13.8, and 19.9 per cent of teenagers, up from 19.6.

High unemployment and its effect on the economy prompt governmental efforts at "full employment," an undertaking Zaidi says is more difficult when the work force is regarded as a monolith.

"If we want to find the remedies for unemployment, then we should find out what's wrong first," Zaidi suggested.

One thing that's wrong, apparently, is that unemployment exists in pockets, Zaidi pointed out, while government policy is applied to the entire work force in aggregate. He proposes that employment programs be targeted at the pockets that are known to exist and that more data be made available on employment by region, sex, age, ethnic origin and other bases.

Such an approach might even stem the tide of inflation, which seems to rise as unemployment falls, because seldom-stimulated segments of the economy would be the targets.

Finally, greater public understanding of unemployment is needed, Zaidi said, although government and the press focus on a few, simple percentages.

"The public," Zaidi said, "is quite capable of making decisions if the facts are communicated well."

UNIVERSITY OF MINNESOTA  
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MARCH 8, 1976

NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

MTR  
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J A4P

MAGRATH TO SUPPORT MPIRG

(FOR IMMEDIATE RELEASE)

University of Minnesota President C. Peter Magrath said Monday (March 8) he will support the renewal of the University's contract to raise funds for the Minnesota Public Interest Research Group (MPIRG) when it comes up for discussion by the Board of Regents Friday (March 12).

At issue with the board is whether to continue for two years the method by which the University collects an optional fee of \$1 per student per quarter to contribute to MPIRG, a student-controlled and -operated lobbying and research organization.

"The real question," Magrath said, "is 'should we facilitate student participation in a peaceful, constructive way, using lawsuits, using research, using public information campaigns?' My answer is 'yes,' because I've seen too much of the other kind of student activism."

A student survey showing that 80 per cent of those surveyed were aware of MPIRG and that 75 per cent of those aware of MPIRG favored the fee-collection method demonstrated that the fee collection is not really an issue, Magrath said. He said there is a "clear student understanding of how the MPIRG fee system operates."

MPIRG was given a one-year probationary renewal of its two-year contract last year after a large number of interest groups that had been affected by MPIRG actions appealed to the Regents to discontinue the University's collection of the MPRIG fee.

As a result of the pressure, the University fee statements were changed to allow students to refuse to pay the MPIRG dollar at the time they pay their fees.

The option is printed on fee statements in red letters to emphasize its voluntary nature. In addition, students may obtain refunds of the \$1 fee after the quarter begins.

(MORE)

Russel G. Schwandt, president of the Minnesota Agri-Growth Council, says that is not enough. He said MPIRG should be compelled to do fund-raising in a manner similar to that of other social organizations like the United Way and the Heart Fund.

"Why should these organizations be denied the opportunity to reap the rich 'rip-off' reward of a negative checkoff on every student's University fee statement?" Schwandt said.

Richard Young, a University student and chairman of the MPIRG board of directors, said the group has undergone an internal reassessment since its probationary renewal a year ago.

"The increased student participation and improved communications seem to have paid off," he said. "The percentage of fee collections is up. This fall 83 per cent of the students on the Twin Cities campus paid the \$1 MPIRG fee, an increase of 8 per cent from last year."

Young said MPIRG remains accountable to students through the optional fee and through the review of its contract by the Board of Regents every two years.

"I am often uncomfortable with many aspects of what MPIRG says and does," Magrath said in a letter to the Regents. "But I believe we have a strong vested interest in making the social process effective for students by giving them opportunities (when they desire such opportunities) to participate meaningfully in the resolution of significant public policy issues.

"I further believe that the overwhelming number of students both understand the MPIRG fee mechanism and support it," Magrath said.

The Regents will discuss MPIRG in committee at 3 p.m. Thursday (March 11) and again in the committee of the whole at 8:30 a.m. Friday.

-UNS-

(A1-5,18;B1;C1,4,5,21;D12)

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MEMO TO NEWS PEOPLE

Renewal of the University of Minnesota's fee-collection contract with the Minnesota Public Interest Research Group (MPIRG) will be among the agenda items at the monthly meeting of the Board of Regents Thursday and Friday (March 11 and 12).

The student concerns committee will discuss MPIRG and take any testimony there may be on the subject at 3 p.m. Thursday in the Regents' room, 238 Morrill Hall. The regents will take action on the contract in their committee of the whole, which meets at 8:30 a.m. Friday in the Regents' room.

The regular monthly board meeting will begin at 10:15 a.m. Friday in the Regents' room. Committee meetings will be Thursday.

The board will convene as a committee of the whole at 10 a.m. Thursday in the Regents' room to hear the appeal of Robert H. Miller, a pharmacy faculty member who was terminated by the University.

The physical plant and investments committee will consider recommended abstentions from voting stock in the University's portfolio at 1:15 p.m. in 300 Morrill Hall.

The faculty and staff affairs committee will meet at 1:15 p.m. in the Regents' room.

The educational policy and long-range planning committee will discuss educational and public radio in Minnesota at 3 p.m. in 300 Morrill Hall.

Besides MPIRG, the student concerns committee will discuss student funding of the Bierman athletic building and hear a report on the student-run bookstore at their 3 p.m. meeting.

-UNS-

(A1-5;B1;C1)

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MARCH 9, 1976

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NEWS PEOPLE: For further information  
contact JEANNIE HANSON, 922-9471 or  
LEE ANNE WALLACH, 373-2916

VOLUNTEERS NEEDED FOR  
U OF M BREAST CANCER STUDY

(FOR IMMEDIATE RELEASE)

Breast cancer is the number-one cause of cancer deaths in American women. The rate of breast cancer for women in the United States is six times as high as for women in Japan. Why?

University of Minnesota doctors are asking for volunteers to help find out.

Healthy volunteers will receive free, intensive medical exams and testing over the next year and instruction and equipment for monitoring their own health. Researchers will draw a detailed personal profile of each volunteer's hormone levels, blood pressure, temperature and other factors as they vary over the day, month, season and year.

Such information---not usually gathered because of the expense and time involved---could prove valuable in discovering any current or future disease in the volunteer, as well as in studying factors contributing to breast cancer, according to principal investigator Franz Halberg.

Women who have no family history of breast cancer or who have a mother or sister with the disease are needed for the study.

They should be between 12 and 17 years old, 25 and 33 years old (if they will not be pregnant or nursing a child for the year of the study) or 50 and 65 years old. Volunteers must not be taking any hormone medications (such as thyroid or birth control pills) during the year of the study.

Preference will be given to women in good health who live in or near the Twin Cities area. Volunteers will be reimbursed for travel expenses and incidentals.

(MORE)

Hormone levels, blood pressure and temperature levels are considered possible factors in predicting and treating breast cancer, Halberg said. University of Minnesota researchers from several departments, including Halberg's laboratory, have spent many years demonstrating that medical measures vary significantly in predictable rhythms---in a circadian rhythm (a period of about 24 hours), a circatrigintan rhythm (about a month) and a circannual rhythm (about a year), for example.

According to Halberg, the study will compare the biorhythms of hormones, blood pressure and temperature for women in the United States and Japan in an attempt to find clues to the causes and prevention of breast cancer.

Early detection may well be the first pay-off, according to researcher Lee Anne Wallach. Wider than usual differences in hormone fluctuations have been shown to appear before hypertension develops in rats, for example. And a developing breast cancer may be detected in a volunteer.

Hormones have also been involved in the treatment of breast cancers, according to Wallach. The cancer seems to grow more slowly if estrogen sources are removed from the pre-menopausal breast-cancer patient. The opposite, extra estrogen, seems to work best for post-menopausal breast-cancer victims.

Other biorhythms have already been used in treating other kinds of cancers in mice and in a few people. Anti-cancer drugs for leukemia, timed to circadian rhythms instead of being administered at any time of the day, have doubled the cure rate for leukemia in mice.

The rate of children with leukemia who survive for five years already has been doubled by scheduling treatment according to the cell cycle of the children, without reference to circadian rhythms. Another doubling of this cure rate in people through the use of circadian chronotherapy is only a hope of chronobiologists, justified by the results in mice, Halberg said.

Participation in the study involves an initial screening process. Volunteers must fill out a questionnaire and consent to the release of previous medical history, if it should prove necessary (although anonymity would be preserved). A personal interview and a free physical exam will be administered to the subjects chosen.

Once chosen, volunteers will be taught to take their own blood pressure, temperature, and to collect their urine samples. The equipment will be used at home, with volunteers calling and mailing in information every week.

Four times a year the women will receive free physical examinations and special monitoring of many different kinds of hormone levels found in blood and urine. This screening would benefit the volunteers in the present and in the future when deviations from their regular body rhythms could signal problems.

To volunteer, call 373-2916 or 373-2920.

(A1-5,8,21,22,23;B1,5;C1,4;E3,11,25) -UNS-

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NEWS PEOPLE: For further information  
contact ROMAELE SAYRE, 373-7516

THIEVES ENJOY VARIETY  
WHEN 'SHOPPING' AT U OF M

(FOR IMMEDIATE RELEASE)

Classrooms, offices and laboratories on the Twin Cities campus of the University of Minnesota are favorite targets of thieves seeking tape recorders, calculators, microscopes and typewriters.

And then there are those with more discriminating tastes---those who have made off with such items as animal clippers, lawn chairs, drapes and one Norfolk Island pine tree.

According to University Police Captain William House, thieves take some of the items they steal for their own use, but dispose of most within a short period of time.

"The property moves through channels quickly," House said. He reported that University property has been recovered all over the country and has been found in some homes during drug raids.

In addition to drug addicts seeking quick cash, House said, other people who steal from the University include friends of employees, who have found access to office keys, and ex-felons who "can't resist the temptation to start all over again."

"The losses do not occur from break-ins, but take place when the offices are open," House said, adding that even bolted-down typewriters have been among items taken.

House said there are special security problems at University Hospitals since facilities are open 24 hours a day and many people are in the area all of the time.

Recent losses from University Hospitals have included more than \$4,000 worth of tape recorders, a video-tape machine and 10 black and white portable television sets.

(MORE)

University property losses last year had a value of \$71,315, about half of the total personal property loss experienced by individuals on campus.

But no dollar value could be assigned to one item taken from the lobby of Northrop Auditorium five months ago---a full-length portrait of Cyrus B. Northrop, second president of the University.

Officials said at the time that the portrait has great historical value to the University and is not replaceable. House said authorities were surprised that no clues have turned up, even after extensive publicity of the theft.

Officials of University Gallery expressed the belief at the time that the painting was taken as a prank and would be returned. The painting hung over the ticket office and took some effort to remove.

House said other Big Ten schools share the same theft problems as the University, especially those in metropolitan areas.

-UNS-

(A1,2,5;B1,11;C1,4;D12;E4,28)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

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(For more details, contact News Service writer whose name is given by each item.)

'U' CHILDREN'S ART CLASSES STILL OPEN

(Bill Richardson)

Spaces are still available in spring-quarter children's art classes at the University of Minnesota.

The classes, sponsored by the Institute of Child Development and the art education department, are offered to children ages five to eight and will meet Saturdays from 10 a.m. to 12:30 p.m. March 27 through June 5.

Instructors certified in art education will teach the classes, which emphasize exploration of art in many media rather than formal art techniques, Virginia Eaton, resident fellow at the institute, explained.

"Children are encouraged to develop a feeling of their worth as artists," she said.

The fee for the 10-week course is \$15. Additional information may be obtained by telephoning 373-9851.

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PIANO TRIO TO PERFORM

(Judy Vick)

A piano trio will present a free public concert at 8 p.m. Sunday, March 14, in Scott Hall auditorium at the University of Minnesota.

The group will feature music professor Bernhard Weiser, pianist; John Sambuco, violinist, and Eric Wahlin, cellist. Sambuco and Wahlin are members of the Minnesota Orchestra and the Twin Cities String Quartet.

The program, which previously was presented at the College of St. Thomas in St. Paul, includes Trio for Violin, Cello and Piano, Op. 67, by Shostakovich; Sonata No. 3 for Violin and Piano by Ives, and Trio for Violin, Cello and Piano, Op. 65, by Dvorak.

The event is sponsored by the University's departments of music and music education.

-UNS-

(A2,4,5,20,21,24,25;B1)

(Sidebar for "NCAA")

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contact BILL HUNTZICKER, 373-7512

'U' OFFICIALS WILL WORK  
ON CHANGING NCAA RULES

(FOR IMMEDIATE RELEASE)

University of Minnesota President C. Peter Magrath said Wednesday that the University will work through the Big Ten to try to change the National Collegiate Athletic Association (NCAA) rules.

"The problem with the rules is not their intent," Magrath said at a news conference. "The difficulty, I think, is that the rules have grown like Topsy and it is difficult to focus on the main problem areas. We'd like to get the rules cleared up and clarified."

Magrath and University Vice President Stanley B. Kegler both said the University was legitimately penalized by the NCAA for its rule violations, but they would like to see an improvement in the rule book.

