

CHILEAN DROUGHT

David Rosenboom and Jacqueline Humbert

for Electric Stereopticon

The following are short descriptions of what it is like to experience the extremely strong, highly coherent production of electrical energy by one's brain, of the Beta (13—18Hz), Alpha (8—13Hz), and Theta (4—8Hz) types.

Beta: "Maximum efficiency in making abstractions. Making instantaneous logical connections between things seen in the environment."

Alpha: "Super consciousness of the presence of everything in the environment but not making abstractions. Raw data stored but not coded. No filters on incoming information."

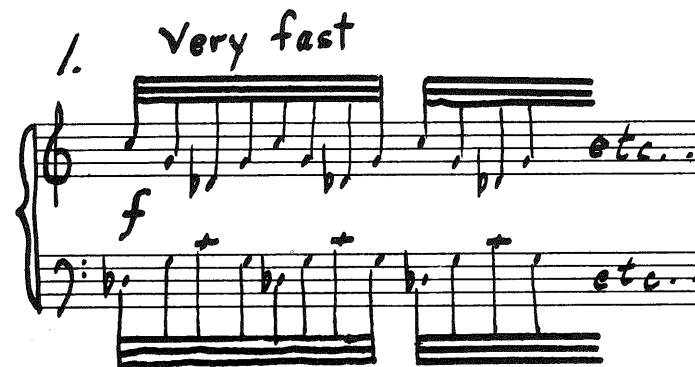
Theta: "Pure relaxation, oneness. Everything on automatic pilot. Automatic, nonevolutionary automaton."

This is a piece for a minimum of two performers. One person has electrodes attached to his scalp that are capable of monitoring his electroencephalogram. This signal is sent simultaneously through three band-pass filters, each followed by a low frequency, envelope follower that is capable of producing a slowly varying voltage, corresponding to the relative intensity of emissions present in the three, Beta, Alpha, and Theta, bands. (See circuit diagram). Each of the three slowly varying voltages is then used to gate or control the relative intensity of two input channels of a six-in, two-out mix of previously taped material. Three stereo tapes are provided. They are to be played simultaneously, ideally through a voltage controlled mixer, such as the one diagramed. In any case, both outputs of each tape playback unit are to be gated by one of the three envelope followers, corresponding to the three brain-wave frequency bands. The stereo dispersion must be maintained as diagramed.

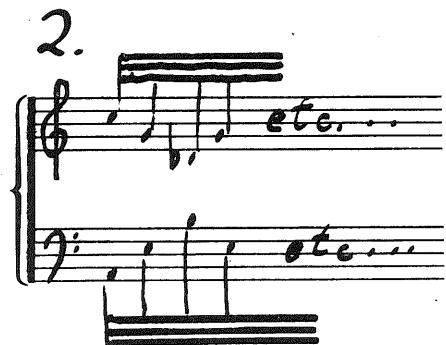
As the performer's brain-wave emissions fluctuate, a mix of the material on the three tapes will be created. He may choose to try to control his emissions using disciplines learned through practice of biofeedback, or he may choose to be a passive channel through which the effects of the sound of the piece are made manifest. He may involve himself mentally in the sound of the voices on tape and music as he sees fit.

The electronic system should be adjusted so that smooth, but definite, cross fades and a beautiful mix occur, under control of the first performer.

The second performer is a pianist. After the tapes have been started and the mix of the vocal sounds has established itself, the pianist must begin to play the very rapid, arpeggiated patterns written here.



Pedal once for each pattern.



Each of the patterns is to be played for a long time, proceeding when ready to the next one. All four patterns are to be played in order. The pianist may choose to play the cycle of four patterns either once or twice, ending on pattern number four. If the pianist has friends who are percussionists, they may play gong or bell-like sounds that fit within the pitch structure and the texture of the piano sound. The patterns may also be played by mallet instruments, but in this event, movement from one pattern to the next must be in unison and well co-ordinated.

