

Anything Is Possible With Electronic Music

By THORA WILLIAMS
Associate News Editor

Any rhythm, scale, complexity, radicalism in noise is possible with electronic music, Festival of Arts speaker Lejaren A. Hiller said Tuesday evening.

But the creation and assimilation of natural and synthetic sounds is a laborious process, and the results may be good, bad, or indifferent. Hiller, scientist-musician from the University of Illinois, recounted the short history of electronic music and showed with slides, films and recordings what can be done with it.

HE SAID that during World War II the electronic tape recorder was perfected by the Germans and, because there were no patent restrictions, it saw rapid introduction throughout the world.

Prior to this time all recording of music was done directly on disks and there was no way to make correction, to shorten or to splice. About the only experiments done were in playing the recordings backwards and there was little application in electronics.

Early work in combining sound effects with the tape recorder was done in France and Germany, and now there are studios for tape manipulation in France, West

Germany, Italy, England, Holland, Poland, and the United States. Hiller said there have been "a couple of hundred compositions" using the newly developed techniques.

HE NOTED that, in practice, many effects which are simple to produce instrumentally are difficult to perfect electronically. Therefore, the new techniques can best be used to complement, not compete with, instrumental music. Combinations for tape recorder and orchestra have also been effective, he said.

Hiller explained the acoustical approach to sound synthesis, presenting a classification of sounds into pure sound tones, with pitch only; periodic musical tones, pitch and harmonic overtones (timbre); clamorous, inharmonic overtones; ordinary noises, any sonorous effect; and random or "white" noise, sound with all frequencies.

He showed graphically, with slides, how wave forms are broken down, timbre is produced (by "throwing away" or adding overtones), and how to create "attack" and "decay" in tones (how fast the tone builds up to maximum volume, related also to the echo effect).

HE SAID artificial echo can be produced by connecting a feedback loop between the playback head and record head of the tape recorder, and showed an adaption for creating a rhythmic effect by making loops in the tape.

The complete console includes equipment for creating sound sources, test equipment, sound modification instruments and recording equipment, Hiller said. With this, the controller can create unusual scales, "stretch out or squeeze together a sound, such as making a 10-second sound into a nine or 11-second sound," or transpose music.

Hiller showed his early electronic music recording equipment "put together with what I could find around" and his new equipment, which is still being developed and improved. He showed films of the operation of the equipment and played tapes of electronically composed music.

"We teach both the engineer and the music student," he said. "It's my philosophy that one should know what goes on inside the equipment—should not just think it's a magic black box."

Chessmen To Attend Berkeley Tournament

Results of the all-campus Chess Tournament last week find Wyne Roney in first place with Lars Bjursten in second. Position was determined by the tie-breaking point of four rounds of chess. Roney and Bjursten will attend College Unions Regional Games Tournament in Berkeley Thursday through Saturday.

Roney is a sophomore from Billings, Montana, and Lars Bjursten is an exchange student from Sweden at the University. Third place winner was Harvey Warren.

Dental School Committee To See Pre-Dent Students

The Admissions Committee of the University Dental School will meet with all pre-dental and prospective pre-dental students at 7:30 p.m. today in 123 Science. A question and answer session will be conducted by representatives of the committee after they speak to the group.

Those who wish to consult individually with the committee may do so, either immediately after the evening meeting, or during the same afternoon, when regular appointments have already been arranged with applicants who have not been accepted yet. If you have been accepted, or have a conditional acceptance, it is not necessary to be interviewed unless the Dental School has asked to see you.

For further information see Mrs. Stearns, Biology Office, 361 Science, or call Ext. 1401.

Tuition . . .

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mah) told Sherburne, "You are experiencing part of the over-all inflationary effects . . . After you are through with college you will find it a lot rougher."

Sen. Alfred H. Corbett (D-Multnomah), told Sherburne, "Students will have to turn to loans. High school graduates should be acquainted with scales showing the earning capacity of college-trained persons . . . As well as making more for the state in taxes, these people also earn more."