"We are voluntary members of the NCAA and that manual has been around for some time and we're supposed to know it," Magrath admitted.

Kegler said the rules have grown in response to specific "symptoms" of problem areas and, as a result, a number of unusual rules have resulted.

For example, he said, "I can't give a hitchhiker a ride if he happens to be a student athlete." Coaches and alumni are in violation of NCAA rules if they have a student athlete as a dinner guest in their homes, he said.

"I have recommended to President Magrath to bring something akin to an open meeting law to bear on the NCAA," Kegler said.

During the University's investigation of NCAA rule violations, he said, the institution was precluded from saying anything about the investigation. He said the files and meetings regarding allegations of rule violations should be made public or made available to the institutions charged.

(MORE)

"The investigation was a closed proceeding from beginning to end," Kegler said. "We were precluded from speaking out and the NCAA would not give us access to their information regarding allegations of rule violations."

Kegler said the manual must be updated. "A careful reading of the NCAA manual could preclude eating, breathing and living under the athletics program," he said.

He and Magrath said, however, that the NCAA would not have investigated the University for the "trivial" rule violations if there were not more serious irregularities involved.

"Although we can poke some fun at the technical infractions," Magrath said, "the reason we were subjected to an investigation is the occurrence of the major infractions."

-UNS-

(A1,2,5;B1;C1,4,19;D12;E4)

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contact BILL HUNTZICKER, 373-7512

'U' RELEASES NCAA  
PENALTIES, FINDINGS

(FOR IMMEDIATE RELEASE)

The National Collegiate Athletic Association (NCAA) has placed the University of Minnesota basketball team on a three-year probation and has restricted its activities during two of the three years.

NCAA penalties, the University's response and a summary of the University's investigation into the allegations of NCAA rule violations were released in document Wednesday by University Vice President Stanley B. Kegler.

Gopher basketball teams will be restricted from playing in any post-season game for the two-year period beginning March 4, 1976, the date University President C. Peter Magrath notified the NCAA that the University would not appeal NCAA penalties. Thus, it might be possible for the Gophers to participate in post-season games in 1978 if they were scheduled after March 4.

During the two years, the Gophers will not be allowed to participate in any televised games under NCAA control and they will lose three basketball scholarships, reducing to three the number that can be awarded each year.

Gopher participation in the 1972 NCAA Mideast Regional tournament will be erased from the NCAA record because four players--Jim Brewer, Bob Murphy, Bob Nix and Keith Young--had received benefits, which were in violation of NCAA rules, from the University or its supporters, Kegler said.

The University will have to return its third-place award and \$21,488 which it received for its participation in that tournament.

During the probationary period, the NCAA will monitor Gopher basketball activities to insure that abuses are not repeated.

(MORE)

"The record of what was done that is wrong is clear," Magrath said in his statement to the NCAA. "It speaks for itself. There is no point in varnishing it over and trying to rationalize it away."

Staff members and players currently in the basketball program who are affected are assistant coach Jimmy Williams and student athletes Phil Saunders, Mike Thompson and Dave Winey.

Because individual sanctions are formally imposed by the University with the NCAA as an appeal body, student disciplinary hearings for Saunders, Thompson and Winey have been scheduled by the University.

Williams, who is alleged to have given money and transportation to student athletes and prospective recruits, will be prohibited from participating in University recruiting during the first two years of the probationary period.

"Unlike Musselman," the University documents state, "assistant coach Jimmy Williams has been fully and voluntarily cooperative in all aspects of the investigation. He admits participation in or knowledge of a number of rule infractions, most of them minor.

"It is the University opinion that Williams' involvement in these infractions was not knowing or willful, but rather from a misplaced sense of loyalty to his immediate superior," the report said.

Thompson, a sophomore center, is alleged to have sold his complimentary season tickets for \$180, used an athletic department recruiting car, participated in pre-season conditioning drills and attended dinners for basketball players at private homes.

Winey, a sophomore forward, is accused of selling some of his season tickets for face value (not a NCAA, but a Big Ten rule violation), receiving \$10 for a meal after a late practice, using the recruiting car and receiving entertainment from a local businessman and his family.

Saunders, a junior guard, allegedly used a WATS line established for basketball recruiting for personal use, used the recruiting car, participated in pre-season

(MORE)

drills, charged meals at a local restaurant and received meals in private homes with the team.

"The University is required to afford hearings to student-athletes Winey and Saunders in addition to that afforded student-athlete Thompson to determine if these athletes should be declared ineligible," Kegler said.

Because of other minor violations, Gary Korkowski, Osborne Lockhart, Saunders, Thompson, Chris Weber, Ray Williams, Winey and Bill Zager have been declared ineligible for NCAA post-season championship events.

The University will formally sever its relationship with Harvey Mackay, president of the Mackay Envelope Company, considered to be "a representative of the University's athletic interests," because of gifts to players and purchase of complimentary tickets at more than face value.

Magrath will sever relations with six other individuals and send letters to three community representatives to "admonish" them for their violation of NCAA and conference rules.

The University apparently has some disagreement with the NCAA over who is a "representative of the University's athletic interests," so will release only the names of those involved in its own findings.

A subcommittee of the University Assembly Committee on Intercollegiate Athletics (ACIA) admitted that "the program violated any reasonable person's standards of amateurism" and directed Magrath to inform Paul Giel, director of intercollegiate athletics, of his responsibility to monitor the athletics department for rule violations.

The ACIA report stated that Giel has made "a reasonable effort" to discover the truth of violations when they have been brought to his attention. Giel admits, however, offering basketball prospect Mark Olberding a grant-in-aid for four years, which was a violation of NCAA rules.

The ACIA also recommended that athletes be recruited "primarily from the geographic area from which the normal student population is drawn."

(MORE)

During its investigation, the University reported a number of rule violations which had been unknown to the NCAA, including the providing of free legal counsel to student athletes Ron Behagen and Marvin "Corky" Taylor following the fracas during a Minnesota-Ohio State basketball game in 1972.

Among the largest recipients of improper gifts was Rick McCutcheon, who along with his family, was given free transportation and accommodations to and from the Twin Cities.

The most common violation appears to be the sale of complimentary tickets, which are provided to team members for use by family and friends.

"In the judgement of the investigator," the report said, "based on a number of interviews here and elsewhere, the sale of complimentary tickets by student-athletes was not conducted in any organized manner and that the practice was not substantially different from that found at basketball programs around the country and perhaps not as flagrant as can be found at some schools."

Other common violations include small loans or gifts of cash, gifts of such things as fishing rods and bicycles, loan of an automobile, use of a WATS line for long-distance phone calls, housing prospective recruits in a hotel, and transportation.

Sources of the money used for gifts were: Musselman's personal funds, complimentary goods and services provided by community members through the basketball staff, unaffiliated individuals and athletic department representatives acting on their own, and abuse of privileges by student-athletes.

Some funds were from the athletic department, which "was knowingly and unknowingly the source of improper benefits." The coaching staff also used credit cards provided by Harry Cox, former president of the Laub Baking Company of Cleveland, Ohio, the report stated.

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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
March 14-20

- Sun., March 14---Photojournalism Group Show: "Seekers of Vision." Third floor gallery, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through March 31. Free.
- Sun., March 14---University Gallery: Pioneer photographers. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 19. Free.
- Sun., March 14---University Gallery: Studio Arts Group Photography Show. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through March 21. Free.
- Sun., March 14---Natural History Films: "Baboon Ecology," "In Search of a Mate" and "The Mayfly: Ecology of an Aquatic Insect." Museum of Natural History aud. 2:30 p.m. Free.
- Sun., March 14---The Whole Coffeehouse: Ronnie Laws and Pressure; Roberta Davis Trio. Doors open 7:30 p.m. \$2.50 in advance at MSA Store, \$3 at the door.
- Sun., March 14---Concert: Piano trio. Scott Hall aud. 8 p.m. Free.
- Mon., March 15---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., March 15---St. Paul Student Center: Wildlife Batiks by Marnie Dahl. 8 a.m.-10 p.m. Mon.-Fri. Through March 25. Free.
- Mon., March 15---St. Paul Student Center: Photographs by J. Lavigne; Color Design: A Student Show; "Dance: Ceramics" by C. Daryl Gangroth. 8 a.m.-10 p.m. Mon.-Fri. Through March 30. Free.
- Mon., March 15---West Bank Union Gallery: Group Photography Exhibit. West Bank aud. 8 a.m.-7 p.m. Mon.-Fri. Through March 26. Free.
- Mon., March 15---Film: "I'm All Right Jack." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Wed., March 17---Poetry Reading by W.S. Merwin. 310 Anderson Hall. 8:30 p.m. Free.
- Thurs., March 18---Film: "Antonia: Portrait of a Woman." 310 Anderson Hall. 2:15 and 7:15 p.m. Free.
- Fri., March 19---Film: "Bedazzled." The Whole Coffeehouse. 2:30, 7:30 and 10:15 p.m. Free.
- Sat., March 20---Film: "Bedazzled." The Whole Coffeehouse. 2:30, 7:30 and 10:15 p.m. Free.

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(AL-6;B1)

UNIVERSITY OF MINNESOTA  
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NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

**MPIRG'S FUTURE IS IN DOUBT**

(FOR IMMEDIATE RELEASE)

The future of the Minnesota Public Interest Research Group (MPIRG) is in doubt following the refusal of the University of Minnesota Board of Regents to grant a two-year renewal of its contract to collect MPIRG fees.

Chuck Leer, MPIRG administrative director, said MPIRG's student board of directors will hold a special meeting to determine whether to sign the one-year contract granted by the Regents Friday (March 12).

"I guess if we don't sign the contract, that's the end of MPIRG as we know it," Leer told reporters following the Regents' meeting.

The University collects an optional \$1 per student per quarter fee which provides about \$100,000 of MPIRG's \$157,000 annual budget. MPIRG is a student-controlled environmental and consumer group composed of 12 full-time staff members and about 300 student volunteers.

MPIRG's two-year contract was given a one-year probationary renewal a year ago by the Regents with the stipulation that a survey of student opinion be taken, that the fee be made more clearly optional on the fee statement and that MPIRG improve its relationship with the student government.

University President C. Peter Magrath recommended that the Regents approve a two-year contract on the basis that the conditions of the probation had been met and the survey showed strong student support for the MPIRG fee.

"A year ago, there were some reasons why the one-year contract was granted," Leer said. "This year, there were no reasons given other than that the Regents indicated that MPIRG would be more accountable.

"The question is 'accountable to whom?' Is MPIRG to be accountable to the Regents or is MPIRG to be accountable to its student constituency?" Leer said.

(MORE)

MPIRG's proposal and that of the student representatives to the Board of Regents was that MPIRG would present a quarterly report to the student government on its activities.

"In the last year, we addressed the concerns of the student constituency," Leer said. "What they're telling us now is to address the concerns of the special interests."

Duluth Regent Erwin L. Goldfine, whose motion amended the contract for one rather than two years, said he had received 1,000 letters on the issue and 90 per cent of them were from residents of his region who opposed MPIRG.

"I believe that the industry input into MPIRG has not been of the consequence it should be," Goldfine said.

He said MPIRG has failed to strike "a proper balance between the protection of the environment and the promotion of industry" and the economy in northeastern Minnesota, where MPIRG has waged an environmental battle against the dumping of taconite tailings into Lake Superior by Reserve Mining Company and the clear cutting of timber in the Boundary Waters Canoe Area, and has studied the potential development of copper-nickel mining.

"Laying the problems of (the economy and) unemployment in northeastern Minnesota on a research group attributes more power to them than they have," said Regent George Latimer, a candidate for mayor of St. Paul

"We are not in the business of controlling minds and controlling ideas," Latimer said. If MPIRG's ideas and methods are wrong, Latimer said, the democratic processes in which they become involved would prove them wrong.

"If what we're saying is that we want them to be even safer when they come back here again next year, then I'm opposed to the amendment. I'm not interested in coming back next year and examining all of their positions. I don't think that's any of my affair," Latimer said.

Goldfine's amendment passed on a 6-5 vote with Regent Robert Latz, abstaining. Latz, legal counsel for the Minnesota Beer Wholesalers Association, which has opposed

(MORE)

MPIRG on ban-the-can and other issues, abstained from all the MPIRG votes.

During the roll call, Regent Loanne Thrane changed her vote from one against the amendment to one in favor of it, thus "making Regent L. J. Lee's vote crucial," she said. Lee, who was snowbound at his home in Bagley, Minn., was telephoned for his vote on the issue. Lee was permitted to join the meeting through a telephone hookup.

Students at the news conference disagreed on the significance of Thrane's decision.

Mike Unger, chairperson of the student representatives to the Board of Regents, said the events were unusual and that MPIRG had the necessary votes for a two-year contract. The circumstances surrounding the question about whether to delay for a meeting at which Lee could be present caused the decision against the two-year extension, Unger said.