Upon reaching pattern number four, the players may stop anytime before the tapes run out. If there are several players, they must stop together. After this, the tapes and the brain-wave performer continue for a short time and then should be slowly faded out.

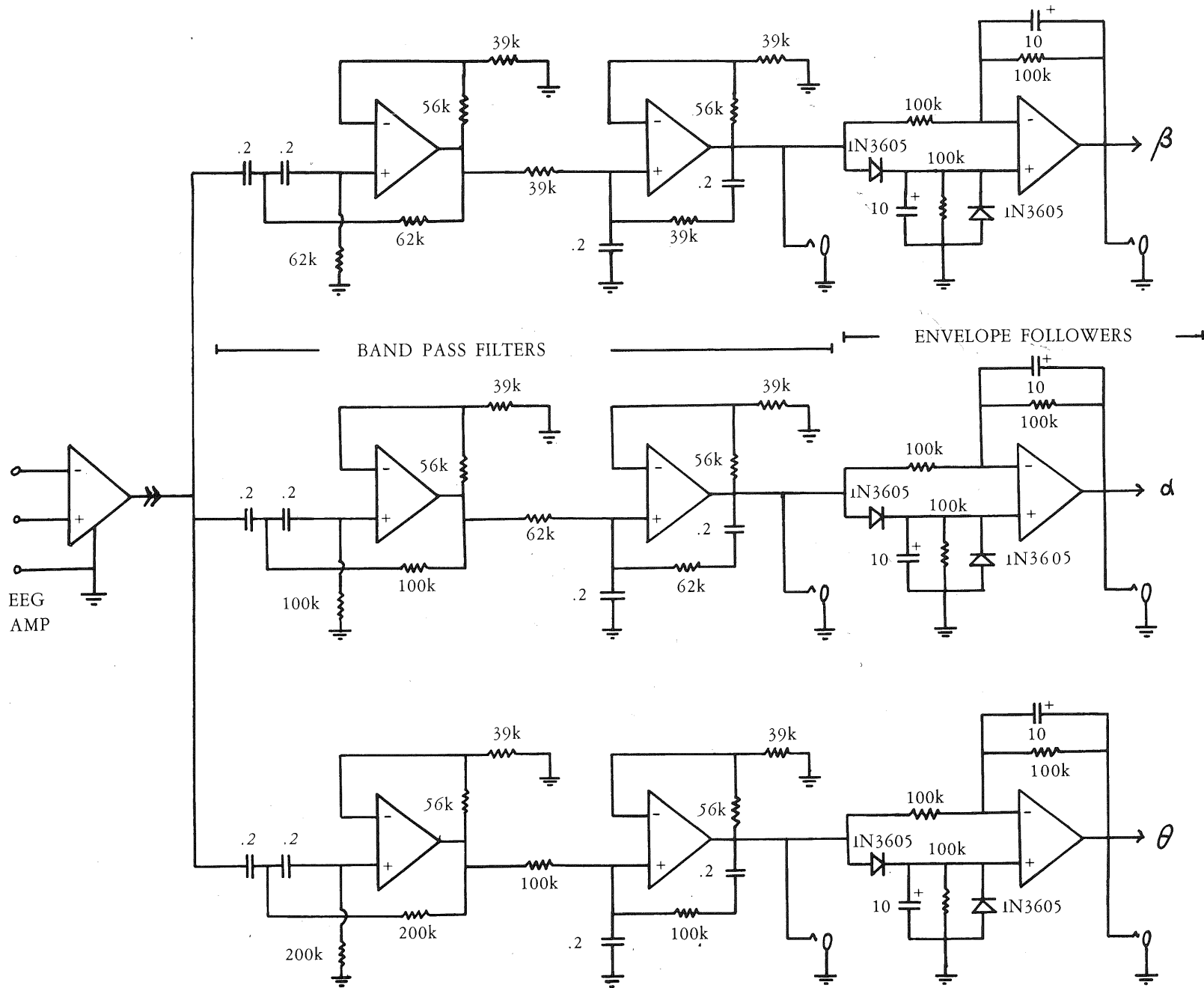
Another version of the piece may be performed in which all sounds are made live. In this case, live voice microphone signals will replace the tapes, but they must be gated in the voltage controlled mixer or similar equipment by the brain signals in the same way. Three male speaking voices and several, (four or more), female chanting voices will be needed. All speak or chant the texts shown in the score simultaneously. The sequencing of events is the same as that for a performance with tapes. The microphones for the performers of each of the three must be separated such that leakage into the wrong microphone is minimized. However, the performers may be situated physically surrounding the brain-wave performer so that he can hear the unamplified sound of the voices. The audience should not be able to hear this clearly. The sound that appears on the speakers will possibly then reflect the brain-wave performer's relationship to the vocal material.

