## = Werner Kaegi (composer) =

Werner Kaegi (born June 17, 1926) is a Swiss electronic music composer, musicologist and educator. During the 1960s, he promoted electronic music in his home country. In the 1970s, as a composer and researcher at Utrecht 's Institute of Sonology, The Netherlands, he developed pioneering programs in the field of computer @-@ generated music.

## = = Early life = =

Kaegi was born in Uznach , in the St. Gallen canton . He studied mathematical logic and music in Zürich , Heidelberg and Basel , and music composition in Zürich , Basel , Salzburg and Paris . His music teachers have included composers Paul Hindemith , Arthur Honegger and Louis Aubert . In 1951 , blending his interests for mathematics and music , he received his doctorate with a study of the structure of Johann Sebastian Bach 's Inventions and Fugues .

Kaegi discovered Pierre Schaeffer , musique concrète and the GRM radio broadcasts in Paris in 1951 , yet his 1950s compositions are for traditional instruments ; Ariadne in Zürich is for clarinet and piano 4 hands , Miniaturen , for oboe , bassoon and cimbalom , while the 1956 Sonate is for clarinet and piano . During the next decade , however , Werner Kaegi embraced electronic music and became a pioneer of Swiss electroacoustic music , predating other composers in the field , such as Bruno Spoerri and Rainer Boesch .

## = = At Centre de Recherches Sonores (1963 ? 1970) = =

From 1963 to 1970, Kaegi worked at the Centre de Recherches Sonores, the electroacoustic music studio of Radio Suisse Romande in Geneva. There he started composing electronic and tape music, including pieces such as Éclipses (1964), L'Art de la Table (1964), and Entretiens (1965). At the C.R.S., Kaegi created several radiophonic works; such as La Porte Noire in 1964 and Zéa in 1965. In the late 1960s, Kaegi wrote several essays on electronic music, including the influential book Was ist elektronische Musik?, ("What Is Electronic Music?"), which was published in 1967 in Zurich, Switzerland, and also became a film for Swiss television.

This period of electronic music championing culminated in 1971 with the publication of Kaegi 's unique record release , a 7 @-@ inch record titled Von Sinuston zur elektronischen Musik ( " From Sine Wave to Electronic Music " ) . In the 12 pages accompanying booklet , Kaegi analyses the basic constituents of electronic music like sine wave , sound synthesis , ring modulation or electronic oscillator , with sound examples provided on the disc as well as excerpts from his most recent works of the time , Kyoto , 1970 , Thai Clarinet , 1970 , Hydrophonie I , 1969 and Illumination Expo ' 70 Osaka , 1969 . The latter piece was commissioned by the Swiss government to be used as background music for the Swiss pavilion at the World Expo ' 70 in Osaka , Japan , a project he undertook with composer and contemporary music promoter André Zumbach ( born 1931 ) , then head of music at Radio Suisse Romande .

## = = At Instituut voor Sonologie ( 1971 ? 1987 ) = =

In 1969, Kaegi was invited to compose at Utrecht 's Institute of Sonology, formerly known as STEM, in The Netherlands, where he created the tape music of Hydrophonie I. Owing to a grant from the Swiss government, he permanently relocated to The Netherlands in 1971 to work at the Institute and soon became a member of the board of directors. At the Institute, Kaegi worked as a composer, researcher and teacher in the field of electronically generated music and composition? his students have among others included Benno Ammann, Lasse Thoresen, Jos Janssen, Cort Lippe, Kathleen St John, Trevor Batten, Maarten In 't Veld, Martin Supper, Peter Pabon, Kees van Prooijen. After Floris van Maanen the Canadian composer Paul Goodman, born 1955, became his assistant in the 1980s.

Between 1973 and 1978, together with Dutch researcher Stan Tempelaars (1938? 2010), Kaegi

developed the VOSIM program . VOSIM , which stands for VOice SIMulator , is a system based on the digital sound synthesis of simple , sinusoidal square waves , allowing the modeling of vowel sounds , vocal fricatives and quasi @-@ instrumental tones . It complemented , and was used in conjunction with , Gottfried Michael Koenig 's own computer @-@ generated music programs Project 1 ( 1964 ) , Project 2 ( 1966 ) and SSP ( 1971 ) . Werner Kaegi summed up the VOSIM system in 1986 in a presentation for the scientific journal Interface .

In 1987, Kaegi was awarded a prize at the 15th Bourges international electroacoustic competition, in Bourges, France, for his piece Ritournelles, for soprano and VOSIM software. He apparently ceased teaching and composing after 1987.

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= = Notable compositions = =
9 Lieder with lyrics by Joseph Von Eichendorff and Hermann Hesse (1943)
Vom Leben und Sterben des Hirten Kaedmon, oratorio
Miniaturen, for oboe, bassoon and cimbalom
Magna Voce Ad Dominum Clamo, for singer and orchestra
Lieder für neuapostol, songs for choir (1948? 54)
Sonate, for clarinet and piano (1956)
Ariadne in Zürich, for clarinet and piano 4 hands (1957)
Concerto, for jazz quartet and string ensemble (1961)
= = = At Centre de Recherches Sonores, Geneva = = =
Suisse Vigilante (music for Expo '64, Lausanne), for tape (1963)
Éclipses, for tape (1964)
L'Art de la Table, for tape (1964)
Flüsterbogen, background or exhibition music (1964)
La Porte Noire, radiophonic work (1964)
Zéa, radiophonic work (1965)
Entretiens, for tape (1965)
Mystic Puzzle II, for tape and jazz orchestra (1965)
Mystic Puzzle III, for tape and saxophone (1967)
Les Vêtements de la Demoiselle, for tape (1967)
Entretiens Solitaires, for speaker, 9 instruments and tape (1968)
Anima ou Les Rêves de Damien, for tape (1968)
Illumination (music for Expo '70, Osaka, Japan 1970), with André Zumbach (1969)
Kyoto, for tape and instruments (1970)
Thai Clarinet, for clarinet and electronic (1970)
= = = At Instituut voor Sonologie, Utrecht = = =
Hydrophonie I, for tape (1969)
Consolations, for tape (1984)
Dialogue II, for tape and gamelan orchestra (1984)
Dialogue III, for tape (1984)
Dialogue, for tape with gamelan orchestra (1985)
Champs Magnétiques Ritournelles, for tape (1985)
Ritournelles, for soprano and computer (VOSIM software) (1987)
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