"Basically, we were just outmaneuvered on a parliamentary move," Leer said. "We had the vote initially on the two-year contract.

"The students were told to work within the system," Leer said, "but I guess we just couldn't outmaneuver the special interests this morning."

Leer said that the one-year extension compromised MPIRG's ability to sustain long-term research activities at the expense of short-term issues and an emphasis on advertising and fund raising.

The contract renewal, however, did pass on a 7-4 vote of the board. An effort by Lloyd Peterson, a Paynesville farmer, to strike MPIRG from the student fee statement was defeated on a 4-7 vote. Unger said that he would take the MPIRG issue back to the Regents if MPIRG rejects the one-year contract.

-UNS-

(A1-5,11,15,18;B1,7;C1,4,19,21,22;D12;E4,26,31)

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MTR  
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NEWS PEOPLE: For further information  
contact CRAIG TRYGSTAD OR DIANE ERICKSON,  
373-3564

U OF M TO HOST CONFERENCE  
ON HIGH-SCHOOL JOURNALISM

(FOR IMMEDIATE RELEASE)

High-school journalists have been unaware of their rights and responsibilities for too long, according to Craig Trygstad, assistant director of the Minnesota High School Press Association and newly named coordinator of high-school journalism programs for the Robert F. Kennedy Memorial.

"That's unfortunate," he said, "because it has not allowed them to realize the exciting potential they might have in serving their audiences."

When given the chance to explore that potential and to examine the exciting possibilities high-school journalism can offer, student journalists are "serious-minded about their responsibilities and anxious to have a positive impact," Trygstad added.

A special conference on high school journalism, co-sponsored by eight Minnesota professional and educational journalism groups, is scheduled for Tuesday, March 23, on the University of Minnesota Minneapolis campus. The day-long conference, which will begin at 8:30 a.m. in the West Bank Auditorium, will feature professional journalists who will lead small-group discussions on specific issues and problems related to journalists' rights and responsibilities.

Student journalists and their faculty advisers from throughout Minnesota, Iowa and Wisconsin are expected to attend. The conference was initiated to give students a chance to focus on legal and ethical issues that relate to student publications.

One of the co-sponsors, the Robert F. Kennedy Memorial, is responsible for "Captive Voices," the recent publication which reported the findings of an in-depth national investigation into legal rights and responsibilities of the student press. The Memorial will make copies of that book available to conference participants.

(MORE)

Other sponsors include the Minnesota High School Press Association, Journalism Advisers of Minnesota, Little Bit magazine, the University of Minnesota's School of Journalism and Mass Communication, Women in Communications, Inc., the Society of Professional Journalists, the Twin Cities Journalism Review and the National Scholastic Press Association.

Additional information, including schedules, maps and registration forms, is available from MHSPA, 110 Murphy Hall, University of Minnesota, Minneapolis, Minn. 55455.

-UNS-

(A1-5;B1;C1,4)

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MPIRG ACCEPTS 'U'  
ONE-YEAR CONTRACT

(FOR IMMEDIATE RELEASE)

Leaders of the Minnesota Public Interest Research Group (MPIRG) have voted to accept a one-year extension of their contract with the University of Minnesota, but have made it clear that they are angry about what they consider a breach of faith by the Board of Regents.

MPIRG's student board of directors met Sunday (March 14) to decide whether or not to accept the one-year contract extension under which the University collects an optional \$1 per student per quarter fee. The fee provides around \$100,000 of MPIRG's \$157,000 annual budget. The board of directors represents 20 of the state's college and university campuses.

"We came out of this year's Regents' meeting with more than a one-year contract," said Richard Young, chairperson of MPIRG's board of directors. "MPIRG has become a student-rights issue at the University of Minnesota and they (the Regents) are not going to forget it."

The Regents refused to give MPIRG a two-year contract renewal following a one-year probationary extension granted a year earlier, even though MPIRG opponents admitted that the conditions of the probation had been met.

"We played straight with the Regents in the last year and they didn't come through," said Chuck Leer, MPIRG administrative director. "We're not going to let the weight of their next decision hanging over us influence our activities in the coming year."

The 15-0 vote to accept the contract followed a two-hour discussion in which the students and MPIRG staff people discussed whether accepting the compromise contract would be a violation of the group's integrity.

Early in the evening, Joyce Warkentien, a University senior from Eagan, Minn., introduced a resolution to refuse the contract. "It's about time we stood up for our

(MORE)

rights," she said. "They didn't uphold their end of the bargain and we more than met their requirements."

Steve Chapman, MPIRG's research director, said the students should consider the strong student support they received, the support of the University administration, and the close 6-5 vote by the Board of Regents and should take their case back again next year.

Katy Kelley, chairperson of the University of Minnesota MPIRG board, said the quality of MPIRG's research could be compromised by accepting the contract. Kelley said she and staff people spent an enormous amount of time working on student support.

"This year we had student support and it wasn't enough. Next year, they'll want student support and something else," Kelley said. "I've worked with some people who do political research and with vast staffs they don't come close to the quality of research MPIRG has done. If we play in that political arena, we will lose our quality," she said.

After the discussion by staff members indicated they would not let political concerns be an overriding issue during the coming year, Warkentien's motion was voted down 14-2 with one abstention.

She then introduced the motion to accept the contract, on the condition that MPIRG work to improve Regents' bylaws on conflict of interest, lobby for voting student Regents, and coordinate an educational campaign with these efforts.

In urging acceptance of the contract, Elliott Rothenberg, MPIRG's legal director, said the group is involved in a number of legal cases involving pollution by Reserve Mining, logging in the Boundary Waters Canoe Area and occupational safety and health.

"We have excellent chances of winning these cases. If we go out of business, we won't win any of these issues. If MPIRG goes out of business, who's going to rejoice? Reserve Mining Company, the logging interests, people who conduct business with Northern States Power company. We'd be handing them a victory on a silver platter."

(FOR IMMEDIATE RELEASE)

Feature story from the  
University of Minnesota  
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## HORIZON IS FOCUS FOR 'U' ARTIST

by Judy Vick  
University News Service Writer

Where the lake meets the sky on Minnesota's North Shore at Grand Marais, George Morrison first saw the horizon line that has become the focal point of his work.

Combining the natural elements, the precision design of his Native American heritage and many years of urban influence, Morrison, a University of Minnesota professor of studio arts, creates art works that have earned him many local honors and national recognition.

All of these factors---nature, mosaic design and abstract expressionism---are evident in his current, rare one-man exhibition at the Minneapolis Institute of Arts. The showing of wood collages includes both those made from textured, weathered pieces of driftwood and several new works made entirely of new woods, cut in curving, flowing shapes.

"George Morrison is an artist, not only of importance, but of integrity, dignity and tremendous depth," said Olive Herstand, chairman of the Special Exhibitions program for the Friends Gallery of the Institute, where the exhibit will remain through March 28.

Throughout his career, Morrison has crossed cultures to create a unique lifestyle and works of art. Born just south of the Grand Portage Chippewa reservation, he grew up in a family of 12 children. His father worked as an animal trapper for the government.

During his childhood and school years in Grand Marais, he developed his interest in drawing and carving. "I always liked to make things with my hands and had a knack for it," he said. He decided to study commercial art, which led him, eventually, to the fine arts.

(MORE)

After completing four years of what he terms "formal and academic" study as a scholarship student at the Minneapolis School of Art (now the Minneapolis College of Art and Design)---which many years later awarded him an honorary master's degree---Morrison went to New York City where he spent the next 20 years. "This period shaped my whole life work," he said.

Although the influence of abstract expressionists and more training at the Art Students League is apparent, most of Morrison's work still conveys his Indian background, as has been noted by numerous critics.

A Minneapolis Tribune review of his one-man drawing exhibition at Walker Art Center in 1973 said, "It's that bit of difference (his heritage) that has really made his art unique. These drawings are rooted more in rural values than urban...more in earth than concrete."

Morrison hesitates to discuss the specific forces that result in his creativity, saying, "The work should speak for itself."

He does acknowledge that his life on the East Coast reinforced his awareness of the horizon line and the use of it in his work. "I was attracted to the ocean and I was fascinated by the structural and organic elements, the rich textural surfaces of the bones and fragments and the beach," he said.

Several of the works in his current show are composed of beach fragments found along the Atlantic shore in Massachusetts and the north and south shores of his familiar Lake Superior.

In 1952, Morrison went to Europe on a Fulbright scholarship to study and work in France, Italy and Spain. In 1953-54, he received a John Hay Whitney Fellowship.

Turning to the academic life in 1959, he was a visiting professor at the Minneapolis School of Art, the Dayton (Ohio) Art Institute, the State College of Iowa and Cornell University, before joining the permanent faculty of the Rhode Island School of Design, where he remained for seven years before returning to Minnesota in 1970 as a visiting faculty member in American Indian studies and studio arts. He now has a full professorship in studio arts and teaches classes in drawing and painting.

It was about 10 years ago that he began working with the wood pieces that established his uniqueness among Minnesota artists. The first collages were made entirely of found wood. Recently he has employed new woods, featuring colored, tropical woods in a piece which was commissioned by a Minneapolis bank.

Morrison prefers to do most of his work in the basement of his unusual renovated church-home on Stanford Ave. in St. Paul. He spreads the wood pieces over the large space and then selects as he completes each mosaic.

"There is a dilemma between teaching and devotion to one's work," he said, "There's never enough time." Next year he will take a sabbatical leave to spend full time working at home.

"Ten-foot drawings and small collages in paper," are among his plans for the future. He is also working on a filmed documentary of his life. A biography, written especially for a junior reading series, will be published this spring by Dillon Press.

Morrison is represented extensively in private, corporate and institutional collections including those of the Minneapolis Institute of Arts, Walker Art Center, Whitney Museum of American Art in New York, Philadelphia Museum of Art, Virginia Museum of Fine Art, Joslyn Museum in Omaha, Neb., the Heard Museum in Phoenix, Ariz., the LaJolla Art Center, Calif., and the Amon Carter Museum in Fort Worth, Texas.

One of Morrison's most readily visible works is the 18 ft. by 98 ft. cedar mural created for the front of the new Minneapolis Regional Native American Center at Franklin and Bloomington Aves. The design is based on an Ojibway feather motif.

-UNS-

(A1-5,10,25,26;B1;C1,4)

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MARCH 16, 1976

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U OF M TUITION TO RISE \$11

(FOR IMMEDIATE RELEASE)

Tuition will increase \$11 per quarter for each student at the University of Minnesota next year.

The tuition increase, which is projected to raise an additional \$3.7 million, is included in a budget plan which the University administration has prepared for use in writing the final budget which must be approved by the Board of Regents in July.

The budget plan deals with the \$189 million general operations and maintenance fund which is derived primarily from state legislative appropriations and tuition. The \$139 million is an increase of \$8 million over the current fiscal year.

Faculty salary increases totaling 5 per cent as appropriated by the 1975 Legislature are also included in the budget plan, which proposes to allocate three per cent of that amount for cost-of-living raises and two per cent for merit and promotion increases.

The budget plan projects that enrollment at the University's six campuses will increase from 55,079 last fall to 57,293 next fall. The Twin Cities campus enrollment is expected to increase from 45,230 to 47,000.

"Tuition generated from additional students will be allocated to the budgetary units, primarily for enrollment-related needs," according to the plan as it was submitted to the Regents last week.

The enrollment increase is expected despite new enrollment limits in many fields.

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(A1-5;B1;C1,4,19)

(FOR RELEASE ANY TIME)

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U OF M PROGRAM OFFERS  
STUDENTS JOB EXPERIENCE

by Ronaele Sayre  
University News Service Writer

There are some things that can't be learned from a textbook. Job experience, for example.

An all too frequent frustration for new college graduates is the job interview, during which they are told it's just too bad they have had no job experience in their fields of study.

For nearly 70 years, students in business and technical fields have combined school work with on-the-job training and experience. It has only been in recent years that the same opportunities have been made available to liberal-arts students.

Meg Campbell, coordinator for cooperative education in the Office of Special Learning Opportunities (OSLO) at the University of Minnesota, reports that since 1969, the number of schools in the country with cooperative education programs has increased by 220 per cent. There are now nearly 900 schools which enable students to alternate class work and job experience.

"In addition to the valuable training, the student is paid for the work and receives academic credit for a special project that is usually completed during the quarter of work," Campbell said.

Through OSLO's program, University of Minnesota students have been assigned to positions with the Twin Cities office of Housing and Urban Development (HUD), the National Aeronautics and Space Administration (NASA), Houston, Texas, Northwestern Refining, St. Paul Park, Minn., and the University's Computer Center.

(A cooperative education program for students in mechanical and civil engineering at the University has been operating for a number of years. A similar program for students in electrical engineering has been in operation for four years, according to Larry Kinney, internship chairman. There are currently about 45 students

(MORE)

involved in the two-year program of alternating course work with work experience. Most of the placements are within the Twin Cities.)