Rep. Ross Morgan (D-Multnomah) added, "The thinking and values of students must be adjusted. It's definitely worthwhile to take out loans."

Sherburne also criticized the statistics on scholarship aid given by Kenneth Bragg, legislative fiscal officer. "After study of these figures, I find that they are not valuable. They were prepared by state legislative fiscal officers of other states. There is no way to determine whether NDEA loans or Alaska-Hawaii remissions were considered."

Chancellor of the State Board of Higher Education, Roy E. Lieuallen, said that he had been "contacted by students from Alaska who believe that they have committed their futures to the existing tuition situation."

Lieuallen said that if Alaska-Hawaii tuition is increased, then the present students should be allowed to enjoy their current status.

Lieuallen also told the sub-committee that if resident tuition is increased, "scholarships should be increased by the amount of the tuition increase as well as by the number of students who need scholarships."

Journalist . . .

(Continued from page 1)
which such groups as the Arab League Against Jewish Aggression which claims that Christ was an Arab and destruction of the Jews is a necessity.

He also strongly criticized Gamal Abdel Nasser, president of the United Arab Republic, for using aggression and assassination to achieve the "laudable purpose" of uniting the countries of the Middle East.

"One of Hitler's prize propaganda agents is in Egypt," said Carlson. He has taken an Arab name and become a Moslem, according to Carlson, and is employed in the Ministry of National Guidance where he publishes violently anti-Semitic literature.

"Our policy in the Middle East is peace and stability," he commented, "but Nasser means anything but peace and stability."

Carlson also cited incidents of subversive publications in the United States. One booklet, the "American Nationalist" by Frank L. Britton, "accused" Frank Sinatra of promoting racial integration.

A far more serious instance is the manipulation of the New Jersey magazine "Common Sense," said Carlson. "This is the favorite organ of Arab Consulates in America who pay for many of the issues and use them to spread anti-Semitic literature."

Non-Residents . . .

(Continued from page 1)
of-state students as "the greatest variable (in enrollment), one which can be controlled." The State Board of Higher Education has set the enrollment projection for the next two years at an 8-plus per cent increase.

THE STATE Board recently decided to increase out-of-state tuition \$60 yearly for the next two years. This would result in a tuition charge of \$735 by 1964-65. They also included a fee-remission provision for outstanding students.

Barkhurst commented that higher education in Oregon is still a "pretty good buy" for out-of-state students. He said that the cost is often greater in such states as Washington and Idaho. Private schools in Oregon have also been "pricing themselves out," often charging \$400 to \$600 more a year in fees.

Barkhurst added that private schools charge less for dormitory room and board although their instructional cost is higher. The State Board also recently decided to raise dormitory charges at the University by \$40 a year due to anticipated increases in operating costs.

A SURVEY made in May of 1962 for comparable institutions of higher education has shown that with the tuition increase, non-state students will eventually be paying more than they would at state-supported schools in Idaho and Washington. The University of Idaho now charges them \$250 a term, for example.

Another drawing factor Bark-

hurst cited for the University is the Honors College program. "Those who could be admitted to a higher prestige institution such as the University of California but can't afford it are induced to go here instead," he said.

Constance commented that comparatively fewer out-of-state than Oregon students are on academic probation at the University this year.

This is "not a very clear argument," he said, since non-residents are well screened by higher academic requirements and other restrictions. There is also a technical problem in determining non-residents since some may decide to move to Oregon permanently.

OREGON STATE University, the only other school in the state system with a large number of non-resident students, is experiencing a greater problem than the University, said Barkhurst. He attributed this to OSU's changing its status from a college to a university.

The new status meant a new academic structure with more classes available. This made the school more attractive to out-of-state students, said Barkhurst.

Any changes in academic requirements or any new restrictions will have to originate with the State Board of Higher Education. Barkhurst said the University and Oregon State University can only make recommendations and no final decisions.

He was not prepared to say whether or not the University would recommend any changes this year.

