NEWSLETTER

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COUNSELING EXAM

Wednesday, 11 September 1974
7:00 p.m.
Computing Center Seminar Room
First Floor

All graduate students enrolled for the Fall Term, who have taken Math/CCS 473, 476, 573, or their equivalents, are urged to participate. It is not necessary to sign-up. Inquiries regarding the exam should be directed to Jim Henriksen, 764-2121.

NEW VOICE SYNTHESIZERS

The Computing Center is in the process of replacing the IBM 7772 Audio Response Unit (ARU) with a newer and more easily programmed voice synthesizer called Votrax. An installation date of 1 October 1974 is planned. The new equipment will consist of five Votrax voice synthesizers connected through the Data Concentrator and will be programmed to operate in a manner similar to the present equipment. Some beneficial features of the new hardware are summarized below:

Economy: The Votrax synthesizer requires fewer bytes of information than the IBM 7772 to specify the pronunciation of a word. Thus, the master vocabulary can be conveniently kept in shared memory instead of a disk file. The voice synthesis process should then require about one-tenth the CPU time as previously.

Improved word concatenation: The Votrax hardware automatically generates smooth transitions between phonemes. Those pronunciations which are constructed from root words, prefixes, and suffixes will not sound chopped up.

Ease of constructing user vocabularies: The Votrax data format consists of one 8-bit code per standard English phoneme. The format of the vocabulary files will be simplified to consist of the EBCDIC spelling of a word followed by its phonetic spelling encoded into mnemonics for each of the available hardware phonemes. The pronunciation of a new word can easily be generated by spelling it phonetically.

Full-duplex operation: The connection through the Data Concentrator allows queueing of input lines while the synthesizer is not actively speaking output. In a few months we anticipate acquiring full-duplex data sets which will allow input during output, asynchronous attentions, and a freeze/thaw capability similar to the Ctrl-T/Ctrl-R facility on teletype-like devices connected to the Data Concentrator.

There will, however, be some unavoidable, subtle changes in the new support. These are summarized below:

@SP modifier: This will be treated in the Data Concentrator sense instead of returning the encoded DCV (digitally coded voice) to the caller. A separate facility will be provided for performing the action of @SP on the current ARU (see MTS Vol. 4, p. 190).

Text definition file: Alterations to the currently attached text definition file will not take effect unless the user reissues a %DEF= device command.

%TAR=n facility: This facility will not automatically terminate the input line if the line overflows due to text insertion.

%SEG(. . .), %TIM(. . .): These prosodic commands will not be recognized.

Users who would be adversely affected by the above changes are encouraged to contact Jack DiGiuseppe at the Computing Center as soon as possible (764-2121).

120-Characters/Second Terminals Supported

The Computing Center now has available on a limited trial basis one terminal port which supports communications with 120-characters per second half-duplex terminals. This type of port is useful in applications that require the transmission of large amounts of data from the terminal to MTS. Typical applications include batch mode CRT terminals, terminals equipped with magnetic tape cassettes, and remote minicomputers. This port will also support terminals capable of receiving data at 120-characters per second.

The terminal must be equipped with a Bell System 202C compatible modem with the reverse channel option. However, this requirement alone will not guarantee compatibility with the 120-characters per