Marcia Burlingame, Grand Rapids, Minn., and Sue Brewer, Bemidji, Minn., are among five students who will spend this spring quarter at the Houston Space Center as part of the University's program.

While not looking forward to apartment hunting in Houston, the two women are happy with their decision to participate in the program. "It will be nice to put down that work experience on a resume," said Burlingame, a junior majoring in political science.

Brewer, a junior in business administration, said she found out about the program through an advertisement in the student newspaper. "We don't know what we will be doing but it will be in one of three departments---budget, procurement or personnel," Brewer said.

David Swee, 1720 Como Ave. SE., is also headed for Houston. The opportunity to work, according to Swee, a junior in political science, is better than "getting lectured at."

The University students will be among several hundred students from across the country who participate in a cooperative education program at NASA. The students working in Houston this spring will return to the University for summer-session classes and will again be assigned to Houston next fall and winter quarters.

The summer will find Joan Demeules, 6216 Sunnyside, Minneapolis, working with HUD. She was assigned to the agency winter quarter and will be enrolled for classes at the University spring quarter.

Assigned to work with community agencies and individuals involved in various HUD programs, Demeules, a junior majoring in psychology and sociology, said there is a lot of "reality" that cannot be learned in the classroom. She hopes to experience some of that "reality" while at HUD.

The assignment with HUD means some office work and some field work, such as inspection this winter of a South Minneapolis apartment house where the tenants were

seeking HUD assistance in renovating the structure and operating it as a cooperative venture.

Roger Redmond, 2540 Aldrich Ave. S., is another University student who knows where he will be working this summer. Redmond worked winter quarter for Northwestern Refinery in St. Paul Park, Minn.

"The practical experience is invaluable," said Redmond, a junior in biological science. Working in the refinery lab, Redmond conducted quality-control tests on samples from refinery boilers and towers three days a week and took air and water measurements for environmental tests the other two days.

Participation in the program increases post-graduation job opportunities, according to Meg Campbell.

Students who are hired by a participating government agency are allowed to waive the usual merit test required for employment.

-UNS-

(A1,2,3,5,27;B1;C1,4,19,21;D12;E1,4,6,31)

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ARCHAEOLOGY IN CENTRAL AMERICA  
YIELDS PRACTICAL RESULTS

by Jeannie Hanson  
University News Service Writer

"In the past no one had money, but we ate well," the old woman said. "Now my husband grows sugar cane for the big company---he earns the money. Last week I had to ask him for some of it, and he threw it at me. Before, we grew our own food. It was ours."

The woman lives near the village of San Antonio in Belize, a British colony in Central America. She remembers some of the old ways of the proud and independent Mayan people whose history in Belize dates back to 1100 B.C. Their agricultural patterns had remained much the same from the time of the Spanish Conquest until about 20 years ago, when the agriculture and social structure began to change rapidly.

The woman, her husband and the nearly 300 other villagers are descendants of the ancient Maya, builders of one of the most complex prehistoric civilizations on earth. Flourishing between 600 B.C. and 850 A.D., they studied the stars, originated an elaborate calendar and built religious shrines in the jungle that rival the pyramids and Angkor Wat.

Equally amazing, the early Maya grew enough food to support a population of 1,000 persons per square mile on land that today supports only three to five persons per square mile and is largely uncultivated. It is the techniques of ancient Mayan agriculture that now show the most promise for the village of San Antonio and others like it.

The society in Belize is undergoing painful transition. "The Maya have imported the modern way of life, but they have imported it piecemeal," said Olga Stavrakis, anthropologist. She and her husband Dennis Puleston, archaeologist at the University of Minnesota, are researching the daily life of both the present and ancient Maya.

(MORE)

Their method: "archaeology by experiment." Their focus: the agricultural and social patterns of the ancient and modern Maya. Their goal: to make archaeology and anthropology useful to the people being researched.

The husband-and-wife team are part of the Rio Hondo project in Belize. Researchers from the University of British Columbia, Harvard University and the University of Minnesota are working there not only to uncover the past but to reconstruct it.

In three years of work---digging in water-filled trenches under the tropical sun---the researchers have uncovered evidence of four different methods of agriculture: raised-field canal complexes, terracing, tree-cropping of the breadnut tree, and multi-crop gardens.

Some 3,000 years ago, the Maya had dug drainage ditches around their fields, constructing a complex raised-field, flood-plain agricultural system. The "moats" also prevented inch-long leaf cutter ants from reaching the crops and permitted fish to be raised for their food value and for the rich sediments they contributed to the next season's fertilizer supply. The raised fields yielded ample corn in areas too low, too small and too swampy to be used for anything else.

The Rio Hondo project's discovery of these fields has required archaeologists to revise their entire view of ancient food production in the tropics. The Maya did a lot more than "slash and burn" (brief cultivation, than abandonment, of a cleared area). Their fields made possible permanent, continuous agriculture---the kind of food production needed for a large, stable and advanced civilization.

Detailed information about prehistoric agricultural patterns can often best be gained by both excavation and experiment. Pollen from ancient domestic corn found through excavation in Belize was planted as an experiment. Information about weeds, tools and the whole ecology of the ancient agriculture then began to emerge. The Pulestons believe this "archaeology by experiment" yields knowledge that also can be quite practical.

One immediate result is that two fields reconstructed by Dennis Puleston are now being cultivated successfully by the ancient methods, supplementing the food

(MORE)

volume and broadening the nutritional base for the villagers. The town leaders in Belize not only cooperate and benefit, but also suggest further topics for study, according to the Pulestons.

The effect of agricultural patterns on the village has been the research focus of Olga Stavrakis.

Until about 20 years ago, large-scale agricultural production by the men along with multi-crop gardens, pigs and chickens grown by the women provided nutritional variety for the villagers. Then the sugar cane trade came to Belize, offering money. Now villagers can "afford" to grow only the cane---everyone wants what the money-based economy can bring, from cosmetics to appliances to hospital care for babies. Everyone wants money---few people want to grow food.

The old food-based economy also had its advantages. The women grew the family's fruit and vegetables in the gardens and earned money by selling the surplus. Everyone ate corn and beans and fresh meat, fruit and vegetables. Now that everyone works in the cane fields, there is money, paid to the men, but there is less fresh food to buy. The village social patterns have changed, and families depend more on canned food, white rice, white flour tortillas and occasionally canned milk---all relatively expensive, less nutritious foods.

"The villagers are very conscious of what's happening," Stavrakis said, "but they find it hard to do anything about the changes."

Raised-field agriculture and multi-crop gardening, the means of survival 2,000-3,000 years ago in the area, seem a key to its future. With a modern reconstruction of the ancient system, the village could have the advantages of the past---fresh food and stable social patterns---along with the advantages of the present money economy.

The Rockefeller Foundation has already begun to fund multiple-crop projects in nearby Guatemala to encourage areas not to specialize in one crop for money and develop an unbalanced diet and an unbalanced culture because of it. When wiser agricultural patterns are part of the recent and the ancient past, as in Belize, the prospects are especially promising. Land not being cultivated can be reclaimed through techniques that have not been used fully for 500 years.

The temples and jade carvings of the ancient Maya may have little value now for the villagers in Belize, but their indigenous and ingenious agriculture may prove to have great value. The Pulestons and the other members of the Rio Hondo project are helping descendants of the ancient Maya rediscover their past to enrich their present

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contact BILL RICHARDSON, 373-7517

MTE  
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JAC

EAU CLAIRE MAN TO RECEIVE  
U OF M ALUMNI AWARD

(FOR IMMEDIATE RELEASE)

Eau Claire resident Jack Stromwall today (March 17) received one of the University of Minnesota's highest awards in a ceremony at Menomonie.

Stromwall, a 1950 graduate of the University of Minnesota, was presented with the Alumni Service Award by Alumni Association executive director Edwin Haislet.

The award, recommended by the Alumni Association and awarded by the University's regents, cites Stromwall's "dedicated work in alumni affairs," particularly as an organizer of the association's Eau Claire chapter and member of the association's national board.

Stromwall, an insurance executive, is married and father of four children.

-UNS-

(A1,2;B1;D3)

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contact JUDY VICK, 373-7515

**ARTIST TO DISCUSS  
'WOMAN'S SENSIBILITY'**

**(FOR IMMEDIATE RELEASE)**

"A Woman's Sensibility" is the topic of two free public lectures by artist Miriam (M.S.) Schapiro to be presented at the University of Minnesota Wednesday, March 31, and Tuesday, April 6.

Both events will be in 125 West Bank Auditorium Building at 8 p.m.

The lectures will trace the development of art from the perspective of a woman's sensibility and show how that sensibility is manifested in materials and forms used by women artists.

Schapiro, who lives in New York, has been represented by the Andre Emmerich Gallery in New York, for 16 years. Her work has been shown throughout the United States.

Painting and prints of hers are owned by the Museum of Modern Art, New York; the Whitney Museum of American Art, New York; Stanford University, Mills College and the Hirshhorn Museum. This year she has been on tour and has lectured at the Chicago Art Institute, the Kansas City Art Institute, the San Francisco Museum of Art and the Brooklyn Museum Art School.

Her work is currently shown in a large retrospective exhibition at the College of St. Catherine in St. Paul, where she will be teaching a class in feminism and art this spring. She will also be teaching a workshop for credit on "A Woman's Sensibility" at the University spring quarter. The class is already filled to capacity.

Her five-week residency in the Twin Cities is sponsored by the University of Minnesota studio arts department, the College of St. Catherine and the Minnesota State Arts Council. She will also be making a suite of prints at the Minneapolis College of Art and Design.

-UNS-

(A2,4,5,21,24,25;B1;C1,4,18)

UNIVERSITY OF MINNEOSTA  
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NEWS PEOPLE: For further information  
contact JUDY VICK, 373-7515

'U' BICENTENNIAL EXHIBIT  
TO OPEN FRIDAY IN WILLMAR

(FOR IMMEDIATE RELEASE)

More than 400 architectural photomurals, about 45 paintings and 30 examples of Native American art will be included in the Bicentennial Exhibition of Minnesota Art and Architecture opening Friday, March 26, in Willmar, Minn.

This will be the first showing of the exhibit outside the Twin Cities area. It is scheduled to visit 19 Minnesota cities before the end of 1976. Objects from Willmar area private collections will be featured in this exhibition.

The exhibition has been prepared by the University of Minnesota Gallery in conjunction with the Minnesota Society of Architects and is being circulated throughout the state by the University of Minnesota Agricultural Extension Service and Continuing Education and Extension. It was first presented at Dayton's in Minneapolis last month.

The architecture portion of the exhibit, which shows many aspects of Minnesota life from the earliest settlements to the present time, may be seen at the Kandi Mall in Willmar. There are examples of barns, houses, resorts and gas stations as well as more famous architectural monuments such as the State Capitol complex in St. Paul.

The paintings, all of which were done before 1914, may be seen at Willmar Community College Gallery. The Native American arts will be displayed at the Bank of Willmar and Trust Company.

Local arrangements for the exhibit have been made by a committee of volunteers, chaired by Dr. John Torgelson, president of Willmar Community College. Local sponsors are the Otto Bremer Foundation and the Bank of Willmar and Trust Company.

(MORE)

Transportation for the exhibit, which will travel throughout the state in a large Bicentennial-decorated truck, has been provided by the Minnesota Motor Transport Association, Fruehauf Division of Fruehauf Corporation, St. Paul and Thermo King Sales and Service, Inc., St. Paul. Additional equipment for the Willmar visit has been provided by GMC Truck and Coach Division, South St. Paul. Instructors from the Truck Driver Training Program of the White Bear Lake Area Vocational-Technical Institute will drive throughout the state and will be assisted in Willmar by drivers from Murphy Motor Freight Lines, Willmar.

The exhibition will close in Willmar Sunday, April 4.

In conjunction with the exhibition in Willmar two special programs will be offered free to the public.

"The Arts on the Minnesota Frontier" will be the topic of an 8 p.m. lecture Thursday, March 25, in the Willmar Community College theater. Charles Sigmund, University assistant music professor, will discuss frontier Minnesota life and culture.

Marion Nelson, University professor of art history, will discuss "Norwegian Immigrant Art in Minnesota" at 8 p.m. Thursday, April 1, in the Willmar Community College theater. Both programs are supported by funds from the National Endowment for the Humanities.

-UNS-

(A1-5;B1)

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MTR  
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'U' TO VOTE STOCK  
IN ITS PORTFOLIO

(FOR IMMEDIATE RELEASE)

The University of Minnesota will no longer be a silent partner with the stockholders of the companies in which the University has invested its \$40 million portfolio.

Under a new policy, the Board of Regents will consider the recommendations of a faculty-student committee on whether the University should abstain from voting certain shareholder resolutions.

Formerly, the University automatically abstained from voting, a policy begun in the late 1960's to maintain "institutional neutrality" on controversial issues.

Barbara Knudson, chairperson of the University committee on social responsibility in investments and University College dean, said that institutional neutrality is a myth. "By not taking a stand, you are taking a stand," she said.