...something a little less serious by ted mahar

BLAZING SIX GUNS

Another victim of progress was the pulp western. No longer do you see blood-curdling tales of the range across every newsstand. As a sort of Valentine's Day memorial, therefore, I present my own pulp western.

The sunlight glinted off the steely jaws of the tall stranger as he rode into the dirty little cow town of Hellsfurybloodactionguts on his white horse. Underneath his white hat his John Wayne-like face was set in a look of grim determination. He was a man with a Purpose.

The stranger walked into the town tavern after tying up his horse. His spurs jangled ominously. The bar was filled with weak, snivelly-looking men and strong rough-looking ones. They stared at him.

"What'll you have?" asked the fat bartender huskily. "Milk," said the stranger in a strong, tense, quiet, deep, challenging voice.

"Haw, haw, haw," laughed a grimy, rough-looking cowboy. "That's what sissies drink." The stranger's fist was a blur of speed as he slammed the rough cowboy on the jaw. There was a loud, sickening crunch of bone.

"Wowzargies," said an onlooking cowboy. "Broke his jaw with one blow. Crimenellies."

"Wasn't his jaw," said the stranger. "That was my fist. Is there a doctor around?"

"My father's a doctor," said a bright, quiet, impressed, feminine voice from the doorway. "He'll be glad to fix your hand."

"Thank you, ma'am," said the stranger. One hour later the girl and her kindly father were talking to the stranger, whose arm was in a cast.

"So you've come in to clean up the town, eh?" asked the doctor rhetorically.

"That's right," answered the stranger anyway. "Old Bart's been on my list for three years now. Called me a sissy in a bar once, and I swore I'd get him. When I heard he was running this town, I came after him."

"My goodness but you're brave," said the beautiful, blonde, warm, smarmy doctor's daughter. "When you get done with Bart why don't you come on back here. Maybe we could get married and raise children or cattle or something."

"I'll think about that," said the stranger. Just then there was a commotion outside.

"Great Scott," said the kindly old doctor. "It's Bart and a dozen of his men. He's heard you're in town. Better hide." "Me? Hide?" asked the tall stranger rhetorically. "It will be a frosty day in the Bad Place when Clint Steele hides. I'm going after them." He strode forcefully to the door and flung it open. All of Bart's men saw him at about the same time. They shot him 47 times, and not in the shoulder, either.

"Why, you didn't give him a chance," said the girl.

"You don't get to be boss of a town by giving guys chances or having fair draws in the middle of the street, you dumb broad. Haw, haw, haw, haw, haw, haw."

Then all the bad guys rode off into the sunset.

Before riding off into the sunset, stop in at the Dairy Queen. Buy some nice Dairy Queen. It's good for you. It has lots of vitamins in it. Your hand won't break when you punch somebody in the jaw. It tastes good. Dairy Queen, I mean. I don't know about your hand.

Fallout . . .

(Continued from page 2)

age 50) and bone cancer in an additional 30%.

Oregon is situated favorably—she has no ICBM bases, is located up-wind from other bases, and has only one large city. Deaths as an immediate result of nuclear attack would probably be lower in Oregon than in most states. Although Civil Defense can do nothing to save lives in Portland, it could reduce deaths due to fallout in other areas of the state. It could do nothing, however, to save people from the fatal effects of the deep and widespread ecological, agricultural, and sociological disruptions that would accompany nuclear war.

By 1965 the United States will have more than 1,000 ICBM's. A nuclear attack against this country in the year following the next meeting of the Oregon Legislature would therefore probably be four to five times larger than the attack we have just described.

Civil Defense is not a solution to the problem of survival in the nuclear age.

¹ Based on an estimate by Ralph Lapp (Civil Defense, Hearings before a Subcommittee of the Committee on Government Operations, House of Representatives, 86th Congress, Second Session, March 28-31, 1960) that 3 missiles of 10 megatons each are required to give a 90% chance or better of damaging one hardened missile site.

² Based on data in "Shelters" a publication of the Office of Civil and Defense Mobilization (OCDM SA-61-12 June, 1961).

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