Instructions for performance of the texts are as follows. The Beta Text is to be read by one person in the clear, declamatory style of a network television newscaster. The Alpha Text consists of a number of sentences. They are to be read by two performers, extremely fast, leaving as little time for breathing as is humanly possible. One of the two performers is designated as leader. His job is to read the sentences in different permutations of their order, choosing them as he goes along. The second performer must listen and follow the leader through the various orderings. It is expected that the second performer will always be slightly behind the first. The sound might resemble that of a short, head-gap, tape delay. The two voices should be well matched. The Theta Text consists of four phrases on which are to be improvised slow vocal chants by female voices. Chant #1 is to be performed by some of the voices throughout the entire piece. Chant #2 is to be performed by the remaining voices during the first third of the piece, Chant #3 during the second third, and Chant #4 during the last third, approximately.

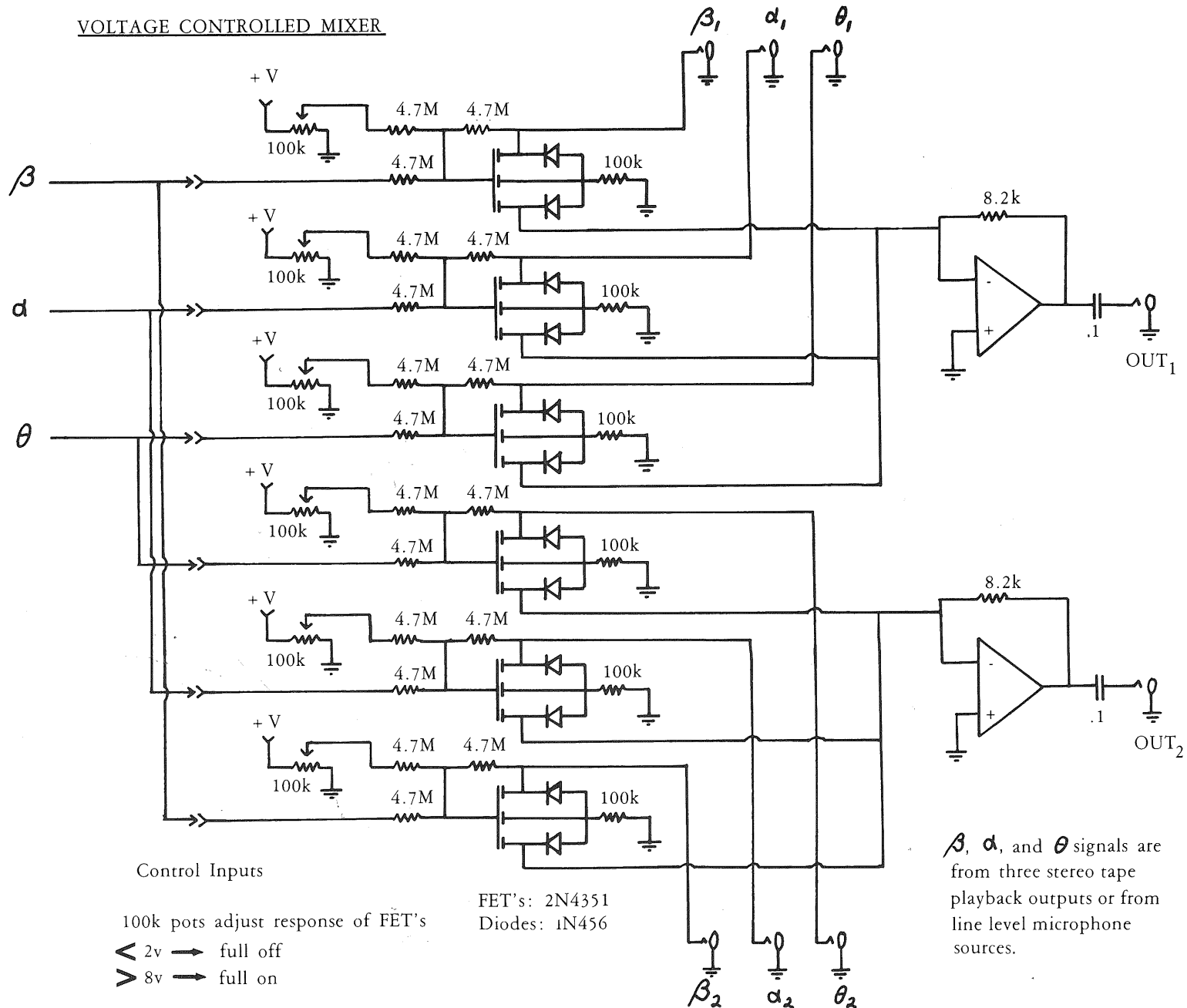
The text is taken from a description of the 1968 drought in Chile.