The policy recommended by University vice president James F. Brinkerhoff and developed by Knudson's committee would place the University in the position of "actively abstaining" on issues of concern to the campus, she said.

Under the new policy, the University will automatically give its proxies to management except when there are shareholders' resolutions on issues that the committee considers important.

In those cases, the University will announce publicly that it is abstaining and will write a letter to company officials informing them of their position. In some rare cases, the University may vote against management on the resolutions, Knudson said.

The University has already abstained on two disclosure issues. At their March meeting, the Board of Regents voted to abstain on resolutions calling for corporations to disclose all amounts of money they have paid for political activities and to disclose their equal employment opportunity practices.

(MORE)

Political disclosure resolutions were up for consideration by seven companies in which the University holds stock: American Telephone and Telegraph, International Business Machines, Exxon, J.P. Morgan, Travellers' Insurance Company, Phillips Petroleum, and Standard Oil of California.

Resolutions on equal employment opportunities were up for consideration by stockholders of Merck Drug, Warner Lambert and Avon.

Because the policy is so new, Knudson said, the University was unable to look into additional issues. Subjects which could be up for consideration at future shareholders' meetings are the B-1 bomber, ecological issues, strip mining and other kinds of disclosure resolutions, she said.

The University's position does not pass judgement on the companies, but calls attention to issues that are of concern to the campus community, Knudson said.

"I think we would be in great trouble to play judge in some of these things," she said. "What we want to do is focus on the issue and force the company to wrestle with the issue."

The University's actual voting power in these companies is very small, but the attention caused when an institution takes a stand on an issue, writes a letter and sometimes sets up forums to discuss the topic can have some influence, she said.

Brinkerhoff has already received a call from a local vice president of the telephone company asking for an explanation of the University's position on the ATT disclosure resolution.

"I don't think for a moment we are going to turn corporate behavior around overnight," she said, but the policy can serve as a "consciousness-raising mechanism."

Brinkerhoff was an associate vice president at the University of Michigan when students became concerned over university investments in Dow Chemical Co., which was producing napalm for use against Vietnamese civilian populations.

(MORE)

"At the time," Brinkerhoff said, "students and faculty were concerned about the activities of a corporation, there was no mechanism for those concerns to be aired."

The issue became an educational opportunity with officials from the company coming to the campus to explain their position while students were given the chance to voice their concerns, Brinkerhoff said.

Students and faculty will now be able to express their concerns about issues which involve companies in which the University of Minnesota holds stock. "It provides an ongoing opportunity to develop an educational forum out of an issue that may be generated in the future," he said.

-UNS-

(A1-5,15;B1,12;C1,4,21;D12;E4,13)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
MARCH 19, 1976

MTR  
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NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

CONFERENCE TO DISCUSS  
JAPANESE-AMERICAN RELATIONS

(FOR IMMEDIATE RELEASE)

Three Japanese scholars on a tour of five American cities will discuss Japanese-American relations during a one-day conference Wednesday (March 24) at the Sheraton-Ritz Hotel in Minneapolis.

The conference will open at 8:45 a.m., and the first talk at 9:30 a.m. will be on "Japanese-American Communications" by Masao Kunihiro, Foreign Ministry consultant and professor of anthropology at the International College of Commerce and Economics at Tokyo.

Takashi Konami, professor of economics at the Tokyo University of Foreign Studies, will speak on "Japan's Economy - Today and Tomorrow" at 10:45 a.m.

At 1 p.m. "The Japanese Political Scene" will be discussed by Tasuku Asano, professor of political science at the International College of Commerce and Economics. Asano translated David Halberstam's book, "The Best and The Brightest" into Japanese.

A panel discussion on "Does the Twenty-First Century Belong to Japan?" will begin at 2:15 p.m. The three Japanese speakers will participate as panelists along with Jerry K. Fisher, assistant professor of history from Macalester College, and Edward H. Copeland, professor of East Asian languages at the University of Minnesota.

Cost of the conference is \$10 and includes lunch. Reservations should be made through the World Affairs Center, 306 Wesbrook Hall, University of Minnesota, Minneapolis, Minnesota 55455, 373-3799.

-UNS-

(A1,2,4;B1)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-63 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
MARCH 19, 1976

NEWS PEOPLE: For further information  
contact BOB LEE, 373-5830

MTR  
N47  
JAP

'FISHING LURE' PLUGS  
BLOOD VESSEL LEAK FOR  
'U' TRANSPLANT PATIENT

(FOR IMMEDIATE RELEASE)

A handful of what at first appears to be miniature fishing lures has saved the life of a 17-year-old girl at the University of Minnesota Hospitals.

Seven years ago Sharon Pape of Dwight, Kansas, received a transplanted kidney at University Hospitals from her mother, Mrs. Ralph Moutz. Everything went well at the time and she and her mother returned to Dwight, which lies 65 miles southwest of Topeka.

But then about five weeks ago, things changed. Sharon lost much of her energy and spent restless nights trying to sleep. She returned to University Hospitals. The diagnosis was severe heart failure.

Her doctors didn't need stethoscopes to hear the continuous loud murmur on her back where her left kidney had been removed in 1971. When her kidneys and spleen were taken out prior to the transplant, her renal artery and vein were surgically tied off. Somehow, over the years, the blood-vessel walls between the two stubs were weakened by the continuous pressure of flowing blood and a hole developed.

A diagnostic procedure known as an angiogram (an x-ray view of blood vessels) confirmed the "communication" or aneurysm between the two renal blood vessels. The half-inch hole was causing Sharon's heart to work twice as hard because she was "losing" half her blood volume through the opening.

The petite teenager was a poor surgical risk for several reasons: she was already in heart failure, she had broncho-pneumonia, she was a diabetic, and she was taking regular doses of anti-rejection drugs.

Her physician, Dr. Michael Mauer, consulted with the cardiovascular radiologists, Dr. Kurt Amplatz and Dr. Augustin Formanek, who proposed trying to close the

(MORE)

hole without surgery by using a small plastic tube (catheter) and a new device, technically called artificial embolic material.

At first glance the device looks like a fishing lure---a steel coil body with a streaming white wooly tail---but the tiny device had a far more serious purpose.

Amplatz and his team (Dr. S. Murthy Tadavarthy, Dr. Wilfredo Castaneda and x-ray technicians Mary Smith and Anette Beschta) inserted a slender hollow catheter through the skin into the artery of Sharon's leg and pushed the tube under x-ray guidance into the site of the aneurysm.

A "wooly tail" was inserted in the catheter and set on its way to plug the hole. It stuck at the aneurysm site, and nine more had to be put in place along with a few smaller sponges that expanded to six times their normal size in the blood stream. The sponges are the same kind used to wash dishes.

The man-made dam held and closed off the hole. Four days later Sharon's kidney, which had stopped functioning, started producing urine again. Now the patient is fine and expects to go home soon.

Amplatz explained that Sharon's body would surround the embolitic material with fibrin, a clotting protein, and heal it into a permanent plug. "This is the first time anyone has been able to close such a large 'communication' successfully without surgery," he said.

-UNS-

(A1,2,3,4,5,8;B1,5;C1,4,19;D6;E3,11,25)

(FOR IMMEDIATE RELEASE)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
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Telephone: 373-5193  
March 19, 1976

MTR  
N47  
JAP

TESTS MEASURE BRAIN DAMAGE  
CAUSED BY PSYCHOSURGERY

by W. R. Hafling, Ph.D.  
University News Service Writer

"...a chart at the bottom...said in heavy black letters,  
MCMURPHY, RANDLE P. POST-OPERATIVE. And below this was  
written in ink, LOBOTOMY.

"They pushed it into the day room and left it standing  
against the wall, along next to the Vegetables."  
--Ken Kesey, "One Flew Over The Cuckoo's Nest."

An operation on the brain to control or alter behavior is called "psychosurgery." The most familiar version is known as "lobotomy" but there are a great many other variations.

Despite some recent court decisions which have prohibited psychosurgery in certain cases involving institutionalized mental patients, psychosurgery is not against the law. In fact, the practice seems to be on the increase once again.

As University of Minnesota psychology professor Alan H. Roberts observes, "during the last ten years, interest and application in psychosurgery has revived and there is a trend toward the use of psychosurgical procedures for the treatment of numerous disorders not considered psychotic."

Recently, legislation has been introduced in some states, including Minnesota this year, aimed at bringing such psychiatric practices as psychosurgery and electroconvulsive (often referred to as "shock") treatment under legal review and control. The chance of such control becoming law however, appears slim at this time.

Some physicians, in particular psychiatrists, have argued strongly against such legal controls on their practices, contending that this is legislative interference with medical practice and decision-making.

The National Institute of Mental Health (NIMH), on the other hand, has been asking for strict legal criteria governing such practices. In addition, the National Commission on the Protection of Human Subjects in Research has asked for a moratorium

(MORE)

on psychosurgery because researchers and clinicians disagree as to whether there is sufficient experimental data to justify psychosurgery as an accepted medical practice.

Tests Measure Brain Damage--

Roberts, with Mary B. Riddle, associate scientist in psychiatry at the University, recently reviewed and reanalyzed the data on the amount of brain damage caused by psychosurgery. Finding that standard intelligence tests were not adequate for such measures, they focused on results of a test known as the Porteus Maze Test.

The Porteus Maze Test consists of a series of increasingly difficult-to-solve mazes, quite similar to those often seen in magazines and newspapers, which the person must solve by moving a pencil through them without getting trapped in a blind alley.

In their review paper, Roberts and Riddle write that the Porteus Maze "appears to test the capacity of the person to look ahead, attend to appropriate information, and make intelligent decisions."

They found that some of the older studies of the effects of psychosurgery on brain functioning were "quite misleading" because the data had not been corrected for practice effects from repeated tests on such mazes. When reanalyzed, correcting for the effects of practice, the Porteus Maze results showed that psychosurgery had clearly caused brain damage.

The severity of brain damage was found to be related to the site of surgery and the length of time between surgery and testing. "The more posterior (further back from the front of the brain) the frontal lobe surgery and the shorter the post-operative interval, the greater the measured loss in Maze Test ability," the researchers concluded.

Evidence was also uncovered which indicated that psychosurgery patients also made increased numbers of repeated errors on the Porteus test.

Roberts said that it is important to consider that "while there are few reports of intellectual deterioration following the use of the 'newer' psychosurgical procedures, there was little evidence of intellectual loss in the 1940s and early 1950s" until certain psychological tests were used to evaluate outcomes.

(MORE)

Making it clear that the review paper has no relevance to the question of the amount of brain damage caused by the more commonly used electroconvulsive treatment (EST), Roberts said, "It is important to note, however, that for years psychosurgery was thought to have no permanent side effects until proper data were collected and the data analyzed in appropriate fashion." (Research by other psychologists, however, already reported in the professional journals, has concluded that electroconvulsive treatment also causes permanent brain damage.)

In 1936, Egas Moniz, was awarded a Nobel Prize for his work in popularizing one form of psychosurgery, the prefrontal leucotomy. By 1961, however, the former superintendant of St. Elizabeth's Hospital in Washington, D.C., testifying before a Congressional hearing on psychiatric practices said, "I feel a bit guilty about ever having a hand in doing that to any of our patients, because it is an irreversible damage that is done to the brain of the patient."

Commenting on a report published by a Minneapolis psychiatrist and his colleagues, which reviewed the results of lobotomies he had performed in private practice (most of them on housewives), the editors of the "Archives of General Psychiatry" (Vol. 32, August 1975) advised, "Recent reviews conducted by the institutes of the Department of Health, Education and Welfare (HEW) have emphasized both the paucity of information and the necessity for fundamental scientific animal study of brain behavior interrelationship, as well as social and ethical study."

-UNS-

(A1,2,3,4,5,7,8,13,16,21;B1,5,6,9,10;C1,4,19;D10,12;E1,2,3,11,12,25,27)

MTR  
N47  
9/4/70

UNIVERSITY OF MINNESOTA  
CONTINUING EDUCATION IN THE ARTS  
AGRICULTURAL EXTENSION SERVICE  
CONTINUING EDUCATION AND EXTENSION  
320 Wesbrook Hall  
Minneapolis, Minnesota 55455

News people only: For further information contact DAVID THIMSEN, 373-5170  
Please do not release phone number.

OUROBOROS TOURS BEGINNING

(FOR IMMEDIATE RELEASE)

Ouroboros South, the experimental energy house built by students from the University of Minnesota, is opening for public tours beginning Saturday, March 20. The house is located at the University's Rosemount Research Center.

The one hour tours will be given by appointment on Saturday, Sunday and Monday afternoons between 1 and 5 PM. Persons who wish to see the house should write to Ouroboros South, 320 Wesbrook, University of Minnesota, Minneapolis 55455, and request a specific date and time. Tour cost is \$1.50 for each person over 12 years old. The tours are sponsored by the University's Agricultural Extension Service and Continuing Education and Extension.

