



Synthesizers such as the Moog III (center left) now offer composers an infinite world of sound from which to choose in the composition of their music. The picture above was taken in the professional electronics studio at the University of

Iowa School of Music. Shown with the Moog are various pieces of backup equipment; on the right, a mixing panel; on the left, a four-channel stereo tape recorder.

—photo by Joe Campbell

## Roll over Beethoven Electronics: a new tune

By JOE CAMPBELL  
Daily Iowa Staff Writer

At first glance, the Moog III looks as if it may have once been the control panel of the Apollo 13 Command Module. But the piano keyboard which sits in front of this electrician's nightmare tells you there is something musical about the Moog. And the fact of the matter is, the sounds you're likely to hear coming from the speakers on either side of the big black box will be more akin to a concerto than a count-down.

They call this piece of space-age hardware a synthesizer and it's probably the biggest thing in music since the bass drum.

The Moog III (pronounced 'moge') is one of two synthesizers which are currently being used in the electronic music program at the University of Iowa.

Ominous in appearance, the synthesizer is not that difficult to understand—at least in basic principle. Essentially it's nothing more than a self-contained instrument package which is capable of either producing its own sound internally (in much the same way an electric organ works), or distorting sounds from an outside source. It does this by controlling the oscillation and frequency of electrical sound waves through variations in the electrical current which produces those sounds.

The value of the synthesizer is that it offers the musician an infinite world of sound from which to choose in the composition of his music—sounds which were never before possible with standard acoustical instruments.

Since purchasing the Moog back in 1966, the UI School of Music has added a second synthesizer (an ARP 2600) and expanded its facilities to include both a professional and an elementary electronic studio, each designed around one of the two instruments.

Of course there's more to an electronic music studio than just a synthesizer, and over the years the School of Music has accumulated an impressive array of backup equipment in each of its studios.

Both the professional and the elementary studio contain essentially the same equipment. Both are equipped with four-channel recording equipment, and both are linked up with the school's main recording studio via trunk line.

However, there is a difference between the two studios in the sophistication of equipment. The Moog III (which might be considered the Cadillac of synthesizers) forms the nerve center of the \$35,000 professional studio and is used primarily by students and faculty who have had previous experience with this form of music. The less expensive ARP is used in teaching students the basics of electronic composition, and because it's portable, can also be used in concert.

Although it wasn't until recently that electronic music came into vogue, experiments with the capabilities and applications of electrically produced sound began around the turn of the century. In 1906 Thaddeus Cahill introduced the musical world to a contraption he called the "Dynaphone": a conglomeration of dynamos which emitted sounds of varying frequencies when plugged into a source of alternating current. The prophets of musical change hailed Cahill's

invention as a way out of the straight jacket imposed by the physical limitations of standard instruments.

Experiments with electronic music continued throughout the early part of the century, and in the 1920's and 30's the field of electronic music languished because most composers refused to accept electronic sound as a valid art form.

With the perfection of the phonograph and tape recorder another dimension was added to sound; the dimension of time.

At last sound could be stored. Once a sound was rendered permanent, that sound (whether it be music or just plain static) could later be played back and manipulated at the will of the composer.

Although the tape recorder allowed more sophisticated applications of electronic sound, it wasn't until after WW II that the field of electronic music began to open up. By 1949 the field had been sufficiently developed to

merit distinction as an art form separate from acoustical music. The name "Musique Concrete" was given to this new sound because it is initially composed of concrete material which is then organized experimentally, whereas standard musical forms are created abstractly (written in symbols) and only in the end do they result in concrete instrumental sounds.

"Musique Concrete" was slow on the uptake in America and prior to 1950 most of the experiments in this field were being done in Europe. American manufacturers were reluctant to sink a great deal of money into research until they were shown a demand for electronic musical instruments and during the early 1950's, about the only experiments with electronic sound on this side of the Atlantic were being conducted by the Defense Department.

A major breakthrough in America was made in 1955 when Robert Moog introduced the first compact instrument package designed specifically

for use in electronic music.

Much of the notoriety electronic music enjoys today comes from the "pop" groups which have been giving the synthesizer a lot of mileage. One of the first groups to use electronic sound were (who else?) the Beatles on their "Sgt. Pepper's" album. That five-minute fade out in "A Day in the Life" is a primitive example when compared to the efforts of such groups as Beaver and Krause or Emerson, Lake and Palmer, but never-the-less will remain a classic in "pop electronics".

Of course any "pop" application is bound to be primitive when measured against the work that is now being done by serious composers and conductors. (after all, Leonard Bernstein was into electronics way back in 1960). But regardless of the application electronic music is here to stay. It's still too early to predict in which direction electronic music will move—it's still a new field—but who knows, perhaps the synthesizer will become the twentieth century Stradivari.

## Stradivari Quartet plans Feb. 16 UI concert

Compared to performing in an 11th-century monastery and a converted carriage house, The University of Iowa's Macbride Auditorium may seem a bit dull. But for the Stradivari Quartet, Macbride is home, and the group will present its first concert of the 1971-72 school year there on Wednesday, Feb. 16, at 8 p.m.

The program for the UI concert will include "Fourth String Quartet, Opus 37" by Schoenberg, "Quartet No. 3" by Bartok and "Quartet in F Major, Opus 135" by Beethoven.

The monastery where the quartet performed was St. Sophie in Ohrid, Yugoslavia, and the acoustics in the hall were the best of any concert hall ever provided for the quartet, according to violist William Preucil.

The Garrett family of Baltimore, Md., converted their carriage house to a concert hall where private recitals were

given by their musicians-in-residence. The estate is now called Evergreen House, and is a part of Johns Hopkins University.

No tickets will be required for the UI concert. In addition to Preucil, the other quartet members are violinists Allen Ohmes and John Ferrell and cellist Charles Wendt. All are faculty members of the UI School of Music.

Among the memorable places where the quartet has played, a Munich rathskeller used for an afternoon rehearsal ranks high on their list. For six months after that rehearsal the lingering odor of beer and sauerkraut each time they opened their instrument cases reminded them of that makeshift rehearsal hall.

The group also performs regularly at the Corcoran Gallery of Art in Washington, D.C., the institution which

loaned them the four Stradivari instruments they use. The have performed before sell-out audiences to rave reviews consistently in these appearances.

This year in Washington and in Baltimore the quartet is performing the entire series of ten Mozart string quartets. UI audiences will be treated to the same bill of fare next year in special performances for the opening of Clapp Recital Hall in the School of Music.

The quartet has two recent recordings on the Composers Recordings label—work from Karl Weigl and the Robert Stewart "String Quartet No. 3."

The quartet's second concert of the season here is scheduled for April 26, also at Macbride Auditorium.



*She will love  
you even if  
it doesn't come  
from*

*Seigert*

*but why take a chance?*