Tape credits: Beta Text is read by Robin Engleman. Alpha Text is performed by Dug Spitznagel. Theta Text is performed by Ellen Band and Jacqueline Humbert.

David Rosenbaum
Toronto, 1974
Jacqueline Humbert
Toronto, 1974.



VOLTAGE CONTROLLED MIXER



BETA TEXT

Instruction: Read as if newscasting.

The people of Chile have been waging war with their environment since the republic first came into being. In 1960, earthquakes, tidal waves, and volcanic eruptions caused the deaths of 5,000 people. Eight years later, another kind of natural disaster—less tumultuous, but no less pernicious—struck the country.

The Chilean drought extended for eight months and was regarded the worst in 120 years. More than half of Chile's nine million people were directly affected. Some 150,000 sheep died of thirst. About 116,000 square miles of once lush agricultural land was made barren by the scarcity of water. And three provinces were declared disaster areas.

The long-term effects of the drought are still felt by the country's economy and biological environment.

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(Start over at the beginning if necessary.)

ALPHA TEXT

Read rapidly as many permutations of the order of these sentences as possible: (912345678), (891234567), (789123456),..., (918273645), (54372819)....etc.

1. The people of Chile have been waging war with their environment since the republic first came into being.
2. In 1960, earthquakes, tidal waves, and volcanic eruptions caused the deaths of 5,000 people.
3. Eight years later, another kind of natural disaster—less tumultuous, but no less pernicious—struck the country.
4. The Chilean drought extended for eight months and was regarded as the worst in 120 years.
5. More than half of Chile's nine million people were directly affected.
6. Some 150,000 sheep died of thirst.
7. About 116,000 square miles of once lush agricultural land was made barren by the scarcity of water.
8. And three provinces were declared disaster areas.
9. The long-term effects of the drought are still felt by the country's economy and biological environment.

THETA TEXT

Instruction: Chant in monotone.

Chant #1: long term effects of the drought

Chant #2: lush agricultural land

Chant #3: the scarcity of water

Chant #4: waging war with their environment

Repeat each chant for a long time. Refer to the instructions in the score.