The house uses energy conserving designs such as a sod roof, semi-underground construction, teepee-like ventilation, and a low profile to the weather. In addition, several energy collecting experiments are being done. Solar panels are used to collect heat for the house and a wind generator system is under construction to supply electricity for the house. An aerobic waste digester is used to treat sewage.

The house was designed and constructed by Architecture students at the University. Students at the Dakota County Vo Tech Institute also helped with the construction. Project Director Dennis Holloway says that the house was not designed to be a "finished product". "The house is an exceptional opportunity for both students and the public to study and learn about energy conservation and the energy alternatives to our diminishing oil and gas supplies". Professor holloway says that the house is a continuing experiment. "Changes are being made in the

design and construction as more information is collected about the operation of the house".

Funds and building materials for the house were donated by several local businesses and foundations including the University of Minnesota, the Bayport Foundation, Andersen Corporation of Bayport, and Northern States Power.

Ouroboros South is part of Project Ouroboros. The project also includes Ouroboros East, a redesign and reconstruction of an existing St. Paul house to make better use of energy resources, and the Winona Exhibition, a community-wide study of the use of alternative energy systems and energy conserving principles.

OUROBOROS TOURS BEGINNING (page 2)

UNIVERSITY OF MINNESOTA NEWS EVENTS

(FOR IMMEDIATE RELEASE)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
MARCH 22, 1976

NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-7517

MTR  
N47  
9A4P

'SAMPLER' OFFERS INEXPENSIVE  
INTRODUCTION TO UNIVERSITY

Dinosaurs to the Democratic Party and buying habits to Bach's B-Minor Mass are all embraced in the University of Minnesota spring Sampler program.

The \$1 lectures, part of regular night extension classes, are designed to acquaint the public with the sorts of courses offered by the University, without requiring major investments of time or money.

Among the 12 lectures to be offered during March, April and May are "The Curious Case of Sherlock Holmes or Come, Watson, Come, the Game is Afoot;" "Religion and Architecture: The Temple, the Synagogue, the Church" and "Should Doctors Always Tell the Truth?"

All lectures are self-contained and require no preparation or prior academic experience, but interested persons must register in advance---no tickets will be available at the doors. Persons over 60 years of age will be admitted free.

More information may be obtained from Continuing Education and Extension, telephone 373-3039.

-UNS-

(A1,2,4,5,20;B1)

(FOR RELEASE ANY TIME)

Feature story from the  
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March 23, 1976

MTP  
W47  
JAG

NO GREAT RESERVES OF FOSSIL  
FUELS FOR MINNESOTA

by Jeannie Hanson  
University News Service Writer

A farmer drilling for water hits a pocket of natural gas, or a two-inch deposit of coal. A hiker sees an oily film on the edge of a wilderness stream. Does this mean Minnesota could join Norway, Saudi Arabia, Venezuela and North Dakota by striking it rich in a fossil fuel?

Probably not.

According to Matt Walton, director of the Geological Survey at the University of Minnesota, much of Minnesota may be simply too old geologically to be hiding any significant amount of a fossil fuel. And the rest just missed the boat environmentally.

"Small amounts of coal and natural gas have been found over the years in Minnesota," Walton said. "But the geological environment for the formation of significant amounts of oil, coal and natural gas simply does not exist in Minnesota. Our only significant fossil fuel is peat."

The major fossil fuels---coal, oil and natural gas---are formed only under special geological conditions, he said. First, there must be a large amount of animal life in a large body of water or growing in water-saturated wetlands. These plants or animals must die and then decay under water, where there is little oxygen and few bacteria to consume the organic matter.

Then the decayed organic sediments must be buried by succeeding layers of inorganic sediments forming sandstones, shales and limestones. As the sediments accumulate to depths of hundreds or thousands of feet, they are pressed and heated underground, over millions of years. And, finally, these chemically created fossil fuels must be discovered before they have decayed, leaked out or disintegrated.

(MORE)

Oil, coal and natural gas are all formed in this basic way, but there are some variations. Oil begins as marine organic life, is a liquid hydrocarbon, and takes several millions of years to develop. Coal begins as land plant life, usually in a vast swamp, is a solid hydrocarbon, and is also created over several millions of years.

Natural gas, a gaseous hydrocarbon, is a more volatile product of the same process. It simply escapes up through the rock and into the air unless it is formed under a thick blanket of impervious rock. Once formed, all these fossil fuels, are eventually degraded through natural chemical processes into graphite or relatively inert carbonaceous compounds---all that is left in rocks more than four or five hundred million years old.

According to Walton, Minnesota simply missed out on this series of events but did have several near misses.

More than two billion years ago, there may have been large amounts of oil and coal in Minnesota, Walton said. "We've found abundant graphite in two-billion-year-old rocks in Northern Minnesota. It may be decomposed oil and coal." Walton also points out that the oldest rocks yet analyzed on earth are from the Minnesota River Valley---rocks 3.8 billion years old. Minnesota rocks are near the middle of the continent and may represent the nucleus of the formation of the continent. Only rocks from the moon and meteorites are older.

In other words, much of Minnesota's geology may be too old to contain fossil fuels, even if they had been formed at some time, Walton said.

Minnesota missed a more recent chance to become oil- and coal-rich between 500 million and 350 million years ago. Then, southeastern Minnesota was covered by a shallow sea, which deposited sandstone and limestone sediments containing marine fossils.

These could have developed into fossil fuels. But the marine life was apparently not rich enough or the sediments thick enough to form significant amounts of oil. And most of what little may have been formed would probably have decomposed by now, Walton said.

(MORE)

Still another chance for riches was missed only 200 million years ago, he said. At that time there may have been large, active forests in Minnesota on the coastal plains of ancient seas. But the dry land, shallow shorelines, and climate in Minnesota did not provide the proper environment for preserving enough of the plant life to form significant amounts of the fossil fuels.

Minnesota's last opportunity to be geologically rich took place 100 million years ago, during the Cretaceous period when a shallow inland sea flooded the state. Evidence of this stage---shark teeth and other marine fossils---has been found along the southern edge of the Iron Range. But, again, the water did not get deep enough or the organic sediment thick enough or the climate right to make large amounts of fossil fuels.

Minnesota has only some scattered beds of coal a few inches thick---not worth mining---in the Southwestern quarter of the state and along the North and South Dakota border. These are testimony to the shoreline of the rich ancient sea, which extended from the Gulf of Mexico to the Arctic Ocean---too far west to help Minnesota. It gave the Dakotas, Montana and the west their rich fossil fuels.

Ancient Minnesota apparently never had enough forests and water at the same time with the right environmental conditions to create coal, oil or natural gas, Walton said. A deep, 1,619 ft. hole, drilled through sedimentary rock at Hollandale near Albert Lea to test the thickest part of the marine sedimentary formations in the state, revealed nothing.

But what was and is being created in Minnesota is peat, he said. Peat can be thought of as coal in an early stage of development. The decayed vegetable matter has not been covered by other deposits and compacted. This resource can provide about half the heat content of bituminous coal and may well prove quite valuable to Minnesotans, according to Walton and others. No one is waiting around for coal.

Even if fossil fuels were never formed, Minnesota's greatest natural resource owes much to the state's climate and geology. Ever since the Ice Age a few thousand years ago when glaciers 10,000 feet thick covered parts of the state, the vegetation of Minnesota has died every year and fallen to the ground. The cold winters have inhibited bacterial action and prevented the sediments from decaying too rapidly and disappearing. The sediment goes into the "deep freeze" to become available as humus for next year's growth, forming the rich black soils of Minnesota, Walton said.

-UNS-

(A1,2,7,18;B1,9;C1,3,4,5;E24,26)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
MINNEAPOLIS, MINNESOTA 55455  
MARCH 23, 1976

MTR  
N47  
JH4P

NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

PEOPLE'S BICENTENNIAL FOUNDER  
TO SPEAK AT UNIVERSITY

(FOR IMMEDIATE RELEASE)

Jeremy Rifkin, founder and director of The People's Bicentennial Commission which is in favor of an alternative Bicentennial observance, will be guest speaker at the University of Minnesota at 8 p.m. Thursday, April 29, at Coffman Union.

Rifkin's appearance is part of a series of programs titled, "Angles of Vision," dealing with social and political issues and the arts and sponsored by the Coffman Union Program Council and the American Studies Graduate Association. All programs are free and open to the public.

Rifkin will speak on the topic, "From King George III to I.T.T., Exxon and G.M."

The Angles of Vision lecture series will begin Friday, April 2, with a poetry reading by Ishmael Reed at 8:30 p.m., in 5 Blegen Hall on the West Bank.

All other programs will be at Coffman Union and scheduled speakers and topics are:

April 8-7:30 p.m.-Ray Browne, faculty of American studies at the University of Maryland, popular culture in America.

April 22-7:30 p.m.-Gene Wise, American studies faculty at Case Western Reserve University, Watergate and the cultural identity crisis of the 70's.

May 4-12:30 p.m.-Meridal Leseur, poet, historian and writer.

May 6-noon and 8 p.m.-Jose Villarreal, novelist and faculty member at Santa Clara State College and Rolando R. Hinojosa-S, faculty member, Texas A & I University, the cultural-historical perspectives of Chicano experiences.

May 11-1:15 p.m.-Marion John Nelson, University of Minnesota, folk arts of Norwegians in America.

May 27-7:30 p.m.-Kathy Laughlin, local film maker, the art of film.

(MORE)

June 1-7:30 p.m.-N. Scott Momady, faculty member at Stanford University, will be guest speaker. Momady received a Pulitzer Prize for the novel, "House Made of Dawn," in 1969.

An Angles of Vision film series on Sunday evenings, beginning April 11, will feature popular film classics followed by discussion. The films scheduled are: Marty, April 11, 7:30 p.m.; High Noon and Gunfighter, April 25, 6:30 p.m.; Tell Them Willie Boy Is Here, May 2, 7:30 p.m.; Mr. Smith Goes To Washington, May 9, 7:30 p.m.; Mildred Pierce, May 16, 7:30 p.m.; Grapes of Wrath and Wild Boys of the Road, May 23, 7:30 p.m.

A series of British films will be presented beginning April 28. All films are scheduled for 7 p.m. The Lady Vanishes-April 28; Loneliness of the Long Distance Runner-May 5; A Taste of Honey-May 12; The Hireling-May 19.

-UNS-

(A1-5,24,25;B1)

*U. S. ...*

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, S-68 MORRILL HALL  
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MARCH 24, 1976

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SAYRE

NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

MEMO TO NEWS PEOPLE

The appearance of Sen. Hubert Humphrey at a noon luncheon Saturday (March 27) before the national student association organizing convention at the Dyckman Hotel has been rescheduled for 3 p.m.

University President C. Peter Magrath will speak to convention delegates at noon Friday. Speaker at the dinner at 6 p.m. Friday will be Dr. George F. Hamm, vice president for Student Affairs, Arizona State University and chairman, Council for Student Affairs, National Association of State Universities and Land-Grant Colleges.

-UNS-

(A1-5;B1)

(FOR RELEASE ANY TIME)

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March 24, 1976

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1147  
JHP

WOMEN'S MOVEMENT MAY HAVE  
STRENGTHENED AMERICAN FAMILY

by Bill Huntzicker  
University News Service Writer

The American family, far from being threatened by questions raised by the women's liberation movement, may actually have been strengthened by contemporary feminism.

Gayle Graham Yates, assistant professor of women's studies at the University of Minnesota, believes that young people are now making decisions about marriage and their life styles more carefully than they did in the past.

"I think marriage probably is becoming stronger because it's more deliberate," Yates said in an interview. "I think we've been through a shock period where our fundamental values in this society have been challenged."

She said young people are making a wider range of choices than they did in the past. "There are a lot of people who are choosing not to be married, and that's more deliberate," she said.

"The assumption that you have to be married is changing very rapidly. This generation of college students is going to decide---really decide---to get married rather than just drift into marriage as was more the pattern of even a decade ago," she said.

Yates, who has published a book summarizing the main ideas of modern feminism, said social health would be improved if people would accept a variety of family forms as normal.

"While I'm very committed to the marriage I'm in and to marriage as a possibility, I'm also committed to the social health of a pluralism of family forms. I think it would be a measure of social health if we even further made an affirmation that homosexual devoted relationships are a kind of family form that we support socially rather than call some kind of deviation.

(MORE)

"Or we could have family groupings based on some other arrangement, other than man, woman and two children, or some other kind of social contract where three or four pairs of people were committed to each other as a family, may be legally endorsed," Yates said.

Despite her emphasis on the social potential of a variety of life styles, Yates is a parent in a nuclear family---woman, man and two children.

"I think that marriage, the way I'm married, will be strengthened with a pluralism of family forms and the belief that marriage is a clear option and not something that we just sort of fall into," she said.

What's not traditional in her family was the determination of both partners, Gayle, and her husband, Wilson Yates, who is on the faculty of United Theological Seminary in New Brighton, that they would have an equal chance to go to graduate school and strive for faculty positions.

