INSTRUMENTAL EQUIPMENT OF THE LABORATORY
BY THE END OF 1972

1. Instrumentation for speech analysis

2 Sona-Graphs, Kay-Electric, type 6061 A
2 amplitude display/scale magnifier units, Kay-Electric, type 6076 A
1 contour display unit, Kay-Electric, type 6070 A
1 fundamental frequency extractor ("Trans Pitchmeter")
1 intensity meter (dual channel, with active variable highpass and lowpass filters)
1 electro aerometer (dual channel)
2 air-pressure manometers, Simonsen & Weel, type HB 66 (modified)
1 photo-electric glottograph
1 Fabre-Glottograph
1 palatoscope with complete outfit for palatography
1 segmentator, model IPO (Eindhoven)
1 Meyer-Schneider pitchmeter
1 stroboscope, Philips, type PR 9103
1 segmentator, type PT
1 electro-aerometer, four channel, type AM 508/4
1 audio frequency filter, type 445
1 data collecting system, type PT

2. Instrumentation for speech synthesis

1 formant-coded speech synthesizer
1 provisional vowel synthesizer
1 voice-source generator
1 larynx vibrator with power supply
3. Filters

1 LC highpass filter (with stepwise variation of cutoff frequency)
1 active RC lowpass filter

4. Instrumentation for visual recordings

1 mingograph, Elema 42 (4 channels)
1 mingograph, Elema 800 (8 channels)
1 kymograph (with electro-motor)
1 automatic frequency response and spectrum recorder, Brüel & Kjær, type 3332
1 oscilloscope, Telequipment (single beam)
1 oscilloscope, Solartron, type CD 1400 (dual beam)
1 oscilloscope, Tektronix, type 502 A
2 oscilloscopes, Tektronix, type 564 storage
1 dual-trace amplifier, Tektronix, type 3A1
1 four-trace amplifier, Tektronix, type 3A74
1 dual-trace differential amplifier, Tektronix, type 3A3
1 time-base, Tektronix, type 3B3
1 time-base, Tektronix, type 2B67

5. Tape recorders

1 professional recorder, Lyrec (stereo, speeds 7.5" and 15"")
2 professional recorders, Lyrec (mono, speeds 7.5" and 15"")
1 semi-professional recorder, Movic (stereo, speeds 3 3/4" and 7.5"")
3 semi-professional recorders, Revox (stereo, speeds 3 3/4" and 7.5"")
1 portable semi-professional recorder, Uher, type 4000, stereo
4 recorders, Tandberg, type 92 SL
1 recorder, Tandberg, type 7, stereo
4 semi-professional recorders, Revox (stereo, speeds 3 3/4" and 7.5")

6. Gramophones

1 gramophone, B & O (mono, Ortofon pick-up)
3 gramophones, Delphon (mono, Ortofon pick-up)

7. Microphones

1 microphone, Neuman, type KM 56
1 dynamic microphone, Sennheiser, type MD 21
2 crystal microphones, of different brands
2 microphones, Altec
1 1" microphone, Brüel & Kjær, type 4131/32
1 1/4" microphone, Brüel & Kjær, type 4135/36
1 larynx microphone

8. Amplifiers

1 microphone pre-amplifier, Telefunken
1 microphone amplifier, Brüel & Kjær, type 2603
1 laboratory amplifier (mono/stereo, with matching for different impedances)

9. Loudspeakers/headphones

7 different loudspeaker systems
5 headphones, AKG, type K 58
3 loudspeakers, Beovox, type 2600
10. General-purpose electronic instrumentation

1 oscillator, Hewlett & Packard, type CD 200
1 function generator, Wavetec VGC III (0.003 c/s-1 Mc/S)
1 frequency counter, Rochar, type A 1360 CH (5 digits)
2 vacuum-tube voltmeters, Brüel & Kjær, type 2409
1 vacuum-tube voltmeter, Heathkit, type V-7A
1 vacuum-tube voltmeter, Radiometer, type RV 23 b
1 DC millivoltmeter, Danameter, type 205
1 DC nanoammeter, Danameter, type 206
1 universal meter, Philips, type P 817
1 transistor tester, Taylor, model 44
1 Piston-phone, Brüel & Kjær, type 4220
1 component bridge C/L/R, Wayne Kerr, type B 522
1 AC automatic voltage stabilizer, Claude Lyons, type BTR-5F
4 resistance decades, Danbridge, type DR 4
1 condenser decade, Danbridge, type DK 4 AV
6 stabilized rectifiers
1 multi-generator, Exact, type 126 VCF
2 stabilized rectifiers, Danica, type TPS ld
1 stabilized rectifier, Danica, type TPS 3c
1 impulse precision sound level meter, Brüel & Kjær, type 2204
1 attenuator set, Hewlett Packard, type 350 D
1 band-pass filter set, Brüel & Kjær, type 1615
1 digital multimeter, Philips, type PM 2422
1 timer counter, Advance, type SC3
1 oscillator, Advance, type J2E

Additional oscillators, rectifiers, etc., for special purposes
11. Outfit for photography

1 Minolta camera SR-1 (with various accessories)
1 complete outfit for reproduction (including 1 Liesegang UNI-RAX with frame)
1 Telford oscilloscope camera, type "A" (polaroid)

12. Equipment for EDP

1 tape punch, Facit, type 4060
1 control unit, Facit, type 5106
1 tape reader, GNT, model 24
1 DECwriter, Digital, LA30P
1 computer, Digital, PDP8/E, 8K

13. Projectors

1 Liesegang epidiascope
1 Leitz projector for slides
1 Voigtländer Perkeo Automat - J 150
1 16 m/m tone film projector, Bell & Howell "Filmsound 644"
1 projector, Leitz, type Pradovit color 250
2 overhead projectors with accessories
2 overhead projectors, 3M company