

Composer:

Dimitri Voudouris

Composition:

NPFAI.6

Composed:

2018

Duration:

10 minutes

for

*Natural voice/s of performers as well as artificial voices,
African xylophone, variety of whistles, computer assisted processing*

NPFAI.6 - vocal communication through signalling

Conversion of human speech into equivalent sounds for transmission in signalling systems encompasses a wide variety of techniques by which the signals are produced include whistling, syllabic substitution, and a wealth of instrumental replication.

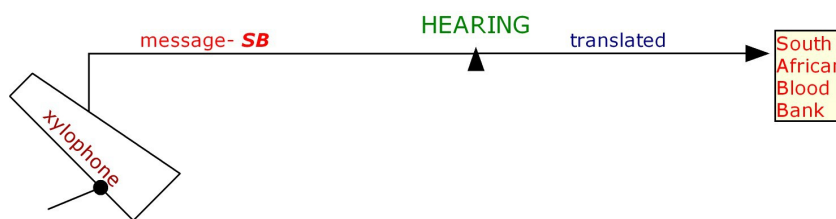
Music resembles language in the sense that it is a temporal sequence of articulated sounds that are more than just sounds. They say something, often something human. The better the music, the more forcefully they say it. The succession of sounds is like logic: it can be right or wrong. But music does contain things that come very close to the primitive concepts found in epistemology. It makes use of recurring ciphers. These were established by tonality creating lexical items. Among these we may start by singling out those chords that constantly reappear with an identical function, well-established sequences such as acental progressions, and in many cases even stock melodic figures that are associated with the harmony.

International morse code system:

Char.	Morse code	Char.	Morse code	Char.	Morse code	Char.	Morse code
A	.-	N	--.	1	·-----	[.]	·-·-·-·-
B	-····	O	----	2	··-----	[,]	--·-·-·-
C	-·-··	P	·-·-·	3	···-·-·-	[:]	---·-·-·
D	-···	Q	--·-·	4	····-·-	[?]	··-·-·-·
E	·	R	·-·	5	·····	[']	·-·-·-·-
F	··-·	S	···	6	-·····	[-]	-····-·-
G	--·	T	-	7	--·-·-·	[/]	-·-·-·-
H	·····	U	··-	8	----·-·	[(]	-·-·-·-
I	··	V	··-·-	9	-----·	[)]	-·-·-·-·-
J	·-·-·-	W	·-·-	0	-----	["]	·-·-·-·-
K	-·-·	X	-·-·-			[=]	-····-
L	·-···	Y	-·-·-			[+]	·-·-·-
M	--	Z	--·-·			[x]	-·-·-
						[@]	·-·-·-·-

- The length of a dot is one unit
- A dash is three units
- The space between parts of the same letter is one unit
- The space between letters is three units
- The space between words is seven units

In morse code the use of letters spell out the initials of what you intend to say, a whole name, or a shortened version. For example, a word example, in abbreviation is e.g., if you just want to use 2 instead of 4 codes, you could use e and g. Using the alphabet in the coded chart, the coded language can be encrypted and decoded is revealing the information to larger community.



Encoding Sound into Speech

The “abridgment” to other parameters of the speech-signal equation; discourse then turns to the “natural history” of abridging systems, their form and distribution; to the linguistic principles underlying abridgment; and lastly to the modifications introduced by style. The classification that follows relates in ascending order to the size of the linguistic unit (phoneme or syllable, morpheme or word, whole utterance) to which a signal refers.

Phonemic representation - The transmitted message bears a relationship to selected sound features of the base (oral) utterance, preserving the order in which those speech elements occur. The relationship is further distinguished by: **Encoding:** There is no essential physical similarity between the sign and the sound feature it represents. Thus in Morse code, sequences of dot and dash are conventionally assigned to the letters of the alphabet. **Abridgment:** An abridging system, while preserving some phonic resemblance to the base utterance, represents only part of its phonemic qualities, so that it is frequently simpler than an encoding system. Encoding systems may not present all the significant features of the base message. Thus, the Morse code does not represent the national or stress features significant in English; and various Semitic scripts do not reproduce the vowels.

Composition:

The authenticity of association of music and language could be further transformed into an internationally accepted coded text or system, in NPFAl.6 also referred to as *signalling*, the African xylophone and whistle through computer assisted processing tend to develop a language of communication (the beats originating from the xylophone and the electro-acoustic environment are represented as dots, the whistle and all other atmospheric sounds are represented as a dash) concentrating on free form of language.

The contemporary element used in the composition of NPFAl.6 begins by extracting rhythmic structural information, rearranging them into encoded signals, based along communication principles. The construction of communication happens between 3 instruments the African xylophone, whistles and the computer. Using the international morse-code system to decode the variety of signals embedded in the composition allows for a transformative communication to occur between composer, performer / narrator and audience.

In a live performance the execution of the music will also involve decoding the encoded data into words and will include natural voice/s of performer/s or artificial voice/s can be used in specific parts of the work in order to transcribe the encoded message.

References cited:

- 1] CARRINGTO JOHN, F. - 1949 Talking drums of Africa. London.
- 2] CARRINGTO JOHN, F. - 1953 Communication by means of gongs and other instruments in Central Africa. Explorations 1 : 24-33.
- 3] COWANG, EORGEM - 1948 Mazateco whistle speech. Language 24: 280-286.
- 4] ARMSTRONRGO, BERTG – 1955 Talking instruments in West Africa. Explorations 4: 140-153.
- 5] International Telecommunication Union, Recommendation ITU-RM.1677-1, International Morse code (2009). http://www.itu.int/dms_pubrec/itu-r/rec/m/R-REC-M.1677-1-200910-!!!PDF-E.pdf