When Wilson and Gayle were married 14 years ago, the idea of "shared role marriages" was not common, even in Massachusetts where she was a graduate student at Boston University and he was a student at Harvard Graduate School.

"The conventional pattern adhered to by most of the people we knew was wife supporting husband through graduate school, wife staying home and wife taking care of children and we met with a lot of opposition in our personal lives," she said.

Care of their two children---Natasha, 12, and Stiles, 8,---is also a shared responsibility. "My husband has a very deep and very rich nurturing capability," she said.

Today the Yates family is not so unusual. "There are more people now who are dividing household responsibilities and dividing the getting of jobs," she said.

The recession has created an economic necessity for "house husbands," who stay home and care for the house and children because they are unable to find jobs, she said.

Alternatives to mothers staying at home all day have been sought as part of the feminist movement and there has been varying quality as to what's available, Yates said. "Women, primarily, have had to fight for things like day care centers," she said.

(MORE)

To change the norm of the mother as constant companion for the child is beneficial to the child rather than harmful as some people seem to think, Yates said, adding that a child should have several adult models.

"Having people trained as specialists in child care probably has some long-range advantages over having every woman in society being expected to be a child-care specialist," she said.

The Yates' life style is within what Gayle calls "the androgynous perspective" in her book, "What Women Want," which analyzes the main ideas of the contemporary feminist movement.

Yates uses a definition of her perspective provided by feminist Carolyn Heilbrun. "This ancient Greek word---from andro (male) and gyn (female)---define a condition under which the characteristics of the sexes, and the human impulses expressed by men and women, are not rigidly assigned," Heilbrun wrote.

What that means, in Yates view, is that men and women should rethink their cultural relationships rather than accepting the present system or blaming each other for their sexual roles.

Her book, which was published by Harvard University Press, classifies the ideas of the women's movement into three groups. Yates' androgynous perspective is the one in which she finds the most hope for the future.

The feminist perspective is one in which women want equal status with men in the present society and political system. The women's liberationist perspective, she said, includes women who have a class analysis or see men as the enemy.

In the androgynous perspective, "values should be arrived at, decisions made, and society ordered on the basis of women and men together," she said.

Her categories are not rigid, she said. "I might even vary myself. One morning I might get up and feel that this will be a women's liberationist kind of day and another day might be an androgynous kind of day," she said.

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MARCH 25, 1976

MTR  
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NEWS PEOPLE: For further information  
contact BILL RICHARDSON, 373-7517

'U' BUSINESS CONFERENCES TO  
RUN GAMUT OF EVERYDAY PROBLEMS

(FOR IMMEDIATE RELEASE)

Common business problems---and some that aren't so common---will be addressed this spring by University of Minnesota Continuing Business Education programs.

Workshops and courses on the future of employee relations, objective management and small business management are just three of 22 scheduled from March through June.

A four-conference series for secretaries will include programs in transactional analysis and interpersonal communication for executive secretaries.

Conference fees range from \$45 for some one-meeting courses to \$295 for the eight-session "Finance for Non-Financial Managers."

All conferences are open to the public. Additional information and registration material may be obtained from Continuing Business Education, telephone 373-3630.

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(A1,2,5,15:B7)

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MARCH 25, 1976

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NEWS PEOPLE: For further information  
contact BILL HUNTZICKER, 373-7512

JAPAN FACES MANY CRISES  
SIMILAR TO THOSE IN U.S.

(FOR IMMEDIATE RELEASE)

Japan, like the United States, is faced with the need to re-evaluate the social, economic and political directions the nation has taken since World War II.

Revelations that Lockheed Aircraft has been bribing high Japanese officials have been met with responses that indicates the seriousness of some of the changes taking place in Japanese society.

"The Lockheed affair will have a very far-reaching political impact," Tasuku Asano, a Tokyo political scientist, told participants in a one-day conference in Minneapolis. "It marks the end of an era and the start of a new one."

"The scandal is of a great enough significance to compare to the coming of the black ships of Commodore Perry in 1853, when a combination of forces made it possible for Perry to succeed in what the history books record as the 'opening of Japan to the modern world.'"

The legitimacy of the post-war government and the constitution imposed by the U.S. during the Occupation has been called into question by Japan's current political and economic situation, Asano said. Specific issues which have surfaced include the relationship between Japan and the U.S., Japanese independence, democracy and pacifism.

The Lockheed affair brings into doubt the so-called independence of Japan from the United States and the other industrialized nations, he said.

Asano said the question of independence is raised by the presence of U.S. bases in Japan which still have authority under a 1952 treaty to intervene in Japanese internal affairs to "maintain law and order."

The Island nation is particularly vulnerable in international relations as a result of a number of post-war economic trends, Asano said.

(MORE)

"In 1955, Japan could attain more or less self-sufficiency in food," he said. "The self-sufficiency level is now down to 50 per cent or less with the resources having been shifted from agriculture to other sectors of the economy."

The rising costs of energy further aggravate the situation. Japan, which in 1960 got 56 per cent of its energy from internal sources, now gets only about 10 per cent of its power from domestic sources, Asano said.

"We are approaching the limits of our rapidly expanding post-war economy," said Rakashi Konami, professor of economics at the Tokyo University of Foreign Studies. "The implications of this are far-reaching and difficult to analyze."

Japan will not return to a period of rapid economic growth similar to that experienced in the post-war period, he said.

"Quality rather than quantity will be emphasized and the growth-rate of the economy will somehow slow down," Konami said. "There are points where growth will be accelerated and there are points where growth will be decelerated."

"The value-orientations will change with more people coming to place more emphasis on private values as distinct from public values," he said.

It's becoming more difficult, for example, to find new sites for industrial expansion with local communities opposing proposed power plants and steel mills for environmental reasons, Konami said.

Konami said Japan is entering the "service stage" of its economy, a period in which the emphasis on services will come to exceed 50 per cent of its gross national product. "The process will involve a search for new values and new ways of thinking," he said.

Masao Kunihiro, an anthropologist who serves as interpreter for Prime Minister Miki in his talks with President Ford and other world leaders, disagreed with the idea that the nation is entering a stage which emphasizes knowledge.

Kunihiro said Japan is spending the least of all industrialized nations on education, research and development. "We are terribly short of energy sources, but no private corporations are capable of coming up with private sources of energy.

(MORE)

I really cannot afford to be sanguine about the future of Japan under these circumstances," Kunihiro said.

Jerry K. Fisher, assistant professor of history at Macalester College in St. Paul, said policy decisions made by multinational corporations could affect political situations in Japan. "Two multinationals of the U.S. and Japan could be getting together to affect policy in Africa and Asia as well," he said.

Roger W. Benjamin, associate professor of political science at the University of Minnesota, said Japan is more related to the U.S. economically than to the other nations of Asia.

The conference was sponsored by the Japan-America Society of Minnesota, the Japan Society and the University of Minnesota World Affairs Center. Minneapolis was one of five cities to be visited by Kunihiro, Konami and Asano, who are Japanese scholars primarily interested in the United States as a field of study.

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(A1,2,5,15;B1;C1,4,19;D12;E1)

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MARCH 25, 1976

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UNIVERSITY OF MINNESOTA, MINNEAPOLIS AND ST. PAUL CAMPUS EVENTS  
March 28-April 3

- Sun., March 28---Photojournalism Group Show: "Seekers of Vision." Third floor gallery, Coffman Union. 7 a.m.-11 p.m. Mon.-Fri., 8 a.m.-1 a.m. Sat., 1-11 p.m. Sun. Through March 31. Free.
- Sun., March 28---Natural History Film: "Secret in the Hive." Museum of Natural History aud. 2:30 p.m. Free.
- Mon., March 29---Exhibition: "The Emperor of Japan." East Asian Library, Wilson Library. 8 a.m.-5 p.m. Mon.-Fri., 9 a.m.-5 p.m. Sat. Through March 31. Free.
- Mon., March 29---St. Paul Student Center: Photographs by J. Lavigne; Color Design: A Student Show; "Dance," ceramics by C. Daryl Gangroth. 8 a.m.-10 p.m. Mon.-Fri. Through March 30. Free.
- Mon., March 29---St. Paul Student Center: "American Agriculture: A Continuing Revolution." North Star Gallery. 8 a.m.-10 p.m. Mon.-Fri. Through April 25. Free.
- Mon., March 29---University Gallery: Oil Sketches by Frederic Church, through May 9. A Painting Conservation Project, through April 28. Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Free.
- Tues., March 30---Life Resources Institute: Fred Hack, tarot card reader, Ruth Gardner, handwriting analyst, and Eve Smith, astrologer. 310 Blegen Hall. 7 p.m. Free.
- Tues., March 30---Master Class: Voice by Gerard Souzay. Scott Hall aud. 7:30 p.m. \$3 students, \$5 public.
- Tues., March 30---U Artists Course: Early Music Consort of London. Northrop Aud. 8 p.m. \$3.50, \$2.50, \$1.50.
- Wed., March 31---Life Resources Institute: Fred Hack, tarot card reader, Ruth Gardner, handwriting analyst, and Eve Smith, astrologer. 320 Coffman Union. 7 p.m. Free.
- Wed., March 31---Lecture: "A Woman's Sensibility" by Miriam Schapiro. 125 West Bank aud. 8 p.m. Free.
- Fri., April 2---University Gallery: "The American Scene: Urban and Rural Regionalists of the '30s and '40s." Northrop Aud. 11 a.m.-4 p.m. Mon.-Fri., 2-5 p.m. Sun. Through May 13. Free.
- Fri., April 2---Film: "Monty Python and the Holy Grail." Great Hall, Coffman Union. 7:30 and 9:30 p.m. \$1.50 with U of M ID, \$2 public.
- Fri., April 2---Poetry Reading: Ishmael Reed. 5 Blegen Hall. 8:30 p.m. Free.

(OVER)

CALENDAR

-2-

Fri., April 2---The Whole Coffeehouse: Kevin Odegard and Billie Hallquist.  
Doors open 8:30 p.m. \$1.50 in advance at MSA Store, \$2 at the door.

Sat., April 3---Film: "Monty Python and the Holy Grail." Great Hall, Coffman Union.  
7:30 and 9:30 p.m. \$1.50 with U of M ID, \$2 public.

Sat., April 3---U Artists Course: National Dance Company of Senegal. Northrop  
Aud. 8 p.m. \$6, \$5, \$4, \$3.50, \$2.50.

Sat., April 3---The Whole Coffeehouse: Kevin Odegard and Billie Hallquist. Doors  
open 8:30 p.m. \$1.50 in advance at MSA Store, \$2 at the door.

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MARCH 25, 1976

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NEWS PEOPLE: For further information  
contact BILL HAFLING, 373-7514

NEW MAPS AVAILABLE FROM  
MINNESOTA GEOLOGICAL SURVEY

(FOR IMMEDIATE RELEASE)

Reflecting new knowledge about Minnesota's geology and natural resources, six new geological and geophysical maps are now open to public inspection at the Minnesota Geological Survey at the University of Minnesota.

Bedrock geology maps of the Stillwater and Duluth areas at a scale of four miles to the inch, the Tower quadrangle of northeastern Minnesota at a scale of one inch to 2,000 feet, and Bouguer gravity maps of the Stillwater, Brainerd and Bemidji areas (four miles to the inch) are available.

"Bedrock geologic maps are useful in evaluating and developing resources and in providing basic information relating to mineral and water resource potentials," survey director Matt Walton said. "They are essential in planning mineral exploration and in providing important engineering data."

Bouguer gravity maps indicate small differences in the gravitational field of an area. These differences are related to variations in the composition and structure of underlying rock formations. "Bouguer gravity maps are especially important in Minnesota, where much of the bedrock geology is concealed by soils and glacial drift," Walton said.

Copies of the maps may be purchased for \$4.16 (prepaid) including state sales tax from the Minnesota Geological Survey, 1633 Eustis St., St. Paul, Minn. 55108. They may be inspected on open file at either the St. Paul office or at the Hibbing Office of the Department of Natural Resources.

G. B. Morey prepared the Duluth bedrock map and collaborated with Bruce Olsen on the Stillwater bedrock map. P. K. Sims and R. W. Ojakangas prepared the Tower map and the gravity maps were prepared by a team headed by Lyle C. McGinnis. The Stillwater and Duluth bedrock maps are part of a State map atlas which the Survey is developing.

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(A1,2,7,18;B1,9;C5;E24)

UNIVERSITY OF MINNESOTA  
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MINNEAPOLIS, MINNESOTA 55455  
MARCH 26, 1976

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10-11  
11-12

NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

HEALTH-CAREER INFORMATION  
AVAILABLE FROM UNIVERSITY

(FOR IMMEDIATE RELEASE)

The high-school student considering a health career can go to a high-school counselor for information on career alternatives and course requirements.

But resources of information are not as easily available to the increasing number of adult students, men and women planning a career change or new career.

A health-career "hotline" to a basement office in a dormitory on the Minneapolis campus of the University of Minnesota is one attempt to fill that gap in information.

Operated from 8 a.m. to 4:30 p.m., Monday through Friday, the service is available to people throughout the state. Individuals may call (612) 376-1449 collect and receive information and advice on health-career programs.

"In some communities the only person available to talk about the health profession is the family doctor," said Judith Atlee, hotline coordinator for the Health Sciences Student Personnel Office.

Atlee said the career hotline will have information on courses not just at the University of Minnesota but at community colleges, area vocational-technical schools (AVTI's), state universities, private colleges and hospitals.

"There are 18 AVTI's in the state and it is easier if there is one place to find out about the programs rather than having to contact all the schools," Atlee said.

She emphasized that callers are provided information about courses that best suit their needs and interests.

Atlee said much of the information given to callers is found in a reference manual, "Health Careers in Minnesota," that her office compiles and makes available to counselors and libraries throughout the state. It lists approximately 27 health professions and 358 programs. There are details on admission requirements, course prerequisites and tuition costs.

The health-careers hotline is similar to a service offered by the Minnesota Health Careers Council until it was discontinued last July.

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(A1-5,8,14,17,22,23,27;B1,5;C1,3,4,19;E25)

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MARCH 26, 1976

NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

U OF M PRESIDENT SEES LARGER ROLE  
FOR STUDENTS IN EDUCATIONAL POLICY

(FOR IMMEDIATE RELEASE)

University of Minnesota President C. Peter Magrath told a group of student leaders from state universities and land-grant colleges Friday (March 26) that students have the power to play a larger role than they now are playing in shaping educational policy at the national level.

"I believe that such an expanded role is not only possible, but very much desirable; I am convinced it would be in the overall best interests of American higher education," Magrath said.

The University president was the keynote speaker at the opening luncheon of a student convention called to consider an alternative to the present National Student Association (NSA). The convention was sponsored by the Twin Cities Student Assembly, the student governing body of the University's Twin Cities campus.

While expressing support for a national student organization, Magrath admitted that there will always be areas of disagreement between administrators and students.

"But I am confident that in terms of national educational policy, as opposed to strictly institutional matters, we will find more cause to agree than disagree," Magrath said.

Magrath told the student representatives from 150 colleges and universities that the entire higher education community can do a better job than it is now doing in telling its story to the American people.

"No matter how effective administratively based organizations eventually become in their lobbying and other activities, there will continue to exist a need for student-based organizations," he said. "As the principal, although by no means sole consumers of higher education, students have an absolutely legitimate role to play here."

(MORE)

Students, he said, have an enormous self-interest in solving the problems facing higher education and can make their efforts to deal with such problems more effective.

"I believe that a new national student organization, one committed to a disciplined focusing of your considerable potential influence, can be such a vehicle," Magrath said.

He noted that much of the energy of many student political organizations has been directed at keeping the organizations intact rather than at dealing with issues they originally hoped to solve. Magrath said a major problem has been the diversity of such organizations and the inherent difficulty in reaching a consensus in a diverse group.

The University president encouraged the establishment of a student organization to serve "the often particular needs of students attending our major public universities, problems resulting from the institution's size and highly visible public roles.

"I also think that it is quite likely that organizational skills, data and arguments gathered for educational change at the national level are bound to trickle down to also benefit students in their efforts to influence and persuade governors, state legislators, and occasionally even university presidents," Magrath said.

Administrators and students share the same concern for low tuition and realistic financial aid, Magrath said. He went on to say that these two segments of the educational community should join together to urge that major public universities be viewed as important national, and not just statewide, resources, deserving of national support. He cited the regional and national needs for veterinary medicine schooling, financial aid for minority students in health careers and the continuing need for support of research programs.

-UNS-

(A1,2,4,5,27;B1,12;C1,4,19,21;D12;E4,6)

UNIVERSITY OF MINNESOTA  
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MARCH 29, 1976

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NEWS PEOPLE: For further information  
contact RONAELE SAYRE, 373-7516

LAND-GRANT AND STATE SCHOOL STUDENTS  
FORM NATIONAL STUDENT ORGANIZATION

(FOR IMMEDIATE RELEASE)

A national organization for students at land-grant colleges and state universities was established by student leaders from 31 schools in 21 states at a convention in Minneapolis last weekend (March 26 and 27).

The convention, sponsored by the University of Minnesota's Twin Cities Student Assembly, was called to consider an alternative to the present National Student Association (NSA).

While a majority of the delegates appeared to support the idea of a student association to represent students at land-grant colleges and state universities, there were others who were opposed to the idea and the first day of the convention was marked by heated debate.

One of the strongest defenders of NSA was Reed Lee, a student at the University of Chicago. Lee, a member of the national board of directors of NSA, argued that students should work within NSA if they feel it is not representative of student interests.

Gary Engstrand, a University of Minnesota graduate student and convention chairman, had cited as a major reason for the convention student frustration with the NSA on the grounds that its large, diverse membership diluted its strength and that it got involved in topics that were not higher education concerns.

After extensive debate and much parliamentary confusion, the delegates approved, on a vote of 36 to 15, a resolution by Mike Stratton of Colorado State University to establish an organization of students from land-grant colleges and state universities. The resolution stated that the organization should promote, at a national level, the advancement of public higher education and should disseminate information and provide member schools with resource and research material.

(MORE)

A resolution to make membership in the organization open to the student governing body of any school that has a bachelor-degree-granting program and is a publicly supported state school also passed.

First president of the new organization, which will be called the National Association of Students at State Colleges and Universities, is David Slemmons, a student at the University of Alaska.

Delegates from several schools, which had not belonged to NSA, attended the convention for the purpose of joining the new organization.

Convention participants received encouragement from Minnesota Sen. Hubert Humphrey, who made a brief appearance before the group.

"Everything worthwhile has high hopes," said Humphrey, who told the students there was great value in lobbying. He urged the students to be leaders and educators of others in their lobbying efforts.

University of Minnesota President C. Peter Magrath told the delegates that students have the power to play a larger role than they now do in shaping educational policy at the national level. He said increased student participation would be in the overall best interests of higher education. Echoing Magrath in his support of a new student association was George Hamm, vice president for student affairs at Arizona State University and chairman of the student affairs council of the National Association of State Universities and Land-Grant Colleges.

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(A2;B1;C1,4,19,21;D12;E4,6,31)

(FOR IMMEDIATE RELEASE)

Feature story from the  
University of Minnesota  
News Service, S-68 Morrill Hall  
Minneapolis, Minnesota 55455  
Telephone: (612) 373-5193  
March 30, 1976

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JALP

U OF M CHEMISTS PUT RED  
FOOD DYE SCARE IN PERSPECTIVE

by W. R. Hafling  
University of Minnesota Science Writer

"Experiment is the supreme judge."  
--Albert Einstein.

Close your eyes and it will taste the same as always, but in the near future your cola drink, ice cream and the cherry on top of your soda may look a little bit strange.

One by one, it appears that the synthetic food dyes long used in such products are being banned by a concerned U.S. Food and Drug Administration (FDA). Testing for safe replacement products takes time and manufacturers are having problems finding substitutes.

Recently banned was the most widely used food dye of all, Red No. 2, also known as amaranth. One of only seven dyes out of a possible 700 selected as safe for food use in 1907, Red No. 2 has been widely used since then in such products as soft drinks, gum, cherries, jams, cereals, pet food and processed meats. Yearly sales of Red No. 2 reached \$4 million, and it was used in products worth \$10 billion until its use began declining in 1973.

Cancer Chemistry

As everyone already knows, Red No. 2 was banned from further use in foods after statistical analysis of an FDA experiment found that female rats (though not male rats) fed a high dose of Red No. 2 had a "significant" increase in malignant tumors compared to the rats in the low-dose group.

According to Science Magazine (Feb. 6, 1976), however, the experiment which led to the ban is routinely referred to by FDA scientists as the "botched" or "bungled" study. Until the "botched" study was made, Red No. 2 had apparently passed innumerable safety tests over the years.

(MORE)

Another cause for nervousness about Red No. 2 is the fact that it is a "coal-tar" derived dye with a chemical structure very similar to dyes already banned from use because they were found to cause cancer. Color Additive Hearings before the U.S. Congress in prior years, however, have not found chemical structure alone sufficient for banning a dye from use.

In interviews at the University of Minnesota, chemistry professors Paul G. Gassman and Edward Leete were asked about the relationship between chemical structure and carcinogenic (cancer-causing) potential in the human body. Both agreed that predicting carcinogenic activity on the basis of molecular structure was practically impossible.

"Talk to people in pharmaceuticals or agricultural chemicals," Gassman, who is head of the chemistry department, advised, "and they'll show you that if you make one very slight change in a molecule, you can completely change its biological activity. You can't look at gross structure and say, 'Well this one's carcinogenic, why isn't this?'"

Leete said a good example is the slight chemical difference between ethyl alcohol, which people drink, and methyl alcohol, a very similar but quite poisonous liquid.

In addition, although many dyes very similar to Red No. 2 have been found to be carcinogenic "this doesn't prove that they're all carcinogenic," Leete said. In fact, he added, it is possible that "there could be a compound of this type which would cure cancer."

Gassman agreed, adding that "in fact a large number of the chemotherapeutic agents that are used to treat cancer are themselves carcinogenic."

#### Sit In "No Smoking" Area

"I don't think the government is very serious about protecting people's health," Leete said. "If they were serious they'd stop people from smoking. One thing we do know is that compounds with a lot of rings (cyclic hydrocarbons) are carcinogenic. They are present in tobacco smoke and when anything is burned. When you burn some cigarette paper you get these same compounds. They don't all come from the tobacco.

(MORE)

"There are also workers who put down asphalt on the roads. We know they have a high incidence of cancer, but they still work out there," he said.

### Bigger Doses---Greater Risks

Just as the heavy smoker has a higher risk of cancer than the non-smoker, the rat who is given more of a test chemical has a higher risk of developing tumors. As a result some question has arisen about how realistic the FDA tests actually are, even when conducted without mistakes.

Referring to the U.S. FDA tests, Canadian Health and Welfare observed that the rats which developed tumors were fed an amount of dye equivalent to 1,500 milligrams per kilogram of body weight per day. "This means," they reported, "that every day a person would have to eat more than 1,600 pounds of food containing approximately 100 parts per million (ppm) of Amaranth..."

"You can produce tumors with almost anything if you give the animal enough of the material," Leete said. "On the other hand, most people get extremely small amounts of food dye, perhaps a fraction of a milligram in one serving."

"Very few people appreciate what the actual coloring power of these substances is," Gassman added. "It's fantastic. In normal everyday consumption one is looking at extremely small amounts of these chemicals."

Reviewing the evidence on Red No. 2, the Canadians concluded that "there is insufficient evidence available at this time to justify the removal of the food colour Amaranth from foods sold in Canada." Ironically, the Canadians have not approved another dye, Red No. 40, considered a possible replacement for Red No. 2 in the U.S. Only nine synthetic dyes are allowed to be used in Canada, one of the world's more cautious countries with respect to food additives.

The U.S. allows about the same number of dyes, though some have restricted use. Approximately 65 synthetic dyes are used in the world ranging from the 33 permitted in Denmark to three in the Soviet Union. Greece bans the use of all synthetic dyes.

### "Natural" Dyes Not Regulated

Another little known fact is that pigments which occur naturally in plants and

(MORE)

animals are exempt from the certification procedures required for the synthetic compounds.

One popular "natural" red dye for example, is "cochineal," which has a rich crimson or scarlet color and is widely used to color meat and candies. Cochineal is derived from insects which infest cactus in the Canary Islands and South America. Leete said, "you might suspect biological activity based on cochineal's chemical structure," but it is allowed for unrestricted use because it is a "natural" material.

Leete said eating a lot of Red Dye No. 2 over the years was probably not particularly dangerous. "No worse," he said, "than eating, say, raw celery.

"There are many things in natural food that are deleterious. If you eat enough of them. Celery has been shown to cause dermatitis in some people. I'm not sure it's been isolated, but there could be a protein in celery which is bad for you in large amounts."

"I think the FDA is sincere in trying to keep carcinogens away from the public," Leete said. "However, they're still arguing about cyclamates and even saccharine, now used for diet drinks, is somewhat suspect. What they've done at the FDA has just not been conclusive so far."

Meanwhile, according to one industrial source, "an innocent party has been executed. FD&C Red No. 2 is as safe a compound as one could find. All this is borne out by every valid, confirmed piece of scientific investigation ever performed on Red No. 2 and there has been more work done on Red No. 2 than almost any other compound."

On the other hand, as the FDA has stated, "an unflawed, life-time, chronic feeding study of Red No. 2 in rats is needed to reaffirm the safety of this food color."

-UNS-

(A1-5,7,8,15,16,18;B1,5,9;C1,4,19;D10,12;E1,2,3,10,11,12,25,26,27)